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“A Better Balance:” Revitalized Pastoral Livelihoods in Karamoja, Uganda

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LIST OF ACRONYMS

CAHWs:	Community Animal Health Workers
DFID:	Department for International Development
DPC:	District Police Commissioner
DVO:	District Veterinary Officer
FAO:	Food and Agriculture Organization
FGDs:	Focus Group Discussions
FIC:	Feinstein International Center, Friedman School of Nutrition Science and Policy, Tufts University
GHG:	Growth, Health and Governance Program, implemented by Mercy Corps, funded by USAID/Food for Peace
GoU:	Government of Uganda
INGO:	International Non-governmental Organization
KALIP:	Karamoja Livelihoods Program
KII:	Key Informant Interview
LC:	Local Councils, ranging from the LCI (village) to LCV (district) level
LDUs:	Local Defense Units
MAAIF:	Ministry of Agriculture, Animal Industry and Fisheries
NGO:	Non-governmental Organization
OPM:	Office of the Prime Minister
RDC:	Resident District Commissioner
RLP:	East Africa Resilience Learning Project, funded by USAID
RWANU:	Resiliency through Wealth, Agriculture and Nutrition
UGX:	Ugandan Shilling
UPDF:	Uganda People's Defense Force
USAID:	United States Agency for International Development
UWA:	Uganda Wildlife Authority
VSLA:	Village Savings and Loan Association
WFP:	World Food Programme

EXECUTIVE SUMMARY

Overview and Methods

Livelihoods in Karamoja continue to change as security improves; this includes a revitalization of pastoral production for some households. This report details the findings from research undertaken in February and March 2016 in four districts of Karamoja aimed at better understanding the current patterns of pastoral and agro-pastoral production in the region. This marks the fourth year of the partnership between the Feinstein International Center (FIC) of the Friedman School of Nutrition Science and Policy at Tufts University and Mercy Corps as part of the USAID-funded Growth, Health and Governance Program (GHG).

This study included case studies in *manyattas* and *kraals* from four districts (Kotido, Kaabong, Amudat, and Nakapiripirit Districts) and covered four population groups (Pian, Pokot, Jie, and Dodoth). We used qualitative methods to explore herd movements, livestock production systems, ownership equity, gendered and locational decision-making, and *kraal* and *manyatta* interactions.

Findings

Animal Ownership and Management

In terms of volume, study participants described that animal ownership has declined substantially over the past ten years. Historically, herd numbers fluctuated during periods of raiding and counter-raiding. However, herd size took a substantial hit as a result of the poor conditions in the protected *kraals*, which arose during the disarmament process. While protected *kraals* are nearly obsolete today, rebuilding herds has been difficult, particularly in the context of high rates of animal disease. Some former livestock owners have opted out of pastoral livelihoods by choice or force; some of these households are now participating in cultivation.

An important finding is the role of animal ownership as a protection against shock. Respondents across study sites described the importance of animals in maintaining household

resilience. Animal sales help smooth consumption during the dry season and in times of more serious food insecurity. Households without animals are at high risk, as they have no assets to sell during crisis periods.

We identified two broad trends through wealth-ranking exercises conducted with all study groups. First, the poorest households in the sample possess almost no animals. Second, the households in the highest wealth category reportedly had 5 to 20 times more animals than households in the middle wealth category. This disparity indicates major inequality in animal ownership, with important implications for household resilience.

A minority of women owned their livestock in their own right. Most had acquired animals through marriage, as gifts, or upon the death of a husband. A few had “traded up” by gradually building herds through market purchases. Despite ownership, women have little outright control over these animals. However, both men and women described joint-decision making when it came to distress sales. Women do have exclusive control over chickens and animal products such as eggs and milk.

Herd Location and Balance

This study identified four types of *kraals* that may be typical of current *kraal* systems in Karamoja. These include mobile unprotected *kraals*, mobile protected *kraals*, stationary protected *kraals*, and urban or peri-urban *kraals*. This diversification of *kraal* types reflects shifting security dynamics as well as growing urbanization.

Mobile unprotected *kraals* most closely resemble the traditional *kraals* of the pre-disarmament period. Animals migrate according to seasonal grazing and water needs and largely follow historical migration patterns. Mobile protected *kraals* are accompanied by armed Local Defense Units (LDUs) or will settle near Uganda People’s Defense Force (UPDF) posts. The movements of these *kraals* are at least partially dictated by security concerns. Protected stationary *kraals* are

similar to the model that emerged under the most recent disarmament period. These *kraals* are located near military barracks and normally have LDU protection within the *kraal* and while grazing. These *kraals* continue to exist in Kaabong District, but smaller *kraals* have broken away from the larger ones with UPDF permission. These breakaway *kraals* also have armed LDUs, and animals return to the same location each night but are not necessarily located near barracks.

Peri-urban and urban *kraals* have emerged around main district centers. This is primarily an economic opportunity in response to urban demand for meat and dairy productions. Livestock owners use slaughter slabs in the urban areas. Some peri-urban *kraals* have links to mobile *kraals* and may rotate animals to these rural areas.

A portion of animals remain at the settled *manyattas*. These are milking animals or those who are weak or ill. Animals rotate between the *kraal* and *manyatta* in response to animal health and human need. Women and children are the primary caretakers of animals at the *manyattas*. Women sell animals (particularly goats) from the *manyatta* herd as needed to manage food insecurity and cover expenses. These decisions are normally taken based on instructions or communication with the male household head. The rapid expansion of mobile technology in Karamoja has assisted in this process.

A hierarchical system determines male roles in animal management. A *kraal* leader manages each *kraal* with three or four *kraal* assistants; herders may become *kraal* assistants if they demonstrate responsibility and good animal husbandry skills. *Manyatta* elders appoint the *kraal* leader. Herders may be livestock owners, the sons of owners, or from non-animal owning families. Women's involvement at *kraals* was not uniform, but overall women have few regular roles at the *kraals*.

Movement: Determinants and Decisions

One component of this study was an examination of the determinants of herd movement. Access to water and pasture are paramount, but movement does not occur unless

security and relations with neighboring groups allow for free passage. Herders also actively seek to avoid areas of known animal disease. Mobile *kraals* follow roughly the same route every year, stopping at four or more stations on the way to the furthest point from their home *manyatta*.

Kraal leaders and male elders reported few to no problems with mobility in areas controlled by their own ethnic group (e.g., a Jie *kraal* moving within Kotido District). However, inter-ethnic tensions do exist within certain dyads, such as between the Acholi and Jie, the Pian and Tepeth, and the Pokot and Pian. In addition, the Uganda Wildlife Authority (UWA) has established protected lands that are off-limits to animals and herders. Loss of access to the area of Kidepo National Park in Kaabong has had a particularly negative impact on animal health.

Animal Health

Animal disease is currently the main challenge to livestock production. The drought that began in early 2015 weakened animals and left them more susceptible to disease. Mortality over the past year has been pronounced. Access to treatment is either limited or not effective, and animal owners complain that they lack adequate cash to purchase the required medicines. The use of expired and diluted medicines and a reported fear (in some locations) of western drugs compounds the treatment problems.

Community animal health workers (CAHWs) are meant to be the first line of response to animal disease. As reported by local respondents and key informants, the CAHW system is underfunded and poorly facilitated by the District Veterinary Office (DVO). CAHWs were present in *manyattas* but lacked an adequate supply of drugs and did not travel regularly to the remote *kraals*. Animal owners did not fully trust the expertise of either the CAHWs or the private sector drug suppliers.

Security and Livelihoods

Security has improved in Karamoja over recent years. Large-scale raids are considered a thing of the past, and both women and men report increased freedom of movement, which, in turn, leads to improved livelihoods. The pastoral sector appears to be recovering, if unevenly.

Households shifting more into agriculture are increasingly opening up new lands for cultivation.

Despite gains in security, two ongoing trends were identified. First, small-scale animal theft continues to occur regularly. Thieves are believed to generally be from within the community or from neighboring areas and reportedly steal due to hunger. If caught, the culprits are often too poor to repay the stolen animals at the two-for-one penalty rate established by local resolutions. The second trend relates to cross-border animal theft, which involves organized groups of armed men coming in from Kenya and South Sudan. This study also uncovered worsening relations and cross-district animal theft between Jie and Acholi.

Over time, the relationships between community members and the UPDF have improved markedly. *Kraal* leaders in particular name LDUs and UPDF soldiers as trustworthy and essential to tracking and recovering stolen animals. They are an integral part of peace committees and continue to play a protective role in many *kraals*. The UPDF is currently scaling down in Karamoja, while the national police are scaling up. Communities view the police less positively than the UPDF, with corruption as the main complaint. The police continue to lack the financial and operational capacity to uniformly provide law and order throughout the region.

Markets

Access to markets is a central component of successful livestock production. It allows for investment in new animals, including “trading up” to improve the growth potential of herds. Markets also allow families to sell animals in the event of consumption shortfalls or to support household needs. Markets in Karamoja are also the main source of veterinary medicines and supplements.

The five markets visited for this study were vibrant and stocked with animals. The majority of sellers interviewed described their sales as a response to food shortages. Sales also paid for school fees, health care, and veterinary medicines. Heifers—the most valuable asset in

the herd—were offered for sale by owners in at least two of the markets, a sign of household distress. Many study participants feel that markets are at a prohibitive distance from many rural locations.

The majority of sellers at the markets were male. Purchasers came from a variety of locations, including Kenya, South Sudan, Kampala, and other districts of Uganda. The presence of traders from far afield indicates the substantial demand for animals and meat from Karamoja. Women are involved in the sale of animal products including milk, dairy products, skins and hides, and eggs. Women also sell these products at informal markets closer to their homes or in town centers.

Livestock Production Activities and Services

Livestock owners engage in two kinds of natural practices related to livestock feeding. The first involves setting aside pasture near the *manyattas*, called *apero* pasture, to feed village animals during the dry season or periods of drought. The second is to allow livestock to feed on cereal stalks after harvest. Herds require a blend of forage types, including grasses high in salt content. When access to these areas is not possible, herders purchase salt supplements from traders. Livestock owners in Karamoja generally do not buy commercial feed.

The availability of water remains a primary concern of livestock owners and herders. Water access determines migration patterns, but many reserves evaporate or become silted during the dry season. Infrastructure to protect animal health (such as dips and crushes) is in disrepair and/or short supply. Livestock owners in the *manyattas* and *kraals* consistently expressed the need for improvements to these facilities.

There are substantial international programs with a strong livestock component, including GHG. The Government of Uganda (GoU) also has a mandate to provide public services and technical assistance to livestock owners and producers. At present, the need continues to outpace access to and availability of these services in Karamoja.

Conclusions and Recommendations

This study indicates that pastoralism is rebounding in Karamoja despite decades of insecurity and the encouragement of sedentarization. Animal ownership serves as a critical insurance mechanism against hard times for households. Balanced livelihoods that include a livestock component tend to reduce vulnerability and increase resilience against shocks, including drought, crop failure, or family crises. Despite the benefits of livestock production, this study identifies a series of challenges to the full recovery of animal-based production systems. These include: substantial inequity in livestock ownership and holdings; poor animal health and an overall lack of preventive and responsive treatments; inconsistent access to water and pasture; and a dearth of pro-poor and pro-pastoral policies in Karamoja. Below is a series of recommendations that addresses each of these challenges.

Recommendations

In response to inequity of ownership:

- Work to support the poultry value chain as an area controlled by women, a ready market opportunity, and a means of “trading up” to further engagement in larger-animal husbandry.
- Invest in infrastructure to improve economic development of the region, including secondary roads, electricity, and telecommunications.
- Invest in services to reduce poverty and improve quality of life, including improved water supplies, health centers, and basic education.
- Consider restocking programs of breed-appropriate animals only with thorough investigation of the positive and negative outcomes of such programs; ensure any such program includes ongoing evaluation of impacts, including on inequity and insecurity.
- Investigate opportunities for value addition at the *manyatta* level and peri-urban *kraals* in recognition that they may be a staging area for marketed animals.
- Support infrastructure improvements for livestock markets, particularly in Amudat. Continue support to Moroto Market as the main link to domestic markets

elsewhere in Uganda. Invest in a political economy analysis of markets to better understand power dynamics and factors contributing to inequity.

- Improve input supply and extension services for those practicing cultivation. These should include trainings on dry-land cultivation, appropriate seeds, and storage and handling. This should be done only in areas appropriate for cultivation and settlement, and should be combined with livestock programs to promote diversified livelihoods.
- Support urban livelihoods through continued investments in markets, urban planning, service delivery (water, schools, health care, roads, security, transportation, etc.), and a support to the urban private sector.
- Support skill development for diversified livelihoods through financial and basic literacy training programs, introduction of mobile banking, and expansion of pro-poor financial services.
- Encourage longer-term livelihood diversification through a focus on education, including support to teachers as well as schools, bridging the achievement gap for secondary-school leavers, continuing school feeding programs, and working to create local sustainable employment opportunities through private sector development.
- Work to decrease discrimination against people from Karamoja who migrate to other parts of the country, including Kampala and Jinja. This is a form of livelihood diversification, and these migrants should be able to access social and protective services.

In response to poor animal health:

- Advocate for proper funding and facilitation of DVOs and their offices, including investment in CAHWs.
- Advocate for policies to be put in place on veterinary diseases and regulation and import of animal medicines. Work with DVOs to expand knowledge of such policies.
- Advocate for revitalization, funding, and facilitation of GoU extension programs in animal health.

- Until GoU extension programs are fully funded and supported, expand non-profit support of CAHWs, including facilitation to travel to *kraals*, regular refresher trainings, and increase in numbers. Investigate creative models for trainings, including involvement of private sector actors, lessons from other countries, and evaluating weaknesses in previous efforts. Work to develop sustainable CAHW programs through cost-recovery or other mechanisms.
- Design and implement vaccination programs that follow animals to remote *kraals*. These should be cost-recovery programs to discourage dependency.
- Investigate market models for delivery of animal medicines to remote *kraals*.
- Consider lessons learned from other vector-control projects in East Africa.
- Conduct trainings for herders on proper use, storage, and dosing of drugs.
- Monitor markets for sale of expired or diluted medicines.
- Target *kraal* leaders and assistant *kraal* leaders for trainings, including possible visits to pastoral areas outside of Karamoja.
- Construct or rehabilitate crushes and dips.
- Continue to evaluate and encourage cost-recovery service programs, such as spraying and vaccination campaigns. Work with facilitated DVOs and CAHWS to implement and educate on such programs.
- Conduct regular evaluations of the outcomes of all programs and implement lessons learned.

In response to limited mobility:

- Investigate and respond to problems where conflict or tensions limit mobility, such as the Acholi-Jie border. Facilitate peace meetings and resource agreements in these locations between male elders, herders and farmers, LCIs, and sub-county and district officials.
- Continue to facilitate peace processes and resource agreements in other border areas, including with the Turkana, Toposa, Sebei, Teso, Acholi, and Langi.
- Continue to train and expand numbers of

police as the UPDF presence decreases. Work on building community-police relations and decreasing corruption in police ranks.

- Educate appointed district leadership on the value and importance of mobility to pastoral production.
- Advocate for a reduction in bureaucratic hurdles as a component of livestock movement.
- Study lessons learned in other contexts to demarcate grazing zones near cultivated areas to minimize conflict.
- Negotiate community-managed access to select UWA areas to allow for grazing.
- Manage and maintain water points as a public good to prevent silting and disrepair.
- Ensure that grazing mapping exercise includes water points, areas of restricted access, areas of continued insecurity, and areas with different forage types.
- Consider introduction of fodder production/hay-making, including a strong educational component and community buy-in.
- Create better linkages for *manyattas* to peace committees and theft-reporting structures.

In response to the poor policy environment:

- Encourage national-level investments in public goods that support livestock production, including support to Karamoja-based veterinarian labs that are properly facilitated, support to DVOs, and support to disease-control efforts (including dips, crushes, etc.).
- Advocate for release and public comment on policies on pastoralism, rangeland management, and veterinary disease management. Ensure that these policies are pro-pastoral and pro-poor.
- Educate district- and national-level politicians and civil servants as to the positive contributions of pastoralism to the national economy and identity.
- Advocate for policies that view Karamoja as an integrated part of Uganda, not an isolated and problematic region.

OVERVIEW

The aim of FIC’s research in GHG’s fourth year of programming is to understand the contemporary and historical trends—including drivers, barriers and accompanying decision-making from a gendered and livelihood lens—associated with pastoral grazing and livestock production in Karamoja. This research is meant to inform GHG’s overall programming and livestock pilot program, as well as to build the evidence base to influence broader livestock development policies and outcomes.

The key areas of inquiry for the study include the following:

- The key drivers and barriers to herd movements and production systems
- The current state of traditional mobile *kraals* (herd, family, labor composition)
- The balance between livestock kept within *kraals* versus at the home *manyattas* or village settlements
- How livestock holdings/productivity benefit households or communities
- The existence of and barriers to livestock support activities
- The current nature of relationships and patterns of interaction, including intra-ethnic, inter-ethnic, youth, elders, *kraal* leaders and authorities
- Drivers of shifts in livestock holdings as a result of stressors or opportunities
- A gendered analysis of grazing systems and patterns, including evolving gender roles and relations
- An examination of equity in relation to pastoral patterns and livestock movement

Methods and Locations

This study relied on qualitative methods and involved a series of in-depth community-level case studies in northern and southern Karamoja.

We selected the study communities in consultation with the Mercy Corps teams; these communities are meant to represent a range of situations in which communities have livestock in *kraals*. We conducted focus group discussions (FGDs) with male youth and men at *kraals* and with male youth, men, and females of various ages at the related *manyattas*. We conducted a number of semi-structured interviews with individuals from these same categories when it was practical to do so. In addition, we conducted key informant interviews (KIIs) with representatives, including LCIs, CAHWs, female leaders, youth leaders, elders, *kraal* leaders, and local defense units (LDUs). In total, we conducted 30 FGDs, 45 KIIs, and 20 semi-structured individual interviews. The communities chosen as case studies include *manyattas* in four districts (two in the north and two in the south), and their associated *kraals*. These communities comprise four different ethnic groups (Pian, Pokot, Jie, and Dodoth). In addition to the selected cases, we also conducted interviews with peri-urban and urban *kraal* leaders in and around Kaabong, Kotido, and Nakapiripirit towns (see Table 1).

The research team conducted key interviews with district representatives, technical staff, and security forces. The team visited five area livestock markets where we conducted interviews with producers, traders, and vendors. Fieldwork took place between February 26 and March 25, 2016. The team included a combination of social scientists (Stites and Howe), a large-animal veterinarian (Akabwai), a livestock specialist (Redda), and four local assistants.

Table 1. Overview of study sites

Village/parish location	<i>Kraal</i> type	<i>Kraal</i> location at time of interview
Nangolmuria/ Nakwakwa Parish, Rengen Sub-County Kotido District	Mobile, unprotected	Loongor Dam, Kacheri Sub-County, Kotido District ¹ Sinat Farm grazing Area, Rengen Sub-County, Kotido District ²
Nakwakachel/ Kaloboki Parish, Kalapata Sub-County, Kaabong District	Stationary, protected	Kaloboki-Nasiduk <i>Kraal</i> at Kaloboki Parish, Kalapata Sub-County, Kaabong District ³ Losera <i>Kraal</i> , Kalapata Sub-County, Kaabong District
Kakoruron/ Lokales Parish, Karita Sub-County, Amudat District	Mobile, protected	Popei <i>Kraal</i> , Kween District
Nayonaangikalio/ Kosike Parish, Nabilatuk Sub-County, Nakapiripirit District	Mobile, protected	Naaratom <i>Kraal</i> , Iri Sub-County, Napak District

¹ The research team interviewed respondents from several *kraals* at this location.

² Sinat was both a farming site new settlement comprised of people from Nakwakwa Parish and a grazing area. It was not considered a traditional mobile *kraal* location.

³ The Kaloboki *Kraal* is a breakaway *kraal* from the larger Losera *Kraal*.

ANIMAL OWNERSHIP AND MANAGEMENT

Changes in Animal Ownership

Overall animal ownership in the study sites has decreased over the past ten years, according to respondents. This decrease was due to a variety of factors, including animal raiding, disease, and the protected *kraals* introduced as part of disarmament. An earlier assessment by a Tufts team as part of GHG documented the extent of animal losses following the introduction of the protected *kraals* (Burns et al 2013).

Coincidentally, this team also worked in Nangolmuria Village in Kotido, where they estimated that 41% of the total herd had been lost between entering the protected *kraals* in 2008 and the time of data collection in early 2013. In two sites in Kaabong, herd losses since entering protected *kraals* were 39% and 47% for *kraals* entered in 2008 and 2007 respectively.

Losses in the protected *kraals* were due to a combination of disease and high mortality rates (especially of calves), which were exacerbated by overcrowding and lack of mobility. The protected *kraal* system disrupted herd multiplication: animals died before reaching maturity, the calving rate in the protected *kraals* was low, and many calves died.⁴ Animal owners in Karamoja typically take a long-term view of production and build their herds over an extended period. Rebuilding herds after a loss is very difficult, especially for the poor. Today, most protected *kraals* have been disbanded except in border areas (such as on the Kaabong-Turkana border and the Nakapiripirit-Kween border).

Respondents for the 2016 fieldwork spoke more about disease outbreaks as a factor in livestock loss than about the continuing negative impacts of disarmament or the protected *kraals*.⁵ We hypothesize that this may be due to the severity of the recent disease outbreaks and also to the generally positive current views on disarmament,

discussed in more depth in the section on security.

Continued Function of Animal Ownership

This study set out to conduct an in-depth analysis of several pastoral and agro-pastoral production systems, but over the course of the research we also learned a great deal about diversification or transition away from these models. The most obvious shift was among populations who had shifted entirely to cultivation and owned few or no animals. (In most instances, the loss of animals was not by choice, but was due to the combined effects of raiding, disease, and the protected *kraals*.) We visited an area known as Sinat in Rengen Sub-County, Kotido, which was traditionally used for grazing animals relatively near to the *manyatta*. Mercy Corps funded the drilling of a borehole at Sinat, and a large number of people moved to the area from Nakwakwa Parish in 2013 on a permanent basis. 2014 saw a bumper harvest, drawing more people to the fertile soil of Sinat. The harvest in 2015, however, was largely a failure. Despite this failure, some of the respondents farming at Sinat reported that they were happy with their decision to change their livelihoods, as illustrated by the following quote: “We have become farmers. We want to go ahead with farming. No more animals, we are happy like this.”⁶ Others, however, mentioned the precariousness of relying entirely on crop production in a location with no services (schools, roads, or health centers) and limited water. Interviews with respondents at *kraals* showed a particularly negative view of the move towards cultivation; this was seen as something that would only be done in desperation after the loss of animals.⁷ To note, a fair number of the people in the Sinat Farm village appear to be splitting households, with some family members remaining back home in the *manyattas* (elderly,

⁴ Importantly, a reviewer notes that calf mortality is a major issue across the region and may not be directly related to the protected *kraal* system. Respondents did associate this problem with the *kraals*, but further research and interventions around this issue would be useful.

⁵ The section on Animal Health discusses diseases in depth.

⁶ FGD with male farmers, Sinat, Rengen Sub-County, Kotido.

⁷ KIIs at Kotido and Kaabong *kraals*; FGD with male youth, Losera *Kraal*, Kalapata Sub-County, Kaabong.

school-age children, co-wives, some husbands). Depending on the access to animals for those in the *manyattas*, this form of household splitting would allow for livelihood diversification and risk-sharing.

The increased vulnerability associated with agriculture-based livelihoods in a semi-arid and unpredictable environment such as Karamoja has been discussed elsewhere (Levine 2010; Mubiru 2010), as has the pressure by the GoU to encourage sedentarization and a shift to agricultural production (Mwangu 2015). There are certainly areas within Karamoja that are suitable for cultivation, as is evident from the long-standing reliance of communities on a bifurcated livelihood system that balances livestock with agricultural production. Even these areas, however, are highly vulnerable to the unpredictable and erratic rainfall patterns that characterize the region.

Data for this study illustrate the importance of animal ownership as insurance against household shocks. A family will first sell chickens to acquire a small amount of cash. A goat is typically sold when hunger is greater, and a family with animals will leave a certain number of goats at the *manyatta* for this purpose during the dry season. The grains purchased from the sale of a goat will cover a family for several weeks (depending on family size). A bull may be sold if there is a more serious problem, such as sickness within the family.⁸ Productive heifers are sold when there is no other means of coping with pronounced hunger, and older animals are sold before younger ones. *Kraal* leaders in a Kaabong *kraal* explained that the decision to sell a heifer would ideally occur at a time when the price for heifers in the market was high in order to maximize returns.⁹ Such strategies are only possible, of course, when a household has animals available to sell. Those without animals must increase their casual labor or sale of resources,¹⁰ or beg for assistance from others who

have animals, as explained by herders at Sinat grazing area in Rengen, Kotido:

A problem is that if you have animals, your neighbors come to you to ask for help. If you sell an animal it will never be just you that you help with this—you have to support a very large number of people. They are asking for food, not animals. It can even be the whole clan who comes begging!¹¹

A range of respondents stressed the importance of animal ownership in maintaining household resilience. For instance, the LCV-elect for Kotido explained that “crisis occurs if the livestock and crops fail at the same time—or if people have no livestock. Previously, when there was a better balance, people could survive even if one failed.”¹² The Resident District Commissioner (RDC) in Kotido, who otherwise viewed transhumant livelihoods as inherently backwards, stated, “Those who are sure of tomorrow are those who have livestock. Everyone else has to run out of the district or cut natural resources.” The local head of an international aid organization stated simply, “Animals are the best way to support families, but we see a decline in ownership.”¹³

The ability to sell animals can help to smooth consumption in periods of crisis, but this does not mean that pastoralism should be the only form of livelihood in Karamoja. Recent analyses of livelihood diversification and resilience in the Karamoja Cluster illustrate different models for understanding change in the region. Catley and Aklilu (2012) discuss the difference between “moving up” (earning cash within the livestock sector), “stepping out” (engaging in non-pastoral activities while still retaining a foothold in the livestock sector), and “moving out” (transitioning away from livestock-based activities altogether). A range of external and internal factors (such as insecurity, climate, wealth, and gender) affect the ability and outcome of households diversifying

⁸ KII with CAHW, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

⁹ FGD with *kraal* leaders, Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong.

¹⁰ FGD with male elders, Kakoruron, Lokales Parish, Karita Sub-County, Amudat.

¹¹ FGD with herders, Sinat grazing area, Rengen Sub-County, Kotido.

¹² KII with LCV-elect, Kotido.

¹³ KII with INGO representative and civil society member, Kotido.

in these ways. For the very poor, the decision to abandon livestock-based production systems may not be their own. It can be extremely difficult for poor or very poor households to expand their herds to a level that allows for regular and replaceable engagement in the market. Hence, when shocks such as disease, drought and raids occur, “poorer households suffer proportionately higher losses of livestock and take longer to rebuild their herds.”¹⁴ This means that many poor pastoralists are being pushed out of pastoralism, as opposed to making strategic decisions to exit pastoral production for alternate livelihood opportunities. In this Tufts study, the farmers at Sinat likely represented a combination of two categories laid out by Catley and Aklilu; some had intentionally moved away from livestock entirely, while others were diversifying their livelihoods into settled agriculture, while also maintaining a foothold in pastoral production. More in-depth research with those who have shifted to cultivation would help to illustrate the extent to which such moves were voluntary or taken out of desperation, as well as the wealth rankings of these households.

Equity and Inequity

We conducted a wealth ranking exercise in each *manyatta* that we visited. This section begins with a discussion of the differences in animal ownership as perceived by male elders in each of these locations.¹⁵

As illustrated in Table 2, there was unanimity regarding the absolute lack of livestock holdings of those households considered to be very poor. A second clear trend is the sharp difference in holdings between the “less poor” and the “better off.” While these data are not representative, the consistency of these two findings—the extent of poverty of the very poor and the degree of difference between the other two groups—is consistent across all locations. As found by Burns et al. (2013), equity in Karamoja is largely understood in terms of livestock ownership. Wealth and status are also determined by the numbers of women and children a male is able to acquire and provide for. Women and children link back to livestock, as it is through the exchange of livestock that a man is able to officially marry and reproduce.¹⁶

Table 2. Wealth rankings in each location

Location (<i>Manyatta</i> / district)	Very poor			Less poor			Better off		
	Cattle	Shoats	Donkeys	Cattle	Shoats	Donkeys	Cattle	Shoats	Donkeys
Kakoruron, Amudat	0	0	0	2–5	5	--	100–150	--	--
Nayonaangikatio, Nakapiripirit	0	0	0	1–20	10–50	1–3	5–50	50–150	5–8
Nangolmuria, Kotido	0	0	0	2–5	“A few”	--	10–30	30–60	5–12
Nakwakachel, Kaabong	0	0	0	5–10	10–20	1–2	100–150	50–100	5–10

¹⁴ Ibid.

¹⁵ We recognize the inherent bias in conducting wealth ranking exercises only with male elders. This was a decision made based on the extensive time such activities require. To note, respondents quantify cattle more readily than sheep and goats, as these smaller animals move quickly in and out of possession and are often not counted as part of capital formation.

¹⁶ Girl children in particular herald wealth, as the cattle from their eventual marriages will add to the household and clan herds, assuming that the parents are officially married.

As discussed above, households with fewer animals often lose a proportionally greater number in the event of shock and crisis. This increases inequity between those who have animals and those who do not, as those with larger herds are able to expand their herds much more quickly and to take advantage of commercialization. In addition, research from elsewhere in the Greater Horn illustrates that wealthier animal owners may use their influence to gain control over important resources such as water and pasture. Poorer herders become excluded, and their ability to stay within the pastoral system is reduced. These trends are exacerbated by enclosing rangeland and developing private water sources (Catley and Akililu 2012). The RDC in Kotido stated that enclosing areas and privatizing access to water and pasture was the vision of the Ugandan government for Karamoja.¹⁷ While he felt that such measures would improve pastoral livelihoods by facilitating service delivery, evidence indicates that such strategies have decidedly negative impacts for the poor.

Female Ownership and Management

We investigated the extent of female ownership of and control over animals in this study. Men, women, girls, and boys have different and specific roles and responsibilities within pastoral production (Hodgson 2000). At the most basic level, women manage the animals that remain in the *manyattas*, while men are responsible for the animals in the *kraals*. The reality is more nuanced, with men and women in regular discussion over the sale and use of animals in the *manyatta*, and with women having some ownership of animals and exercising a degree of control over animal sales. A *kraal* leader in Kaabong discussed the tensions and negotiations associated with female involvement, highlighting the role of women's economic power in this shift:

Tension may come when making decision for animals to send off for marriage, pay debts,

which one to remain at home for milking, oxen, make rosters for herds to send to the *kraal*...There is now much change in ownership and decision-making because resources now come from both sides, say men and women...The women decide on which animals to sell, send for marriage; they share their minds with husbands.¹⁸

A LCI in Kotido also talked about the tensions that may arise between men and women involving decisions around animal movement and use. Citing child welfare and polygamy as potential trigger points, he reported that tensions may arise in:

[T]he scenario where the husband sells or gives out animals without consulting his women. The other tension may arise if children are hungry and the husband is not doing anything about that. Marriage of another wife is usually normal...in Jie but it may cause tension these mean [bad] days; and deciding which animals to remain at *manyatta* and which will go to the *kraal* may also cause tension in the family!¹⁹

Although the negotiating power of women may be increasing in some instances, within our study population the only animals that women had sole and exclusive rights over were chickens. In one location, men found it humorous to be asked questions about chickens,²⁰ while in others they acknowledged that the sale of chickens can be important in ensuring food security or in trading up to purchase a goat. Women used chickens for multiple purposes, as explained by women at the Sinat Farm village:

Chickens are like an insurance force for women. We can decide what to buy—books, soap, pens for children, schoolbooks. It is quick money so you can get anything you want. If someone gets sick and needs medicine, you can get it.²¹

¹⁷ KII with RDC Peter Logiro, Kotido.

¹⁸ KII, *kraal* leader, Losera *Kraal*, Kalapata Sub-County, Kaabong.

¹⁹ KII with LCI, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

²⁰ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

²¹ FGD with women, Sinat Farm Village, Rengen Sub-County, Kotido.

Eggs are consumed, primarily by children (as reported in the Kotido sites), but are also sold by women. Female respondents in Amudat reported that they sold up to five chickens per month. These sales provide for cash needs, fund small businesses (such as petty trade enterprises), or pay fees in VSLAs or other traditional women's groups.²² Men discussed the sale of chickens in only one instance; *kraal* leaders at Nasidok *Kraal* in Kaabong reported that families might sell chickens to acquire drugs when needed for their animals.²³

Some women do own animals other than chickens. These are normally given as gifts from relatives or at the time of a sister's marriage, inherited upon the death of a husband, or acquired directly through trading up (e.g., using the proceeds from chicken sales to purchase a goat). The extent of control that women had over their animals differed across our study population, but the general pattern was that women had limited control over the animals that they did own. Men had primary decision-making power over the women's animals in most instances. Men in a village in Kotido explained that "no matter where she gets the animal from, she has no control over it. She can only milk it and then keep the milk" for her use or to feed to the children. The man decides if the animal goes to the *kraal*, and can even use a woman's animal as a bridewealth payment to secure another wife for himself. Illustrating the extent of nuance in these matters, the men in the Kotido focus group went on to say that "if she were to insist that this cow gives a lot of milk and she wants it at home, then the husband would allow it." The man does have the last word, however: "The man still makes the ultimate decisions about the animal—even to sell it."²⁴ This viewpoint was largely confirmed by female respondents in a focus group discussion in Kotido. When asked, "Who makes the decisions about animals owned by women?" women replied:

Even though the animals are yours, the decision-making is done by the man. Sometimes he could use your cows for a new marriage to a co-wife. Sometimes if a co-wife is hungry, he could give her [your] cows. It is the man also who decides on the sale of the woman's cows. It is the woman who gets to choose when to sell milk, sorghum, eggs, butter. The woman has control of this money, but she will share a little with the men.²⁵

The example from the Kotido village reflects the patterns seen across the study sites and indicates that while women can and do own animals, decisions over and access to these animals is continually contested and negotiated. This is particularly the case in polygamous families. Widows who do not have other male relatives (including sons or brothers-in-law) are an exception, but this is seen as unusual.

Women manage animals that remain at the *manyattas* when their male relatives are at the *kraals*. In some instances, the women appear to have greater decision-making control over these *manyatta*-based animals than over those that they own outright. Respondents felt that the most important decisions were around the sale of animals in response to food shortages. These decisions were often made jointly between the man and woman. The woman sends a message to the man (if possible) telling him that she needs to sell a goat, and he instructs her as to which one to sell. As explained by a man in Kotido, instructions might also be left in advance: "Before you leave you instruct her to sell certain animals, and then you tell her that if it gets worse she should send a message and I will come home to work on this problem."²⁶ In the case when the man can't be reached, the woman does have the power to make the decision without consultation:

²² FGD with women, Kakoruron Village, Lokales Parish, Karita Sub-County, Amudat.

²³ FGD with *kraal* leaders, Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong.

²⁴ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

²⁵ FGD with women, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

²⁶ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

If a man is very far away, and there is no one to bring a message, then the woman just decides how to sell. You come home and see this. The man will appreciate that she has secured the lives of the children—better to sell the animals than to have the children die. This is the way it has always been since the time of [our] great grandfathers.²⁷

Women do have decision-making control over specific animal products, such as milk, buttermilk, ghee, and butter, and women collect and manage these revenues. The sale of milk products is discussed in the section on markets.

²⁷ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

HERD LOCATION AND BALANCE

The study population for this research was comprised of groups living in *manyattas* and/or moving to grazing areas with herds. This section discusses the different types of locations, rotation between these locations, and the gendered roles in these areas.

Manyattas

A *manyatta* is a settled village, enclosed by a circular wooden fence. Each *manyatta* has a central animal enclosure surrounded by compounds of huts. Livestock are placed in the central enclosure at night. Women, children, and the elderly and sick make up the majority of the population of the *manyattas* during the dry season, while the young and able-bodied men are primarily at the mobile *kraals* with the animals. As discussed below, there is regular movement between the different types of settlement by different members of households and communities.

A recent study funded by USAID on livestock marketing in Karamoja found that 5–15 percent of the total herd stayed at the *manyattas*, with the rest moved to the *kraals*.²⁸ The animals that remain behind are normally milking cows and goats that are retained for nutritional purposes and sick or weak animals that are unable to travel to the mobile *kraals*. For this research, reports on the proportion and make-up of animals kept at the *manyatta* differed by location. In Nangolmuria in Kotido, for instance, we were told that there were no milking cows at the *manyatta*, only goats.²⁹ From one respondent in this location, we heard that the number of

animals at the *manyatta* would have been lower prior to disarmament, as fewer animals needed to be kept near the homestead to sell. Those that remained would have been strictly for the purpose of milking, whereas today one of the main functions of this herd is for sale in the event of food shortages. However, a female respondent at the same location contradicted this and said that the challenges of securing adequate pasture and grazing at the *manyatta* were so great that fewer animals remained behind today.³⁰ This was echoed by respondents at the *manyatta* in Nakapiripirit, who said that this was especially the case during periods of prolonged drought.³¹ Respondents at the *manyatta* in Kaabong specified that oxen and donkeys were kept at the *manyatta* for plowing and transportation respectively,³² although respondents at another site said that oxen would be at the *kraal* until shortly before cultivation began.³³

Livestock move to pasture areas around the *manyattas* under the supervision of young boys (and sometimes girls) in collective herds. These duties often require walking long distances to water sources. Men at the *manyatta* in Nabilatuk Sub-County pointed out that herding animals near the *manyatta* can be difficult given the need to avoid gardens that are not fenced.³⁴ Women often help the children to water the animals in the middle of the day,³⁵ particularly if digging in a river bed or heavy pumping at a borehole is required. The animals kept at a *manyatta* often share the water source with the human populations.

²⁸ See Rockeman et al. 2016. Tsehay Redda, a member of this study team, also worked on the RLP report. While we did not seek to quantify the exact numbers of animals in this most recent round of fieldwork, these numbers are approximately accurate, with perhaps slightly fewer animals at the *manyatta* given that we visited at the height of the dry season.

²⁹ FGDs with women and young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

³⁰ Interview with woman, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido. There are many reasons respondents in the same site might provide contradictory information, including different experiences, different interviewers (especially foreign versus local), different expectations of the interview, etc. We aim to triangulate data where possible but also to show the range of opinions where relevant.

³¹ FGD with male elders, Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk Sub-County, Nakapiripirit.

³² FGD with male elders, Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong.

³³ KII with *kraal* leader, Loongor Dam, Kacheri, Kotido.

³⁴ FGD with male elders, Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk Sub-County, Nakapiripirit.

³⁵ FGD with women at Nangolmuria *Manyatta*, Kotido.

In order to ensure adequate access to grazing for animals at the *manyatta*, communities allocate and preserve pasture land near to each settlement for dry season access. These areas are called *apero* pasture and are not used (or used minimally) during the rainy season to allow the grass to grow. Prior to disarmament, each *manyatta* had its own large area of *apero* pasture. Given decreased herd size, today these preserved grazing areas are normally shared between two or three *manyattas*. At the time of our fieldwork, *apero* pasture in some areas was exhausted due to the prolonged drought.³⁶ In hopes for the upcoming start of the rains, communities were demarcating roughly three hectares of pasture (to be shared between two *manyattas*) and setting these aside for *apero* pasture.³⁷ We heard about *apero* pasture in all districts visited except Amudat. According to Simiyu Sathgl, a livestock marketing expert, there is a shortage of grazing areas in Amudat District that can be reserved for dry season grazing. Most Pokot animals move to Nakapiripirit District to access pasture.³⁸

The animals at the *manyattas* are primarily used for milking or sale to meet household needs. Women in Kaabong explained that “girls and women milk cows and sometimes herdsmen [milk cows]. Little girls and boys milk the sheep and goats.”³⁹ As discussed earlier, women consult with their husbands and then sell a sheep or goat as needed to obtain cash to purchase food, medicine, or other household needs. Men in Nabilatuk explained that animals are placed in the *manyatta* after trading-up has occurred. For instance, bulls from *kraals* may be “exchanged for heifers so that the heifers work as an investment,” and these heifers may be in the *manyattas*.⁴⁰ A similar example came from an interview with a woman at the Kanawat Livestock Market in Kotido. She worked as a nurse in Kaabong and

travelled regularly to Kotido to sell the older animals in her family’s herd. She then used the funds to purchase younger animals at the market in Kaabong. This allowed her to take advantage of the price differences and gradually improve the herd stock through this process of trading up.⁴¹

Livestock move between *manyattas* and the mobile *kraals*. This happens at different times and for a variety of reasons. A driving force in this balance is the need to satisfy the food needs of those who remain in the *manyattas*. As explained by male herders in Kotido:

The animals at the home are defense mechanisms to help the small [children] if a cow or goat has milk. We also keep goats here in case there is a need to sell—they can be sold easily and quickly.⁴²

Herders swap dry cows and goats at *manyattas* with lactating cows and goats from the *kraals* so that the families can benefit from milk. This is only possible when the *kraal* is relatively close to the *manyatta*; male herders in Kotido cautioned that when the *kraal* is at a distant point or the *manyatta* animals are weak, the animals are not able to make the journey.⁴³ Dry cows and female goats may also move to *kraals* for breeding purposes, as breeding bulls and rams stay permanently in the *kraals*. Women who manage the animals at the *manyattas* may be the ones making decisions to send animals from *manyattas* to *kraals*, as pointed out by a LCI in Kotido: the woman is “responsible for the animals that remain home and if she assesses that animals behind are weak—no grass, no water—then she sends them to the *kraal*.”⁴⁴ Movements to the *kraal* increase if drought hits, with the only animals remaining at the *manyatta* being those

³⁶ KII with LCI, Nakwakwa Parish, Rengen Sub-County, Kotido.

³⁷ KII, peri-urban *kraal* owner, Kaabong. FGD with youth at Nakwakachel *Manyatta*, Kaloboki Parish, Kalapata Sub-County, Kaabong.

³⁸ KII with Simiyu Sathgl, livestock marketing expert, district production and marketing department, Amudat Town.

³⁹ FGD with women, Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong.

⁴⁰ Interview with male elders, Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk Sub-County, Nakapiripirit.

⁴¹ Interview with woman, Kanawat Livestock Market, Kotido.

⁴² FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

⁴³ FGD with male herders, Loongor Dam, Kacheri, Kotido.

⁴⁴ KII with LCI, Longole Muria, Nakwakwa Parish, Rengen Sub-County, Kotido.

kept on hand to sell. Animals do not normally rotate back to the *manyatta* if conditions are very dry, as it is assumed that the animals will fare poorly.⁴⁵

Sick animals may be moved from the *kraal* to the *manyatta* if the distance is not far, or will be slaughtered and the meat consumed at the *kraal* or taken to the *manyattas*. Oxen in the *kraals* move back to the *manyattas* prior to the start of the rains. In the case of the mobile *kraal* we visited in Kotido, a major period of exchange was when herders moved the animals from west to east at the start of the rainy season (from Loongor Dam to the Kobebe Dam area bordering Kenya). Male herders explained:

As soon as the rain comes we will move east. We will divide out the oxen and leave them at the *manyattas* for cultivation. The rest proceed to the east. Same as when we came here—we will leave some milking animals behind in the *manyatta*. We will rotate out some of the animals that have been at the *manyatta* for the dry season—they will move to the east with us.⁴⁶

Kraals

Sample Kraals by Type, Location, and Security Arrangements

This study identified three types of *kraal* configurations in our sample that appear reflective of shifting security conditions: mobile unprotected *kraals*, mobile protected *kraals*, and stationary protected *kraals*. Urban *kraals* might be considered a fourth variety; these seek to take advantage of expanding market opportunities in and around the growing urban centers in the region.

Mobile unprotected *kraals* migrate according to seasonal dynamics, including access to water and pasture. They often follow historical migration patterns or are directed by elders and formal leaders within the district. Their movement patterns are currently not dictated by security

concerns—they do not intentionally settle near UPDF detachments and are not accompanied by LDUs. For this study, the FIC team interviewed respondents at the unprotected mobile *kraal* at Loongor Dam and the unprotected grazing area at Sinat Farm in Kotido District.

Mobile protected *kraals* are those *kraals* whose movement patterns are at least partially influenced by security concerns and, to varying degrees, may opt to stay near to UPDF barracks and/or be accompanied by LDUs. For this study, Naaratom *Kraal* in Napak and Popei *Kraal* in Kween fall into this category. Naaratom *Kraal* members⁴⁷ reported that they have flexible arrangements with UPDF/LDU. They do not rely on security support while staying within a ten-kilometer radius of the *kraal*, but will ask for LDU accompaniment if they move beyond this range, especially if moving towards Pokot areas. Popei *Kraal* in Kween is more reliant on the UPDF and LDUs. Respondents at Popei described a permanent presence of armed security both within the *kraal* and while the *kraal* migrates. They named the Pian as the main security threat.

The protected stationary *kraal* in Kalapata, Kaabong is most similar site in this study to the protected *kraals* that were established during the early years of the 2006–present disarmament. Such *kraals* are situated near military barracks and have a constant armed presence. After daytime grazing and watering, animals return to the permanent location each evening. The Losera *Kraal* in Kalapata, formerly known as Krau, is near the Kenyan border and originally contained all the animals from the sub-county. It was extremely crowded—with an estimated peak of 10,000 heads of cattle⁴⁸—and had associated negative health consequences for both the animals and for the nutritional status of the families of livestock owners.⁴⁹ As security has improved, smaller “breakaway” *kraals* have been established with the permission of the UPDF and the central *kraal* leaders.

⁴⁵ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

⁴⁶ FGD with male herders, Loongor Dam, Kacheri, Kotido.

⁴⁷ Male FGDs with Naaratom *Kraal*, Napak, near Iriri (members from Kosike Parish, Nabilatuk, Nakapiripirit District).

⁴⁸ Estimate provided by Mercy Corps team.

⁴⁹ FGD with youth at Kaloboki *Kraal*, Kalapata Sub-City, Kaabong.

One such breakaway *kraal* is Kaloboki-Nasidok, which separated from Losera *Kraal* in 2011, with the main aim to improve animal health and increase access to pasture. *Kraal* leaders and herders also expressed a wish to be closer to their families, as oxen from the *kraal* could plough fields, and children would have greater access to milk.⁵⁰ Separation from the large protected *kraal* has occurred in a staggered pattern; i.e., the breakaway *kraal* contained animals from three parishes when it split from the large *kraal*, but has since divided into increasingly smaller units. At the time of our visit (early March 2016), Kaloboki-Nasidok *Kraal* was home to animals from only one parish. The Kaloboki-Nasidok *Kraal* is currently protected by one LDU, but this is anticipated to expand by two more units. In comparison, the stationary protected *kraal* of Losera is located next to a UPDF barracks and is protected by five LDUs.

Peri-Urban Livestock Keeping

Demand for livestock products is growing in district towns as population and purchasing power increase. Services such as hotels, restaurants, butchers, and grocery stores are expanding, as is the number of residential homes, offices, health centers, and schools. Animal owners are stepping up to meet this marketing opportunity with meat, milk, and other livestock products. Most livestock owners in the peri-urban production system were entrepreneurs who recognize the market opportunities provided through Karamoja's expanding urban areas.

We visited peri-urban *kraals* on the outskirts of Kotido, Kaabong, and Nakapiripirit. In Kotido, the animal owner we spoke to reported that there were approximately 12 peri-urban *kraals* around the town council. The peri-urban *kraal* we visited in Kotido was home to 32 animals, down from 60 animals prior to the 2014–2015 season. The owner had hired a herder to take the animals to pasture on a daily basis, travelling up to five kilometers in the dry season and returning each evening. Similar movement patterns existed for the peri-urban *kraals* in Kaabong and Nakapirip-

irit. These peri-urban *kraals* are situated near towns to take advantage of the urban demands for meat and milk. For instance, the Kotido peri-urban animal owner we visited is a member of the Kotido Meat Handlers Association, which maintains a slaughter slab among 30 group members. (Two of these members are women, including the vice-chairmen. Both women are married but reportedly control the income they make from their meat business.⁵¹) The group slaughters two to three cows per day and supplies the meat to 15 local butchers.⁵² (The slab, established via a grant from the Ministry of Gender and Social Development, is open to general use for a payment of 3,000 UGX⁵³ to slaughter cattle and 1,000 UGX to slaughter a sheep or goat.) Slabs also existed in Nakapiripirit and Kaabong, although the slab in Kaabong was reportedly not in active use. A slaughter slab in Amudat was under construction at the time of the field research. These *kraals* in peri-urban areas may also have links to mobile *kraals*, or occasionally rotate their animals to these areas. The rise in peri-urban *kraals* will be important to watch over the coming years, including the relationships between these locations and the rural *kraals*.

Roles and Responsibilities at Kraals **Males**

The primary actors at the *kraals* are young able-bodied men. Adolescent and younger boys are also present. A *kraal* leader, appointed by the male *manyatta* elders, manages all aspects at the *kraal* and is helped by three to four assistants. The *kraal* leader selects his assistants from among the herders. These levels within the *kraal* are hierarchical (*kraal* leader, *kraal* leader assistants, and herders) and have defined responsibilities. A key component of successful herd management is the meeting held each morning before the livestock go out to graze. *Kraal* leader assistants organize these meetings. Herders report on any livestock or non-livestock matters of importance, including security, pasture and water availability, and the overall conditions of the animals. The leaders provide advice on the issues raised and make decisions as appropriate.

⁵⁰ FGDs with *kraal* leaders and herders Kaloboki-Nasidok *Kraal*, Kaloboki Parish, Kalapata Sub-County, Kaabong District.

⁵¹ Phone conversation with a member of the Meat Handlers' Association.

⁵² KII, livestock owner, peri-urban *kraal*, Kotido Town Council.

⁵³ One United States dollar is equal to approximately 3,400 Ugandan shillings (UGX) as of June 2016.

The herders are animal owners in their own right, the sons of animal-owning families, or those without animals who have been hired as herders (in exchange for an animal) or sent to the *kraal* to improve their nutrition. All households that have

animals in the *kraals* would normally also send a male herder to the *kraals*. Table 3 provides findings and observations of the duties and responsibilities of the different male actors present at the *kraals* across the sites we visited.

Table 3. Mobile kraal herd management—duties and responsibilities

Kraal leaders	Kraal leader assistants	Herders
<p>Characteristics:</p> <ul style="list-style-type: none"> • Appointed during assembly of elders. Position does not usually have paid benefits. • Should own cattle, though wealth not required. • Age is variable. • <i>Kraal</i> leaders not always present at the <i>kraals</i>. Appoints a delegate when absent. • Must be respectful, obedient, not biased, and a good speaker/leader. Overall good quality personality. • Have mobile phone. • Must be sharp shooter; ready to die for the animals.⁵⁴ <p>Responsibilities:</p> <ul style="list-style-type: none"> • Oversee the overall <i>kraal</i> activities. • Assist with disease control management and animal health when possible. • Send scouts to assess the next station. • Decide on herd movement and ensure that herd moves together. • Consult the LDU and alert the UPDF before moving herd. • Request meetings with other <i>kraal</i> leaders to discuss urgent matters of security, grazing, etc. • Maintain relationships with other groups, including across borders, in order to ensure access to resources. • Maintain order at the <i>kraal</i>. 	<p>Characteristics:</p> <ul style="list-style-type: none"> • Each <i>kraal</i> leader has three or four assistants depending on the size of the <i>kraal</i>. • <i>Kraal</i> leaders select assistants from the existing herders. • Assistants appoint a delegate from the herders if they are absent from <i>kraal</i>. • Most have mobile phones. • Must be brave and a sharp shooter to ensure the security of his <i>kraal</i> animals. <p>Responsibilities:</p> <ul style="list-style-type: none"> • Assist <i>kraal</i> leaders in their duties. • Organize morning meetings before the herd moves out for grazing. • Meet together at 4 AM, collect wood, build fire, and listen to the report made by the herders. • Give advice and recommendations to herders at daily meeting. • <i>Kraal</i> leader assistants report to <i>kraal</i> leader on a daily basis any important issues from the daily meeting. • Mobile phones have greatly improved communication with <i>kraal</i> leaders (if they are absent from <i>kraal</i>). 	<p>Characteristics:</p> <ul style="list-style-type: none"> • Older boys/young men care for large animals. • Younger boys care for calves, sheep, and goats. • Most are from families with animals at the <i>kraal</i>. • Some are from families without animals and serve as herders in exchange for an animal or two per year. • Most do not have mobile phones. • Must be hard-working and skilled in fattening animals to please their fathers. <p>Responsibilities:</p> <ul style="list-style-type: none"> • Drive livestock daily to grazing and water areas. • Keep animals away from crops. • Check that all the animals are present when they return. • Report daily to <i>kraal</i> leaders and <i>kraal</i> leader assistants at morning meeting. • Provide updates on water and pasture issues, disease, overall health, changes in milk yield, births, security issues, and any other observations. • Contact leaders quickly in the case of urgent matters. • Transport meat, skin, or hide to owners of the animal in <i>manyatta</i> if one dies or is slaughtered. • Collect and prepare milk and blood for consumption. • Act as scouts of new areas or prior to movement when selected by leader and assistants.

⁵⁴ This was a highly-valued trait prior to the loss of guns through disarmament.

Governance at a *kraal* is handled by the *kraal* leaders with support from assistants. The *kraal* leader relies on elders for advice as needed. There appear to be certain codes of conduct in the *kraals*, enforced by the *kraal* leaders and elders. For instance, in an interview with the LDUs at Losera in Kaabong, we asked if there were any tensions among the clans. They responded:

There are no tensions. Only when people drink too much and start arguing and fighting with sticks. We have our own laws here at the *kraal*. When people behave like that, they are beaten by the elders to discipline them.⁵⁵

Female respondents interviewed in the *manyattas* in Kotido and Kaabong discussed how a family decides who should go the *kraals*. It was explained that if there are multiple boys in a livestock-owning household, some boys become herders and some go to school. This was a deliberate calculation and an insurance scheme to allow families to invest in both traditional practices (herding) and modern ones (education). They hoped that if one livelihood strategy failed, the other might succeed. Families with animals must either train a boy (or boys) to become herders or hire a herder; hence families with boy children almost always keep at least one boy out of school in order to maintain the family herd.⁵⁶

Females

The data for this study show discrepancies as to the role and presence of women at the *kraals*. There is general agreement that women move back and forth between the *kraals* and *manyattas* to bring grain, meat, blood, medicines, etc. from one location to the other. There is less consistency as to if/when women remain at the *kraals* and what they do at the *kraals*. As illustrated below in the movement section, some differences are explained by the distance between the *manyatta* and *kraal*, with women more likely to be present when the *kraals* are close to the

manyattas. Security is also a factor in whether or not women are present. At Kaloboki-Nasidok *Kraal* in Kaabong, for instance, we were told by both men and women that the women did not stay at the *kraal* for security reasons, but that men moved back and forth to the *manyatta* on a regular basis.⁵⁷ Changes over time in security also influence the presence or absence of women at the *kraals*, as discussed by women in a focus group in Kaabong:

Q: What is the women's involvement in the *kraal*?

A: We don't have much to do with it any more. It is only men. Before insecurity, we used to go and churn milk into butter. This was during the dry season. In the wet season, we came back for agricultural work. Sometimes if there was more than one girl in the family, she could stay through the whole season.

Q: When was the last time it was like this?

A: Before disarmament. There was a terrible raid by Jie and Bokora at Lokitela-Arengan where they killed men, women, children, elderly, and animals. Our men were there. From this time forward, we stopped going to the *kraal*. From that time forward we said, "I think the *kraal* is meant for men."⁵⁸

Other differences in views on women are explained based on variations in respondent groups. For example, the four focus groups we conducted at Loongor Dam involved men representing different *kraals* located around the dam. Respondents in one group explained that women were regularly present in their *kraal*, and that at the time of the interview several had been staying at the *kraal* for a month or longer. In contrast, respondents in another focus group were adamant that there were no women at their *kraal*. While we can only speak about the locations we visited, the general pattern across these locations is that women are regular visitors

⁵⁵ KII, LDUs, Losera *Kraal*, Kalapata Sub-County, Kaabong.

⁵⁶ In previous research in 2009 in Moroto (Rupa Sub-County) we met a young Matheniko woman at a *kraal* serving as a herder; she was from a family that had livestock and no sons. This was considered very unusual, but she liked her position and reported that she was generally accepted by her male counterparts.

⁵⁷ FGDs with young men, Kaloboki-Nasidok *Kraal*, Kalapata, Kaabong; FGD with women, Nakwakachel Village, Kalaboki Parish, Kalapata, Kaabong.

⁵⁸ FGD with women, Nakwakachel Village, Kalaboki Parish, Kalapata, Kaabong.

to the *kraals* but do not play a daily role in the *kraal* system. Women reported that they go to the *kraals* in order to have sex with their husbands or in hopes of conceiving a child, but then added that “sex is no longer sweet when there is hunger. Girls’ breasts don’t even develop because there is not enough nutrition.”⁵⁹

The reported limited involvement of women at the *kraals* is in line with the general views of gendered divisions in transhumant societies but runs counter to some of the earlier findings of FIC research in Karamoja (Stites et al. 2007). In these studies, we found that women and children were present at most *kraals*. Often these individuals were sent to the *kraals* due to poor nutritional status and may have been pregnant, lactating, or otherwise vulnerable. Improved nutritional access did come up as a positive factor at the *kraals* in this most recent study, though in this example it was males who were sent as hired herd boys. A female community leader interviewed this year in Kaabong explained that poor families without livestock will send their boys to the *kraal* to have better access to animal productions. She said:

Two of my sons are at the *kraal*. I let them go there—and other families without animals let their sons go there because they can benefit from the milk and even bring some back to the family. Sometimes a shepherd is given a cow to keep them being a shepherd.⁶⁰

This shift may be due in part to improved security at present, which allows for greater movement back and forth of such individuals, as well as greater exchange of food stuffs. Improved security also allows for more cultivation and gathering of natural resources, both of which are dominated by women. Better access to services in towns, such as clinics and schools, may also contribute to more women and girls staying in the *manyattas*.

Women who were at the *kraals* at the time of fieldwork for this study appear to primarily carry out domestic duties (cooking, collecting

firewood, milking, butter making, etc.) and have limited responsibilities associated with the animals. Exceptions include caring for young animals while their mothers are out grazing and helping to dig out river beds in areas where this is required to water animals.

⁵⁹ FGD with women, Nakwakachel Village, Kalaboki Parish, Kalapata, Kaabong.

⁶⁰ KII with female leader, Nakwakachel Village, Kalaboki Parish, Kalapata, Kaabong.

MOVEMENT: DETERMINANTS AND DECISIONS

Table 4 offers a generalized description of animal movements during the dry season in each of the four districts we visited. (This chart relies in part on observations made as part of the USAID East Africa RLP (Rockeman et al. 2016), which was implemented by FIC and included contributions from one of the authors of this report.)

A number of factors are taken into account in determining herd movements. These include security, relations with other groups, reported prevalence of diseases, presence of ticks, and access to natural resources. These considerations were explained by young men at a *manyatta* in Kotido:

You go on a reconnaissance to see if it is a good place for animals to water and graze. We look at water, tsetse fly, pasture, and if people we know are there. We go where we have relations with the people. You talk to the other *kraals* on the way. You observe the location for a few days before you decide. You see if your animals are doing well. How do they go out in the morning? How do they graze? How do they sleep? We only go where we know people.⁶¹

Mobile *kraals* follow roughly the same route every year. Depending on the season, herds will stop at approximately one to four stations along the way to their furthest point from the *manyatta*. When nearer to the *manyattas* at the first or second

Table 4. Approximate animal movements during dry season

District	Ethnic group	Movement during peak of dry season
Kaabong	Dodoth	Pastoralists in Kaabong stay in the district in most cases, but some from southern and western parts of the district move to nearby dams in Kotido. Turkana from Kenya move to grazing areas in Kaabong and often create conflict with the Dodoth.
Kotido	Jie	Jie pastoralists in Kotido have better access to water in the region but also move to Abim District based on negotiations with local communities. Some Jie groups attempt to access Acholi districts with varying success. When the rain starts, Jie move east towards the Kenyan border and graze with Turkana from Kenya and near to Matheniko from Moroto, where they share access to the Kobebe Dam.
Nakapiripirit	Pian	The pastoralists in Nakapiripirit move into neighboring districts, including Napak, Bulambali, and Kween. These movements are negotiated and based in large part on local dynamics and relationships.
Amudat	Pokot	Pokot pastoralists in Amudat are highly mobile in comparison to other ethnic groups. They access grazing in eastern Pokot early in the dry season and then move in search of water into Napak, Moroto, Nakapiripirit, and Kween Districts in Uganda and into Kenya.

⁶¹ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

station, there is greater movement between the *kraal* and *manyatta* and more sharing of food and other resources. The herds reach the furthest location from the *manyatta* at the point of greatest moisture stress, also known as the peak of the dry season. Herds normally move close to the *manyatta* during the wet season.

Security and Relationships

One of the main determinants of herd movement in Karamoja rests on both the quality of relationships and agreements made between ethnic groups, as well as restrictions imposed by central government authorities. This study found that decision-making is complex, involving different layers of informal and formal powerbrokers, including *kraal* leaders, elders, political representatives from the LCV down to the LCI, security personnel (including LDUs and UPDF), and the Uganda Wildlife Authority (UWA). Movement is almost exclusively motivated by the herd's need to access water and pasture. The migratory radius expands during the dry season as animals deplete resources closer to home. As the dry season heightens, it is not only the pull towards pasture and water that determines *kraal* movement, but also a complex calculus involving rights, relationships, and informal and formal agreements.

Elders

Elders play a large role in herd movement patterns, whether local, between sub-counties, or cross-district. Although impossible to quantify, respondents imply that respect for elders has risen back to pre-conflict/pre-

disarmament levels. Male elders are seen as the authorities on livestock movements, animal production, justice and discipline, marriage, initiation, and peace making.⁶² In fact, some informants described that elders hold more power and authority, and command more respect, than politicians at the village, parish, sub-county, or district levels.⁶³

One change observed in this study involves the relationship between male youth and elders. In most locations, both youth and elders described improved relations.⁶⁴ Youth find elders to be approachable for both advice and support, and youth themselves feel included in important decision-making processes.⁶⁵ This positive picture was contrasted with the pre-disarmament period where youth were disrespectful, stubborn, and did not follow the orders of elders. This disharmony was largely attributed to "the gun;" many elders wanted male youth to cease with raiding, but many of the youth refused to listen.⁶⁶ A female respondent observed the changes from her perspective:

Before disarmament, [the relationship between youth and elders] was not good. Most youth were in the bush raiding with their guns. The elders tried to tell them to stop, but they continued with their raids. Their gun was their power. They were hostile. But now, they listen to elders more than before.⁶⁷

In all study locations, except in Kaabong District, initiations of young men are taking place (see Knighton 2005; Spencer 1976; Gulliver 1953).⁶⁸ This is an important change

⁶² KII with Kotido DVO; KII *kraal* leader, Losera *Kraal*, Kalapata Sub-County, Kaabong District; Male FGD, Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong District; Male FGD, Nayonaangikalio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; Male FGD, Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

⁶³ Male FGD with Kaloboki *Kraal*, Kalapata Sub-County, Kaabong District.

⁶⁴ There was one exception to this positive trend. In Kotido Town Council, one *kraal* leader described that youth were disobedient because they had become exposed to money and alcohol.

⁶⁵ KIIs with CAWH and youth leader in Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

⁶⁶ KIIs with CAWH and in Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County; Female community leader, Nakwakachel Village; FGD with *kraal* members Kaloboki Parish, Kalapata Sub-County, Kaabong.

⁶⁷ Female community leader, Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

⁶⁸ The gerontocratic system of authority in Karamoja, as with many pastoral regions in the Greater Horn, is based on a rotation of male generation-sets. In Karamoja, only two such sets exist: the seniors and the juniors. A man cannot be initiated into the same generation-set as his father. This means that in the absence of regular rotation (whereby the senior generation set "retires"), there is no space for a new generation of men to be initiated (as they would be in the same set as their fathers). These uninitiated men are called *karacuna*, meaning "of the apron," which is meant to signify that they have a status akin to women.

from five to ten years ago, when initiation had ceased or greatly slowed in many areas, especially in southern Karamoja (among the Bokora, Pian, and Matheniko). The low rate of initiations occurred because the transfer of power between male generations (i.e., from the senior generation-set to the junior generation-set) was delayed for many years (some would argue decades) due to a variety of factors, including insecurity, poverty, drought, and reluctance on the part of the senior elders to acquiesce. In the absence of this transfer of power, young men were not able to initiate, as there was no “open” generation set for them to initiate into. This meant that they lacked official adult status, regardless of chronological age, and were not allowed to participate in community decision-making or leadership. The lack of transfer of power and the stagnation of initiations further fueled the discord between generations of men, and many felt that this contributed to violence in the region (Gray 2000; Stites 2013). Now that initiations are again taking place, youth are affording more respect to their elders, who are in turn seen to be acting as the appropriate authorities and guardians of power. This transfer of power and the reported associated improvements of respect between male generations means that elders have renewed access to traditional justice mechanisms that were previously largely ignored or deemed irrelevant. One of these mechanisms is *ameto*—when male elders order the caning of young men by their peers—and paying a fine (usually a bull) for wrong-doing. The threat of *ameto* helps to keep male youth in line. This is one example of the increased authority of the elders, which we believe has a direct impact on the improvements in security in region.⁶⁹

Regarding livestock, *kraal* members in all four districts described that it is the elders who ultimately dictate herd movements, although always in consultation with *kraal* leaders. In Kaabong, the leader of a large and powerful *kraal*

described that elders had more power than he did: “I am merely a potter for these elders, anything they say I have to respond...They are Gods.”⁷⁰

Intra-Ethnic Dynamics

In all study areas, respondents reported that intra-ethnic relationships are excellent. While *kraals* are historically organized around a single clan (which normally has ties to one sub-county), it appears at least in Kotido that animals from multiple clans can mix within a single *kraal*. This is reportedly an adaptation to the overall decrease in animal stock since the conflict.⁷¹ In terms of accessing pasture and water within Kotido, *kraals* belonging to the Jie ethnic group had no restrictions on movement or access because “Jie land is communally owned.”⁷² Animals from multiple *kraals*, for instance, converge on sites such as Loongor Dam at the same time. During the dry season, elders and leaders from different *kraals* will meet to determine how animals will migrate and disperse throughout the district and beyond.

Similar dynamics were described amongst the Dodoth in Kaabong, with animals from different clans and *kraals* grazing and watering together. As in Kotido, *kraal* leaders and elders from various clans/*kraals* cooperate to organize movement in a way that minimizes overcrowding around resource areas. Likewise, leaders of the Popei *Kraal* from Amudat described that they grazed their livestock communally with other Pokot clans, and a similar arrangement was found amongst the Pian.

In terms of the relationship between pastoralists and agriculturalists, study participants described a system of joint accountability in preventing the destruction of crops and garden plots. In each of the study locations, *kraal* members spontaneously spoke about the need to distance their animals from productive agricultural land. They assume

⁶⁹ We discuss the changed role of the elders in keeping the peace in more detail in the report produced under the Mercy Corps/FIC partnership in 2015: see Howe et al. 2015.

⁷⁰ KII with *kraal* leader. Losera *Kraal*, Kalapata Sub-County, Kaabong District.

⁷¹ FGD with *kraal* at Loongor Dam, Kacheri Sub-County, Kotido District; Male FGD at Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

⁷² Interview with LC at Loongor Dam, Kacheri Sub-County, Kotido District.

the responsibility for preventing livestock from grazing on crops, as described by this *kraal* leader:

We don't have to negotiate amongst ourselves within the district for movement, unless the animals go into someone's gardens. It is our binding law that someone's property is respected.⁷³

At the same time, however, farmers are advised by elders to fence off their gardens to prevent animal incursion.⁷⁴ Interestingly, it was only at Sinat Farm where study participants complained about livestock. As described elsewhere in this report, Sinat is a farming settlement in Rengen Sub-County, established four years ago with people from Rengen Sub-County. Smaller mobile *kraals* from the same sub-county are often based in Sinat. During interviews, farmers complained that livestock occasionally eat their crops, and lamented that herders burn the land surrounding the settlement when they depart (to increase grass productivity). As a result of the burning, the earth becomes too hard to cultivate. Lastly, they felt it was difficult to share one borehole between animals and humans, although they had devised a cooperative arrangement for sharing the water flow.⁷⁵ It is possible that these tensions are more present at Sinat because it is a newer settlement, or because permanent residents only rely on agriculture, rather than combined agro-pastoral livelihoods, as is typical in many other locations in Kotido.

The Uganda Wildlife Authority (UWA)

Restrictions on protected lands, such as Kidepo National Park and the Pian-Upe Game Reserve, interfere with patterns of livestock movement. Access to Kidepo is the most problematic for

pastoralists. Interviews with elders and members of *kraals* in Kaabong revealed that the Kidepo area was a historical grazing location prized for its *elet*, or salty pasture. Respondents regularly referred to Kidepo as a prime dry season grazing location.⁷⁶ Kidepo Park currently comprises approximately 20% of Kaabong District and is reportedly set to expand. Study participants described that their access to Kidepo has become more restrictive, although grazing restrictions have been in place since the late 1990s.

Respondents reported being “chased away,” and shot at.⁷⁷ Herders complain that their cattle are deprived of important pasture, which in turn places greater pressure on grazing lands elsewhere in the district. Moreover, game animals from Kidepo carry tsetse flies that spread trypanosomiasis (*eddit*), which has led to a high mortality rate in livestock (discussed further in section on animal health). Study participants said that they were not able to interact directly with UWA staff, and that neither the elders nor the elected leaders were effective interlocutors.⁷⁸

Kraal members interviewed in the south described similar issues with the UWA, although access seems more flexible, punishment for trespassing appears less harsh, and there appear to be more viable grazing alternatives to UWA land. Residents of Kosike Parish described that the UWA have claimed land rights over several traditional grazing areas.⁷⁹ Herders at Popei *Kraal* in Amudat made similar complaints but have developed a strategy whereby they graze in the early morning before the rangers are on duty.⁸⁰ The UPDF in the vicinity, who are reportedly there to prevent raiding, also play a role in blocking livestock entrance to UWA lands. However, the Pokot whom we interviewed at Popei *Kraal* had acquired access to alternate lands

⁷³ KII with *kraal* leader, Kotido Town Council.

⁷⁴ Male FGD, Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat; Male FGD, Loongor Dam, Kacheri Sub-County, Kotido.

⁷⁵ The FIC team observed that when girls/women pumped water to fill jerry cans, they let half of the flow run off to the animal watering area. This was described as an agreement between agriculturalists and pastoralists to share water from the borehole.

⁷⁶ KII with leaders of Losera and Kaloboki *Kraals*; Elders of Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

⁷⁷ Male FGD, Losera *Kraal*, Kalapata Sub-County, Kaabong District.

⁷⁸ KII with leader of Losera *Kraal*, Kalapata Sub-County, Kaabong District.

⁷⁹ Male FGD, Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District.

⁸⁰ FGD with Popei *Kraal* members, Amudat.

through agreements with Sebei communities in neighboring Kween District. As in the north, however, livestock also appear to suffer from high rates of *ediit* as a result of their close proximity to game animals.

Inter-Ethnic Relationships

Contemporary inter-ethnic relationships are a central factor in determining livestock movement patterns and facilitating animal production. Research conducted in 2015 for FIC/GHG and this cycle of data collection shows, on the whole, improved inter-ethnic relationships. A series of inter-group pacts (such as the Loyoro Agreement, a joint grazing agreement between the Turkana, Jie, and Dodoth, and the Moruitit/Nabilatuk Resolutions to implement local responses to insecurity) have helped to decrease theft and have supported resource sharing for pastoral livelihoods. Such agreements have led to the growth in trade between the Jie and Dodoth and a reported increase in inter-marriage.⁸¹

In contrast, on the western border of Kotido, Jie report strained relationships with Acholi. Both *kraal* leaders and district-level officials described difficulty accessing pasture and water in Acholiland, and periodic animal theft (as described in more depth in the section on security). Respondents from various *kraals* at Loongor Dam provided two explanations for these tensions. First, there are apparent political differences between the residents of Karamoja (largely pro-Museveni) and Acholi (predominantly anti-Museveni), which were highlighted in recent elections. Second, some elements of Acholi communities reportedly have access to weapons, whereas the Jie have been disarmed. Jie respondents said that this allowed men from Acholi to steal more easily. Such thefts may be opportunistic or may reflect a desire to settle past scores in which Jie conducted repeated

and heavy raids into Acholi territory. Furthermore, while we did not interview Acholi respondents for this study, we know that Acholi herders were complaining of Jie incursions and thefts in the same time period.⁸² These accusations point to the tit-for-tat aspect of this dispute, with negative implications for animal migration and resource access.

This study revealed a variety of processes for gaining access to dry season grazing in Acholiland. Some study participants described that their LCV and other officials travel to neighboring districts to negotiate access with leaders.⁸³ Elders play an important role, as explained by a *kraal* leader:

The movement patterns for the District are determined by the LCV. He takes senior elders to where they are supposed to migrate in neighboring districts, and they make an agreement by saying ‘Please, our animals need to pass’—they sell our plea to other districts. This takes place before we start moving. Then they come back to the *kraals* to describe these negotiations with us and what has been agreed upon...They make sure we know the rules—like not stealing, and the need to keep animals out of the garden...We are given rules and policies.⁸⁴

District leaders are certainly not always involved in these negotiations. A *kraal* leader at Sinat described a different process whereby he traveled to Acholiland (without his animals) to negotiate access from an individual LC there. Upon agreement, the *kraal* leader received a letter that allowed him to return with his animals. Several *kraal* leaders stressed the importance of providing written permission to the LDU/UPDF stationed at the Acholi-Karamoja border before being allowed to pass with animals.⁸⁵

⁸¹ Observed by FIC research team at Kanawat and Kaabong markets. On inter-marriage, see Howe et al., 2015.

⁸² Interview with Resident District Coordinator (RDC), Peter Logiro, Kotido.

⁸³ KIIs with NGO representative and *kraal* leader Kotido Town Council; Male FGD, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

⁸⁴ KII with *kraal* leader, Kotido Town Council.

⁸⁵ FGDs with Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

Aside from verbal and written agreements, money and animals (usually one or two bulls) are offered as payment to LCs, elders, or landowners to access water or pasture in Acholiland.⁸⁶ In the absence of cash, an animal from the *kraal* will be sold. If the *kraal* is obliged to move to a new area because of depleted resources, a new negotiation process begins.⁸⁷

In addition to increased restrictions and the perception of deteriorating Acholi-Jie relations, several Jie men and women expressed outright fear at the idea of traveling to Acholi:

Previously you had this friendship and you all went [to Acholi] as a group. But now even our friends aren't receiving us. We are scared because we do not know what might happen to us if we cross-over...[referred to a missing *kraal* member]...You can go just to visit your friends, but you go on a road or in a vehicle. You don't use these cattle paths.⁸⁸

Access to water and pasture in Abim was described in more positive terms. Study participants described that the authorities are generally benevolent (UPDF, LCs, and elders), fair, and cooperative. There is also a perceived ethnic similarity between the Jie and Labwor, and these shared ties are seen as easing access to natural resources.⁸⁹ The following excerpt highlights some of the relational differences and the spirit of agreements between groups in Abim and Kotido:

As a *kraal* leader...I create relationships—friendships actually. I say to them, 'Please brothers, I am migrating,' and then they show me the best place to graze. This relationship is important because we can share ideas. And these relationships help us to work together to prevent theft. It has been four years since we have been going back to the same place

[Morulem, Abim]...As an example of working together, we lend them our oxen to plough their fields, and then they will drive them back here to Kotido Town Council. They will then give us three bags of sorghum as a thanks. This is the most common exchange...No money is ever exchanged. We share food, we give them milk and butter, that is why they are appreciating our presence there.⁹⁰

In southern Karamoja, the quality of inter-ethnic relationships also varied. Respondents at the Pian *Kraal* in Napak District described poor relationships with the Tepeth, whom they feared “would cut us to pieces if we are moving animals to and from home, or from the *kraal* to the market.”⁹¹ People at this *kraal* described receiving “clearance” forms from the local LCI and elders to secure their movement, and said that they are protected by LDUs and UPDF against Tepeth attacks. This same group also feared the Pokot, whom “we do not have relative peace with.” Members of this *kraal* reported being barred from the important sources of water and pasture in Teso due to the historical tensions between the groups over raiding.

Respondents in the Popei *Kraal* in Amudat reported being warmly welcomed by people from Kween. They have full access to available pasture and water, and are also invited to cultivate the land. *Kraal* members described that the Sebei support the Pokot with tracking and recovering stolen animals. Their problems were with the Pian, who steal their animals “from time to time.”⁹²

Natural Resources

Security and good relations allow movement to occur, but such mobility is only desirable and beneficial if it leads to appropriate access to natural resources. At the most basic level, these inputs are pasture and water, but variations in

⁸⁶ KII with herder at Nangolmuria Village, Nakwakwa Parish.

⁸⁷ KII with shepherd at Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County; FGD with members of *kraal* at Sinat and Loongor Dam.

⁸⁸ FGDs at Loongor Dam; KIIs with women at Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

⁸⁹ FGDs at Loongor Dam.

⁹⁰ KII with *kraal* leader, Kotido Town Council.

⁹¹ FGD with *kraal* from Kosike Parish, Nabilatuk Nakapiripirit District at Naaratom *Kraal*, Napak.

⁹² FGD with *kraal* members in Popei, Sebeiland, Amudat.

these resources are important components in the decision-making behind herd movements. Herders seek access to multiple kinds of forage, consisting primarily of nine major types. In a recent doctoral study on forage dynamics in Karamoja, Egeru Anthony (2014) states:

The pastoralists and agro-pastoralists possessed detailed knowledge of forage species type, location, growth periods and forms, perceived quality and preferences by livestock species.

Herders have a clear sense of when and where to access the different types of pasture, and they move animals accordingly. In the fieldwork for this study, we saw how improved security was a positive factor in this regard. *Kraals* in Kotido near to Loongor Dam were divided into those for cattle and those for sheep and goats, and the different herds accessed different areas of rangeland in the larger vicinity of the dam. This division of animals was not possible, explained the herders, during periods of heightened insecurity, when people and animals congregated in larger groups in effort to improve safety.⁹³

Pasture is a central factor in determining herd movements, but water is the most critical and is often more difficult to access than pasture:

We migrate in search of water and pasture. Lack of water is the main reason for migration of the animals. The pasture is plenty in Rengen—we could stay here within this sub-county if there was enough water.⁹⁴

Herders at Loongor Dam in Kotido detailed the location of various Jie herds that were spread throughout Kotido and Abim. (As discussed above, ideally some animals would also have been in Acholi Districts, but relationships with the Acholi were tense at the time of our field visit.) Herds are dispersed, in part, to maximize access to and conserve the scarce water resources.⁹⁵ We visited at the peak of the dry season, when the animals were at their furthest position from the home *manyatta*. The herders listed a series of points as stations along the way from their home *manyattas* to the furthest locations (first column in Table 5).⁹⁶ Herds ended up at a number of dams or other watering points, mostly in Abim (second column in Table 5). Most of these locations had water throughout the dry season, but some, such as Longorikipi in Abim, dried up or were in need of desilting. The animals from this location moved on to Loongor Dam, which does not dry up, although it was experiencing reduced water levels at the time of our visit. The data provided here are meant to

Table 5. Jie livestock movement as reported, dry season 2015–2016

Stations*	Furthest locations (dams or watering points)
Moruekori (Kacheri)	Lokipacha
Kadurum (Kacheri)	Longorikipi 1(in Abim)
Chapet	Lokayet
Nawokoupal	Ayollo
Katukenyang	Katipus
	Longorikipi 2 (on Napak border)
	Loongor (Kacheri)

* These stations are not necessarily consecutive.

⁹³ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido.

⁹⁴ FGD with young men, Nangolmuria, Rengen Sub-County, Kotido.

⁹⁵ KII, CAHW, Nangolmuria, Rengen Sub-County, Kotido.

⁹⁶ Ideally these locations (and those discussed for other groups below) would be shown on a map. This would require asking herders to accompany research team members to sites they had visited prior to where we found them, or moving with the *kraal* throughout the dry season. In either of these instances, the team could then take develop a map using GPS data. This strategy, however, would take a great deal of time (on the part of both the herders and the research team) and would likely only show the pathway of one specific group. These more detailed pathways will hopefully be available through the upcoming grazing mapping study spearheaded by Mercy Corps.

illustrate the nature of movement and the regular and known patterns in seasonal migration, and are not definitive or absolute.

We were able to collect detailed information regarding the movements of the Pian and the Pokot groups we interviewed.

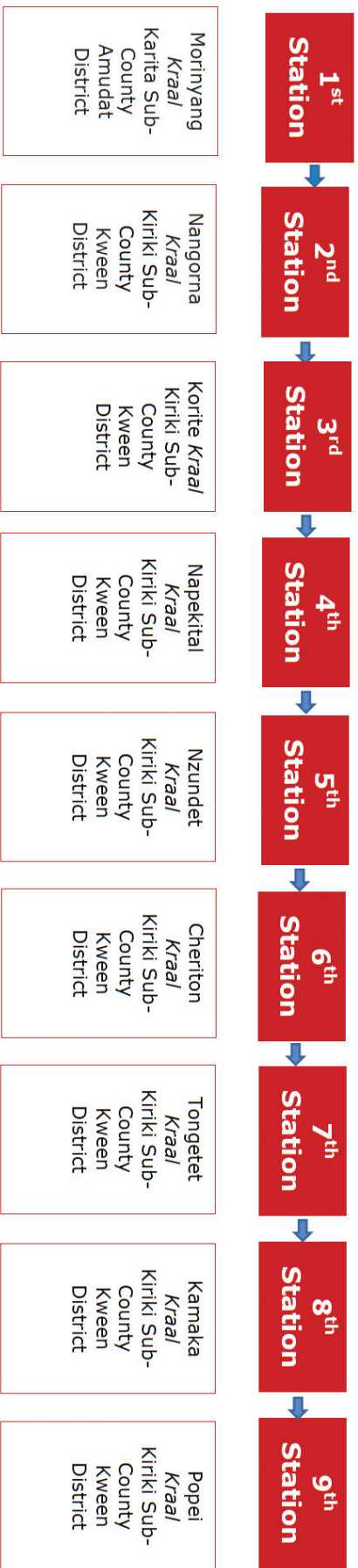
For the Pian of Nabilatuk Sub-County, we interviewed them at Naaratom *Kraal* in Iri Sub-County in Napak District (see Table 6). We found this *kraal* at its fourth and final station of movement as part of the dry season rotation, near the Lodike watering point. This watering point, shared with the resident Bokora, has a

water trough that can accommodate approximately 10 cattle at one time. The trough is connected to a reservoir by a pipe. The reservoir has an inlet pipe that is connected to a water flow that comes from the surrounding hill. Water is available all year round.

The *kraal* leader explained the factors that go into determining when it is time to move from one station to the next. These factors included: cows starting to run out of milk, bulls not mounting heifers, and calves becoming weak and dying. At this juncture, the *kraal* leader would send a scout to assess the availability of water and pasture at the next station.

Table 6. Pian herd movement from Kosike Manyatta to Naaratom Kraal as reported, dry season 2015–2016

1st STATION Alibamun	2nd STATION Lokitelangikoria	3rd STATION Awoyalet	4th STATION Naaratom
<ul style="list-style-type: none"> • 1-hour walk • Use rain water for livestock watering • Not muddy, even if it rains • Stay at this site for 3–5 months after rain stops • Good milk; girls go to <i>kraal</i> to do milking, also to make butter • Transport milk from <i>manyatta</i> • Nabilatuk Sub-County • Pasture abundant • and butter to <i>manyatta</i> 	<ul style="list-style-type: none"> • 2-hour walk from <i>manyatta</i> • Nabilatuk Sub-County • Pasture abundant, • Use dam/borehole • Tall grass • Stay ~ 3 months • Enough milk; men/boys do milking • Some boys make butter, traditionally a female job 	<ul style="list-style-type: none"> • 6-hour walk from <i>manyatta</i> • Nabilatuk Sub-County, but near Chekwi and Teso border • Standing hay • Use dam/ borehole/ river banks • Stay ~ 3 months • Shortage of milk; milk yield start to reduce • Men/boys milk 	<ul style="list-style-type: none"> • Very far from <i>manyatta</i> • Iri Sub-County, Napak • Poor pasture • Use water point • Stay at this station until rain starts • No or very little milk



The nine *kraal* stations in Table 7 are used during migration by the Pokot from Kakuron on the way to Popei, the furthest location. Some of these may be relatively short stopover points. There are four stations where the herds normally stay for a longer period of 3–4 weeks. These are Morinyang (Amudat), Nangorna (Kween), Kamaka (Kween), and Popei (Kween) in the list above (corresponding to stations 1, 2, 8 and 9).⁹⁷

The information provided on the movements of the Jie, Pian, and Pokot groups in this study illustrates both the predictability and importance of movement in the lives of these populations. The movement is not erratic or random, but rather a carefully planned and logistically complex series of steps to areas where access to water, pasture, and security is available. Each step is thought through, discussed, negotiated, and scoped out in advance. Understanding the complexity and the planning behind such movements helps us to move away from the notion of the “wandering” pastoralist population.

⁹⁷ Email correspondence with Simiyu Sathgl, district livestock production and marketing expert, Amudat.

ANIMAL HEALTH

“The raider is now the disease of *ediit* and the ticks.”⁹⁸

Animal health is one of the most important factors in resilience and well-being of pastoral and agro-pastoral populations. In comparison to findings from research five to ten years ago, today “livestock disease” has replaced “insecurity” as the primary concern among most males interviewed. Respondents in all study sites experienced problems with animal health, and some say that this problem has been particularly pronounced in the last year. Others feel that this is a more gradual change from the past and blame this general increase on a rise in tick-borne diseases.⁹⁹ The perceived heightened impact of animal disease is due to several factors, including: i) the view that tsetse fly-affected areas have expanded, bringing an increase in trypanosomiasis (locally known as *ediit*), especially in northern Karamoja; ii) poor coverage, availability, and use of treatment medications; iii) increased movement by animals and interaction with wildlife in many areas; and iv) drought in 2015, which weakened animals and left them more susceptible to disease. Respondents in Kotido in particular reported high rates of animal losses in 2014–2015. One *kraal* leader at Loongor Dam in Kacheri reported losing 80 out of 150 head of cattle, mostly from trypanosomiasis.¹⁰⁰ Such losses have a negative impact on what had been gradual recoveries of animal wealth.

Respondents reported that a disease outbreak in a given area “will force animals to be chased away from the watering point or even the grazing area.”¹⁰¹ When natural resources are limited or when a problem is widespread, animal owners and herders have little option but to continue to keep animals in areas of known infestation. These factors are important differences between studies sites. For example, Pokot herders (from Lokales Parish, Karita

Sub-County) were able to shift animals from east to west to avoid tsetse flies and ticks, even though this meant abandoning an area of good pasture. In contrast, numerous *kraals* had been situated at Loongor Dam in Kacheri, Kotido, for up to five months when we visited in early March, even though the area was overrun with tsetse flies and had experienced high animal death rates. Low rainfall over the past year exacerbated the situation in this instance by pushing more animals to Loongor Dam as certain water points in Abim District dried up. (Herders reported that Longorikipi Dam in Abim had dried up, but other sources relay that it does not dry up, but requires desilting.) Other traditional watering points in Abim and Kotido (such as Lokipacha, Lokayet, and Katipus) still had water but required digging by hand in order for the animals to access it. In addition, the drought pushed wild animals out of Kidepo Park in search of better grazing. Local communities feel strongly that the spread of these animals is responsible for the tsetse fly infestation in northern Karamoja.

Animal diseases have both direct and indirect impacts on food security for humans. Indirect impacts arise from the loss of animals as critical household assets, particularly in times of hardship when the sale of an animal allows for the purchase of cereals. Direct impacts include the loss of animal protein in the human diet through decreased milk supply or the weakening of animals to the point that blood cannot be taken, an important source of dry season protein for herders.

Treatment

Access to and availability of animal treatment is a problem at multiple levels for respondents in Karamoja and was reported by all respondents. The treatment shortfall at the local level includes vaccines, medicines, pest prevention (such as dips), and supplements (such as salt licks).

⁹⁸ FGD with male herders at Loongor Dam, Kacheri Sub-County, Kotido.

⁹⁹ KII, LCI, Nangolmuria, Nakwakwa Parish, Rengen, Kotido.

¹⁰⁰ KII with *kraal* leader and *kraal* leader assistant, Loongor Dam, Kacheri Sub-County, Kotido District.

¹⁰¹ FGD with male elders, Nakwakachel, Kaloboki Parish, Kalapata Sub-County, Kaabong.

Notably, complaints about the lack of treatment and responses to animal disease were rife even though FAO and government partners (with DFID funding) launched a three-month vaccination campaign, successfully vaccinating 182,000 cows, 6,000 goats, and 3,000 sheep in Kotido in August and September 2015. According to the Acting DVO in Kotido, however, the campaign stalled when the animals migrated out to distant *kraals* and were more difficult to reach. He also felt that the amount of drugs was inadequate to meet the extent of need.¹⁰² In September 2015 the Minister of MAAIF (Ministry of Agriculture, Animal Industry and Fisheries) announced an imminent program to control trypanosomiasis and tsetse flies in the region.¹⁰³ This effort does not appear to have taken place, and trypanosomiasis remains widespread, with many respondents citing it as the leading cause of animal death.

Many respondents felt that the system of community animal health workers (CAHWs) was in disarray because of the lack of consistent funds or facilitation of these individuals from the DVO offices. The offices of the DVOs, in turn, often do not receive their operating budgets from the central government, and, even when they do, they lack adequate staff and equipment to facilitate the work of the CAHWs. In addition, some respondents queried the experience and knowledge of the CAHWs. Herders in a focus group at Sinat grazing area in Rengen said, “You never know if they are really trained. You assume they are because they use convincing language.”¹⁰⁴

The lack of adequate funds and facilitation (particularly transportation) for CAHWs means that these individuals are rarely able to reach the remote *kraals* sampled in our study. CAHWs

were present in the *manyattas* we visited in Kaabong and Kotido, but reportedly lacked an adequate supply of drugs.¹⁰⁵ When CAHWs do make visits to *kraals*, they are reportedly often short on drugs.¹⁰⁶ Herders in Losera *Kraal* in Kalapata, Kaabong mentioned greater interaction with CAHWs than in the other locations. Losera is an extremely large *kraal* under UPDF protection. The size, visibility, and accessibility of this site likely contribute to more frequent interaction with CAHWs. In addition, Losera may warrant greater non-governmental and government attention than other sites, because of the density of animal population and associated risks of rapid spread of an epidemic. In addition, a major outbreak of Foot and Mouth (or other) Disease in this location would spread quickly (and also reflect poorly on the GoU and security forces).¹⁰⁷

Private traders in veterinary medicines were also reportedly rarely present at the *kraals* visited by the Tufts team. An exception was the Sinat grazing area in Rengen, where herders reported regular visits by traders carrying animal medicines, though they pointed out that these individuals did not have any veterinary knowledge. (Other respondents clarified that some traders did have good knowledge of treatment protocols.¹⁰⁸) Sinat is closer to towns than the traditional *kraals* visited by the team, which may explain the more regular visit by traders.

Animal owners rely primarily on traders in towns and at livestock markets for the purchase of veterinary medicines. Purchase and administration of drugs is primarily at the household—as opposed to community—level, although herders at Loongor Dam reported that purchases are sometimes made collectively.¹⁰⁹

¹⁰² KII with Acting DVO (Dr. Constantine), Kotido.

¹⁰³ See comments by the Honorable Bright Rwamirama, Minister for Animal Industries, as reported by OPM. <http://opm.go.ug/news-archive/fao-and-government-of-uganda-launch-extensive-livestock-vaccination-programme-in-karamoja.html>.

¹⁰⁴ FGD with male herders, Sinat grazing area, Rengen Sub-County, Kotido.

¹⁰⁵ FGD with male elders, Nakwakachel *Manyatta*, Kaloboki Parish, Kalapata Sub-County, Kaabong.

¹⁰⁶ KII with *kraal* leader, Losera *Kraal*, Kalapata Sub-County, Kaabong.

¹⁰⁷ The involvement of training of CAHWs in Kalapata Sub-County by Mercy Corps was acknowledged and appreciated by the *kraal* leader.

¹⁰⁸ FGD with young men, Nangolmuria, Nakwakwa, Rengen.

¹⁰⁹ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido.

Respondents in all areas reported that if they had cash, they could acquire the drugs that they needed at the local, sub-county, or district markets. (One respondent reported that drugs were more difficult to come by in Abim than in Kotido, and that the efficacy of drugs bought in Kotido was greater.¹¹⁰) Access to drugs when the animals are in the remote *kraals* is more difficult, and animals are often at their weakest at this point in the dry season rotation. Herders reported travelling great distances to purchase drugs, normally on foot, and at times the animals would not survive this delay.¹¹¹ Drug prices were consistent throughout the year and were the same regardless of location of purchase. Prices were reportedly the same whether the supplies were purchased from a private trader or CAHW. Hence the problem with the use of medications is not one of availability, but rather one of access and use by animal owners.

Drugs are not usually kept on hand by traders or owners, with some exceptions. A CAHW interviewed in Kotido said, “We as CAHWs are trying to convince owners to buy enough drugs in advance of sickness.”¹¹² The absence of a stockpile of medicine is likely due to multiple factors, including reluctance to sell animals to generate the needed cash in advance, lack of adequate storage locations, and the unstable nature of some drugs that must be kept at a certain temperature or out of the sun. (Some observers pointed out that a sense of dependency may also contribute to the reluctance to purchase drugs in a timely fashion; i.e., people hope that the items will be provided free of charge by the government or NGOs and hence do not purchase them on the market.¹¹³) Without drugs on hand there may be a delay in treatment, increased spread of disease, or erosion of the condition of animals before treatment starts. Herders from Nabilatuk, Nakapiripirit, who had

animals at Naaratom *Kraal* in Napak, explained the time-consuming steps that must be taken once an animal falls ill:

It’s hard to get drugs at the *kraal*. We also first have to wait for an animal to fall sick, then, after the sale of a goat or sheep, you now have to go as far Iriri or Nabilatuk to buy medicine, which is a very long distance such that by the time you come back the next day sickness would have accumulated in an animal, and in most cases you may even find that the animal is already dead. Alternatively, we sometimes drive the sick animal home for treatment.¹¹⁴

An exception to having drugs on hand came from Loongor Dam, where male herders reported that their *kraal* leader attempted to keep drugs, and also that the *kraal* leader treated the animals communally, as opposed to treatment based on individual ownership.¹¹⁵ We also saw a *kraal* leader treating an animal at the Pokot *Kraal* visited in Kween. This *kraal* leader explained that he carries drugs with him when possible due to the remote location of the *kraals*. He said, “We know what we need, we buy and move with drugs all the time.” He stressed that the knowledge of animal disease was passed down from fathers to sons.¹¹⁶

Mercy Corps staff reported that many drugs are imported informally from Kenya and sold by traders at local markets. These traders have little to no experience with animal diseases. Often the drugs are expired and of decreased effectiveness, which can worsen the disease situation. This is particularly a problem in Kotido.¹¹⁷

Local-level views on and uses of animal medicines are important to examine in order to improve delivery and efficacy. Efforts to save money and to help more animals have led some

¹¹⁰ KII with a *kraal* leader, Kotido Town Council.

¹¹¹ FGD with male herders, Naaratom *Kraal*, Iriri, Napak,

¹¹² KII with CAHW, Nangolmuria, Nakwakwa, Rengen.

¹¹³ Email conversation with Mercy Corps staff member.

¹¹⁴ FGD with male herders, Naaratom *Kraal*, Iriri, Napak.

¹¹⁵ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido. Our team member, Darlington Akabwai, reported that this *kraal* leader was a former CAHW (trained by Akabwai many years ago), which may explain his motivation to keep drugs on hand.

¹¹⁶ KII with *kraal* leader, Popei *Kraal*, Kween District.

¹¹⁷ Email conversation with Mercy Corps staff member.

herders in the study to dilute drugs to spread the medicine over a greater number of animals.¹¹⁸ Other changes to the prescribed doses may arise from the perception among herders that the drugs are not working, or not working correctly. For example, men in a FGD at Loongor Dam in Kotido reported, “We buy drugs, but animals continue dying of tick borne diseases. Even treatment for *ediit* disease is not easy to manage.”¹¹⁹ (In addition, the medicines to treat *ediit* are reportedly very expensive.) An LCI in Rengen, Kotido felt that some of the diseases were becoming drug resistant; this claim was repeated at multiple sites.¹²⁰ The lack of regulation or education on the appropriate administration of medicines compounds the usage problems. As one local NGO staff member in Kotido asked, “Are these the most appropriate [drugs] for the diseases here? People are treating the animals in any which way, they are not doing the right things.” He added that many people are afraid to vaccinate their animals.¹²¹ The leader of an urban *kraal* in Kotido Town Council confirmed that many people were concerned about giving their animals injections, saying that people preferred “washing” sick animals. He blamed this on ignorance in rural areas and said that such people often pretended to treat their animals but did not, blamed traders for expired drugs, and diluted and improperly stored their medicines.¹²² A discussion with herders at Loongor Dam in Kotido did indicate a lesser emphasis on western pharmaceuticals. When asked what they did if an animal fell sick, a group of young men replied:

We use natural remedies like washing them and special roots. If we have the capacity, we buy drugs from [Kotido town]. But the

medicine has no impact. There is no CAHW amongst us.¹²³

A common complaint was in regard to the lack of animal treatment facilities for the management of disease. This has clear negative repercussions on the livestock sector overall. In order for the sector to be robust, herders need regular and consistent access to and education on vaccinations, deworming medications, and dips to prevent tick-borne diseases. As one key informant emphasized, many of the diseases that are having pronounced negative impacts on local livelihoods are not only preventable but are within the ability of the Ugandan system to manage:

There are many preventable tick-borne diseases here. Systems for prevention were managed centrally in the 1960s with numerous dip tanks. This collapsed by the 1980s—today there is not a single functional dip tank in Karamoja. Although some argue otherwise, I think that people would be very happy to pay for services. This could be in place with clear structures and systems and management by the DVOs. Dip tanks are working in western Uganda.¹²⁴

Some organizations have sought to create a shared-cost of treatment model with local communities. Mercy Corps, for instance, initiated a program to spray animals against tick-borne diseases at 200 UGX per animal. Mercy Corps staff reported that this program was underway but moving slowly, while a local *kraal* leader in Kaabong and the Acting DVO in Kotido were under the impression that the program had stalled due to unwillingness of animal owners to pay.¹²⁵ The Acting DVO in

¹¹⁸ Interview with drug traders, Kotido Livestock Market.

¹¹⁹ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido. *Ediit* is particularly difficult, because animals in a tsetse fly area may need to receive multiple treatments in order to remain immune to the effects. This requires a large stock of the appropriate drugs and an appropriate dosing schedule. Herders who may not be aware of this aspect of the treatment may assume that the drugs are not working appropriately when an animal that has previously been treated falls ill again. In addition, the medicines are expensive, pushing some herders to dilute in an effort to have them last longer.

¹²⁰ KII, LCI, Nangolmuria, Nakwakwa Parish, Rengen, Kotido.

¹²¹ KII, NGO representative, Kotido Town Council.

¹²² Interview with *kraal* leader, Kotido Town Council.

¹²³ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido.

¹²⁴ KII with NGO worker, Kotido.

¹²⁵ KIIs, *kraal* leader, Losera, Kalapata Sub-County, Kaabong; Acting DVO (Dr. Constantine), Kotido.

Kotido felt that such programs would be more successful if the system of CAHWs were active, as CAHWs would be better able to convince people to make the small investments needed to protect their herds. Some within the NGO sector placed more blame on district officials, who were seen as unmotivated and as waiting for the development partners to fill programmatic and funding gaps.

A diagnostic laboratory for identification of

animal diseases exists in Moroto, built under a grant from the MAAIF. This is a much-needed service in the region but suffers from a lack of funds and poor staffing and hence is under-utilized. In addition, district officers elsewhere in the region do not have the transportation or budget to deliver specimens to the lab.¹²⁶ Some organizations in northern Karamoja send specimens to a lab in Kampala in an effort to avoid the backlog in Moroto, but even the Kampala lab can take a month to respond. See Table 8 for a list of reported diseases.

Table 8. List of reported animal diseases

Official name	Local name	Vector and symptoms	Greatest impact on animal type	Location mentioned
Trypanosomiasis	<i>Ediit</i>	Tsetse fly; causes gradual loss of body condition and edema of the lower abdomen. Drop in milk production. Emaciation.	Cows, sheep, goats, and donkeys.	Kotido: all locations Kaabong: Kaloboki Parish Kosike Parish, Nakapiripirit District Naaratom <i>Kraal</i> , Napak
Contagious Bovine Pleuropneumonia (CBPP)	<i>Loukoi</i>	Bacterial disease. Chronic dry and prolonged coughing. Dies suddenly or when emaciated. Worsened by overcrowding. High morbidity and mortality.	Cows.	All locations
Contagious Caprine Pleuropneumonia (CCCP)	<i>Loukoi (in goats)</i>	Bacterial disease. (See above.)	Goats.	All locations
Goat or sheep or cow pox	<i>Etom</i>	Viral disease, highly contagious. Fever, ocular and nasal discharge. Pox lesions. High mortality.	Goats, sheep, and cows.	Kotido (all locations) Kaabong, Kaloboki Parish

continued on next page

¹²⁶ KII with Acting DVO (Dr. Constantine), Kotido.

Official name	Local name	Vector and symptoms	Greatest impact on animal type	Location mentioned
Peste des Petits Ruminants (PPR)	<i>Loutokonyen</i> (“sinking eye balls”)	Viral disease. Diarrhea, fever, and emaciation. Can be confused with Rinderpest.	Goats and sheep.	All locations
Anaplasmosis	<i>Lopid</i>	Ticks; bile disease.	Goats.	Loongor and Nakwakwa, Rengen Kaabong: Kaloboki Parish Naaratom <i>Kraal</i> , Napak Popei <i>Kraal</i> in Kween
Heart Water	<i>Lokou</i> ¹²⁷	Transmitted by ticks; animals move in circles.	Sheep and cows.	All locations
East Coast Fever (Theileriosis)	<i>Lokit</i>	Tick-borne.	Cows.	Loongor, Kotido Kaabong: Kaloboki Parish Amudat
Black Quarter (or Anthrax) ¹²⁸	<i>Lokwat or Lokichuma</i> (Black Quarter), <i>Lotidae</i> (Anthrax)	Bacterial, spread by contact. Causes sudden death in mature, healthy animals.	Cows (can spread to humans, zoonotic).	Loongor, Kotido Kaabong: Kaloboki Parish Amudat
Foot and Mouth Disease (FMD)	<i>Lojaa and Ebaibai</i> (mouth and foot lesions)	Viral, spread by contact. Foot lesions cause limping; local lesions in mouth; gradual loss of condition; death in 10–20% of the affected herd.	Cows.	Kotido Kaabong: Kaloboki Parish

continued on next page

¹²⁷ Some respondents called this Lokou, which is meningitis and has similar impacts on the nervous system.

¹²⁸ Respondents in the field described this as Anthrax, based on the symptoms. Mercy Corps staff felt that this was unlikely due to lack of reports of human Anthrax cases. The veterinary doctor on our team felt that local people were able to avoid eating contaminated meat and that this might be why human cases were not reported.

Official name	Local name	Vector and symptoms	Greatest impact on animal type	Location mentioned
Roundworms	<i>Navosin</i>	Worm infestation; spread by drinking or grazing contaminated watering points or pastures. Causes diarrhea and loss of body condition and death in kids, calves, and lambs.	All animals, including cows, goats, sheep, donkeys, and camels.	All locations
Tapeworms	<i>Ngipelei</i>	Spread by grazing infested pastures; zoonotic.	Cows, sheep, goats.	Kaabong: Kaloboki Parish
Red Water (Babesiosis)	<i>Ngakul (Nuarengak)</i>	Tick-borne. Fever, restlessness, anemia, urinates blood.	Cows, goats, sheep.	All locations
Hemorrhagic septicemia	<i>Lookot</i>	Bacterial infection pread by contact. Fever, hemorrhages in the mouth, nostrils, and entire alimentary mucosa. Blood-tinged diarrhea.	Cows.	Kaabong: Kaloboki Parish Loongor Kotido Naaratom <i>Kraal</i> , Napak
Tick Infestation	<i>Emadangit (very many ticks on the body of the animal)</i>	Bushy environment, especially during the wet season when many ticks multiply.	All animals, including cows, goats, sheep, donkeys, camels, and dogs.	Kosike Parish, Nabilatuk, Nakapiripirit District Loongor and Rengen, Kotido and Amudat
Mange	<i>Lonyul, Ekoikoi</i>	A skin parasite spread by contact with infected animal or post, causing severe itching and irritation. Causes hair loss.	All animals, but worse in goats, sheep, camels, and dogs.	All locations
Eye infections		Eyeballs swell, pus, death.	All animals may get eye infections: cows, goats, sheep dogs, and chickens.	All locations

SECURITY AND LIVELIHOODS

Karamoja is currently experiencing a reprieve from a past marred by conflict and extreme insecurity. Interviews with elected officials, police, and the UPDF at the district level indicate substantial improvements to security in both northern and southern Karamoja. These gains are echoed across study sites and are reported by traditional and formal leaders at the community level, residents of *manyattas*, and members of *kraals*.

Better security has brought important improvements to freedom of movement. Women and men described that they are able to move freely by foot to collect wild fruit outside the villages and agricultural areas, and can walk between villages after nightfall.¹²⁹ Men described being able to sleep outside, both at *kraals* and en route between locations.¹³⁰ Income-generating activities including charcoal burning, trade, and animal production have also improved due to better freedom of movement. Women are able to move farther from the *manyatta* and spend several days in the bush burning charcoal.¹³¹ Youth and men are able to graze and water their animals further afield than during periods of conflict, and livestock trade (within and between districts) and production has improved.¹³² As explained by an elder from Kalaboki Parish:

Due to drought, we have shifted to moving freely to other areas where water and [salt grass] are located, because of peace [we can do this]. This was not possible during the days of the gun!¹³³

Security gains have encouraged shifts in livelihood practices, with some residents of Karamoja resuming pastoral production. As described by the WFP representative in Kotido:

People are now willing to keep animals— [because doing so is] less insecure. Animals are not removed from the region through commercial raiding. This is also a benefit of improved security.¹³⁴

At the same time, agricultural practices appear to have shifted as well, with increased settlement in green belts to cultivate new lands.¹³⁵ At Sinat Farm, men described that they gave up pastoralism after they lost their cattle to disease and conflict. With improved security, they have settled closer to the green belt, and have chosen to reinvent themselves as farmers. Even when pushed on the possibility of animal acquisition, some respondents prioritize animals for cultivation purposes, saying, “If there is enough rain, and we have enough money, the first priority would be to buy oxen for plowing.”¹³⁶

An exception to this positive trend in freedom of movement relates to the movement of game animals out of Kidepo Park. *Kraal* and community members, particularly in Rengen and Kacheri Sub-Counties, fear elephants and buffalo and report regular sightings. Not only have these animals increased rates of disease affecting livestock through the spread of

¹²⁹ FGDs with women in Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido District. FGDs with men in Sinat Farm, Kacheri Sub-County, Kotido District.

¹³⁰ FGDs with male youth at *kraal*, Loongor Dam, Kacheri Sub-County, Kotido District; KII with elder Nakwakachel Village, Kalaboki Parish, Kalapata Sub-County Kaabong District; KII with LCI Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido District.

¹³¹ KII with LC at Nangolmuria Village Nakwakwa Parish, Rengen Sub-County, Kotido District.

¹³² KII with DVO, Kotido District; Losera *Kraal* leader, Kalapata Sub-County, Kaabong District; KII with LCI and male youth FGD, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido District; Male FGD, Nayonaangikhalio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; FGD, Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

¹³³ FGD with elders, Nakwakachel Village, Kalaboki Parish, Kalapata Sub-County, Kaabong District.

¹³⁴ KII with WFP representative, Kotido Town Council.

¹³⁵ Ibid; also discussions with Mercy Corps staff members.

¹³⁶ FGDs with men in Sinat Farm, Kacheri Sub-County, Kotido District.

trypanosomiasis, but they destroy crops and have reportedly injured and killed humans.¹³⁷

Study participants attribute improved security to a variety of factors, including widespread disarmament, UPDF-LDU presence, the Moruitit/Nabilituk Resolution,¹³⁸ and the related work of peace committees in developing warning systems and tracking stolen animals. Such explanations were consistent across interviews, regardless of location.¹³⁹

Petty Theft and Small-Scale Raids

While large-scale raiding is no longer commonplace in Karamoja, smaller-scale animal theft has not altogether disappeared. Two trends arose from interviews across the sampled study sites. First, smaller-scale animal theft—whether chickens or a goat from the *manyatta*, or one or two goats, rams, or a cow from the *kraal*—are a continuous concern to local communities. Such petty theft reportedly occurs regularly, with study participants in most locations stating that such theft had occurred in their area within the preceding seven days.¹⁴⁰ In Kotido and Kaabong, thieves were reported as coming from within the community, or from a neighboring village, parish, or *kraal*. In Nakapiripirit and Amudat, thieves are reportedly from within the clan or from a neighboring ethnic group such as the Bokora, Matheniko, or Tepeth. The Pian and Pokot report animal theft between them.

Many study participants described this behavior as a response to severe drought and resulting poverty and “hunger.” If apprehended, the accused are often unable to repay the victim through the “two for one” terms of the Moruitit/Nabilituk Resolution because of their impoverished state.¹⁴¹ This male youth at a *kraal* in Loongor Dam explained the overall situation with such types of smaller-scale theft:

FIC: Can you say more about the petty thieving?

Youth: They take anything they can grab—a donkey, cow, goat. It is because of hunger when they come to the *kraals*.

FIC: When was the last time this happened?

Male Youth: It happened yesterday. The thief can even come from a neighboring *kraal*. They will remove the animal and roast it in the night so you cannot see what is happening.

FIC: How often in a month does this happen?

Male Youth: There is no resting here when it comes to thieves. There is a kind of rotational stealing from different *kraals*.

FIC: And you all, do you steal from other *kraals*?

(Peals of laughter from the youth in the focus group.)

Male Youth: When I am hungry I can go and steal from others. The only food here is water....

FIC: What happens if a thief is caught?

Male Youth: When you are caught you are known as a thief. You will be asked to pay, but commonly you have nothing. So you are beaten and left.

The second trend arising from the field research relates to cross-border animal theft. While this does not necessarily meet the threshold of the large scale-raids of the past, thieves are generally armed, organized, and attempt to steal multiple animals. Cross-border animal theft was regularly cited as a problem by officials and community/*kraal* members in Kaabong. The fact that the “neighbors are not disarmed” is the main reason for maintaining stationary protected *kraals* in Kaabong. People most often name the Turkana as culprits, followed by the Toposa and Didinga. Contemporary cross-border animal theft in northern Karamoja has been documented elsewhere (Howe et al. 2015).

¹³⁷ Female FGDs in Sinat Farm, Kacheri Sub-County, Kotido District. Interviews with several *kraals* at Loongor Dam, Kacheri Sub-County, Kotido District. We heard similar narratives about the encroachment of wild animals during research in Kotido under the FIC/Mercy Corps partnership in 2015.

¹³⁸ The Resolution is known as the Moruitit Resolution in northern Karamoja and the Nabilituk Resolution in southern Karamoja, and requires the thief to return twice the number of stolen animals, plus one for the community. Many simply refer to it as the “Two-for-One” resolution.

¹³⁹ See Howe et al. 2015 for more information on factors contributing to improved security.

¹⁴⁰ FGD, Sinat Farm, Kacheri Sub-County, Kotido District; Losera *Kraal* leader, Kalapata Sub-County, Kaabong District; *Kraal* leader, Kotido Town Council.

¹⁴¹ KII with *kraal* leader, Kotido Town Council. FGD, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

LDUs in Losera *Kraal* reported that there had been three attempted raids during the last quarter of 2015, involving groups of 20–30 armed Turkana. They attempted to steal 52 cattle during the first incident and 20 cattle during the second. During both attempts, the cattle were recovered with the help of LDUs and soldiers from the nearby UPDF barracks. The third theft involved 32 goats, none of which were recovered. After each incident, the *kraal* leader alerted the sub-county peace committee and men from other *kraals*.¹⁴² To note, animal theft also takes place from the *manyatta*. A group of Turkana had stolen eight goats and five cows the night before the research team’s visit Kaloboki Parish in Kaabong.¹⁴³

Study participants described a seasonal dimension to cross-border animal theft. Respondents in Losera *Kraal* explained that herders are less visible during the rainy season because they seek protection from the weather, and some move back to the *manyattas* to assist with cultivation. Raiders are also reportedly physically stronger during the wet season due to improved nutritional status. In addition, during the dry season, the Turkana are dependent on good relations with the Dodoth in order to access pasture in Kaabong.¹⁴⁴ Participants explained that the Turkana “come as friends” (to access pasture) but “leave as enemies” after the wet season begins (and they steal animals as they start their return back to Kenya).¹⁴⁵

Cross-border theft also exists in southern Karamoja, although it appears to happen less frequently. The Kenyan Pokot remain armed and are the main threat, with a reported raid of 200 Pian cows during the election period.¹⁴⁶

As discussed earlier, deterioration in relations between the Acholi and Jie is also a problem, as described by one *kraal* member at Loongor Dam:

The attacks are on the grazing areas. They begin shooting and then pick the animals of their choosing—the best animals. There is nothing you can do. They know we don’t have guns so they just come openly. You can even see them coming...in groups of five or so.¹⁴⁷

Animal theft is often not just one way, and hence there may be a retaliatory aspect to cross-border (Turkana/Dodoth) or cross-district (Kotido/Acholi) raids. The Kotido District Police Commissioner described the following trend in animal thefts:

Between Karamojong and the Turkana—cattle theft is taking place. We find raids taking place cross-border. It is going both ways. Sometimes the raid might have been initiated from one side, and then there are retaliations. It is not as bad as it was initially. The good thing today, though it still takes place, is that the casualties involved in such criminal activities have reduced. Before it involved the loss of life, burning down *manyattas*. What is happening today, it is like organized crime now. It is targeted; it is not widespread like it was.¹⁴⁸

Relationships between Security Forces and Communities

Security improvements in Karamoja have led to a reorganization of the resources going to the army and police. Currently, police forces are scaling up, while the UPDF is decreasing the number of personnel stationed in the region. In Kotido District, the DPC reported that the UPDF removed a full battalion in February 2016, and that “now the UPDF is really just the LDUs.” Police posts are now present in every sub-county, and several parishes have smaller posts.¹⁴⁹ However, this dynamic is not entirely symmetrical. As the UPDF scales down, the police report increased pressure on their capabilities in the absence of adequate resources

¹⁴² FGD with LDUs and KII with *kraal* leader, Losera *Kraal*, Kalapata Sub-County, Kaabong District.

¹⁴³ Female FGD in Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong District.

¹⁴⁴ Interviews with LDUs, *kraal* leaders, and shepherds at Losera *Kraal*, Kalapata Sub-County, Kaabong District.

¹⁴⁵ KII with Captain of Kaabong Brigade; See Howe et al. 2015.

¹⁴⁶ Male FGD in Nayonaangikhalio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District.

¹⁴⁷ FGD with male herders, Loongor Dam, Kacheri Sub-County, Kotido District.

¹⁴⁸ KII with DPC, Kotido.

¹⁴⁹ Interview with LCV, Kotido.

and competency. For example, the DPC in Kotido described that the national standard is 1 police officer per 500 civilians, but in northern Karamoja the ratio is 1 officer for 1,800 civilians.

One interesting longitudinal change has been the relational improvements between community members and UPDF. During the disarmament period, the UPDF was seen as a malevolent force that engaged in animal theft and widespread human rights abuses.¹⁵⁰ LDUs were also not viewed positively, as described by the following *kraal* leader:

The LDUs were part of our own relations, but they were terrible at that time. They acted as informants to the UPDF, or they would pick any old grudge in the village and falsely accuse us of still being armed, and the UPDF would respond with their torture. It was terrible.¹⁵¹

Now however, *kraal* leaders spoke about positive relationships with LDUs and UPDF. They consistently named these forces as instrumental to tracking stolen animals and protecting *kraals* against animal theft and raids—whether cross-border or from neighboring tribes.¹⁵² In Kaabong District, the process of breaking away from the larger Losera protected *kraal* was supported by the UPDF—a far cry from the forced protected *kraal* system of the past.¹⁵³ The UPDF were largely seen as trustworthy and responsive in the areas where we worked—an ally that is actively engaged with peace committees and close to communities. At the *manyatta* level, female study participants described that the UPDF often shared their resources with community

members, including food and medical services.¹⁵⁴ Male respondents at the *manyatta* visited in Kotido District also felt positively about both the UPDF and the disarmament process that the UPDF had led. We asked about our visit to this same area seven years previously, at which time the UPDF were described in militaristic terms and considered to be an abusive enemy, with regular complaints of torture. Young men responded:

When [the soldiers] first came here it was very hard and there was a lot of attacking. But now we see the better way of living. It is like when you beat a small child who corrects himself and grows into a good adult.¹⁵⁵

Two exceptions to this overall positive view were found in this study. First, one *kraal* leader described his preference for LDUs over UPDF because they are able to communicate more easily with LDUs, as UPDF generally do not speak Ngakarimojong.¹⁵⁶ Second, and more seriously, interviews with various *kraal* members at the Loongor Dam indicated that the UPDF and LDUs steal Jie animals near to the border and when grazing in Agago District.¹⁵⁷

In contrast to the largely improved relationships with UPDF and LDUs, respondents in our study sites described a less positive relationship with police forces. Police continue to have a reputation for being corrupt and requiring bribes to carry out basic tasks.¹⁵⁸ A young man from Nakwakwa Parish in Kotido described what happens if peace committees asked the police to respond to a theft:

¹⁵⁰ See E. Stites and D. Akabwai 2010, 24–43 and Human Rights Watch 2007. Interviews with members of Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong. One *kraal* leader showed the interviewer severe scarring on his back, which he reported was from UPDF abuse during the disarmament operation.

¹⁵¹ Interview with *kraal* leader, Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong.

¹⁵² Interviews with all five *kraals* in four districts. This includes cross-border incursions from Pokot and Turkana from Kenya; Didinga and Toposa from S. Sudan; theft from Tepeth and Pian.

¹⁵³ Interviews with LDUs of Losera *Kraal* and *kraal* leaders of Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong.

¹⁵⁴ Howe et al. 2015.

¹⁵⁵ FGD with young men, Nangolmuria, Nakwakwa Parish, Rengen Sub-County, Kotido.

¹⁵⁶ Interviews with members of Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabong.

¹⁵⁷ KII with LC of Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County; FGDs with multiple *kraals* at Loongor Dam; KII with DPC, Kotido.

¹⁵⁸ These perceptions were also found during FIC/GHG study in 2015; see Howe et al. 2015.

The police you have to pay to track. The amount depends on how much they think you have—if they think you have a job or are educated it will be more. The soldiers do not ask us for money. We prefer the UPDF tracking to the police tracking.”

The existence of these views is not a surprise to the authorities. The DPC of Kotido, for instance, is aware that the UPDF has a better connection with community members than police—despite the fact that the UPDF should theoretically be more focused on border control than on local law and order. A representative of an INGO in Moroto noted that it would be interesting to see if the police are able to improve their relationships with the people of Karamoja as the UPDF scales back.¹⁵⁹

A Note on Domestic Violence and Marital Relations

While not the focus of this study, domestic violence continues to be a regular occurrence in families in the region. The DPC of Kotido expressed concern at rising rates of physical violence between spouses (husband against wife), forcible marriage (of girls and women), and sexual abuse and rape of girls. In relation to livestock, men and women described that tensions arise between spouses over the sale of animals and how proceeds are spent. Alcohol abuse ties in closely to domestic violence. In Nakwakwa Parish (Kotido), all female participants in the focus group described that they had a similar experience of husbands becoming violent after the sale of an animal because men suddenly had money, which they then “drank away.” In the same location, other informants described conflict when a husband does not consult his wife prior to selling or giving away animals that she had brought to the marriage.¹⁶⁰ Similar conflicts were reported during prior data collection periods for FIC/GHG research (2012–2015).

¹⁵⁹ KII with INGO representative, Moroto.

¹⁶⁰ FGDs with men and women, Nakwakwa Parish, Rengen Sub-County, Kotido.

MARKETS

Livestock production is a central factor to household and community resilience in Karamoja (Rockeman et al. 2016), particularly in the face of shocks such as drought and failed harvest. Access to functioning markets facilitates successful livestock production through investments in new animals, purchase of required medicines, and the sale of animals to cover consumption shortfalls or households needs. The following section will describe the nature of markets visited as part of this study in Karamoja, the livestock and animal products for sale, the sellers and buyers, and the decision-making processes behind these market behaviors.

The research team visited a total of five markets during the March 2016 research: Kanawat (Kotido), Kaabong, Nandunget (Moroto), and Amudat and Karita (Amudat). It should be noted that we did not conduct full market assessments in these locations.¹⁶¹ The findings presented here are based primarily on observations and interviews with market goers. Information from market interviews and observations were triangulated with interviews conducted at the *manyatta/kraal* primary study sites in each district.

Decision-making and Seasonal Tendencies

Based on recent research funded by USAID and managed by FIC, livestock owners in Karamoja sell their livestock for two principal purposes: to acquire cash to fulfill basic needs and to “trade up” to improve the growth potential of their herds. During the March 2016 study period, livestock owners in *manyattas* and herdsmen at *kraals* described that the primary purpose of livestock sales was to obtain cash. Cash was in turn used mainly to purchase food items for households. This need was particularly acute during the study period, which coincided with a prolonged period of drought. The opinion of a male youth in Kotido echoed throughout the study sites: “It’s better to sell the animals than have the children die. This is the way it has

always been since the time of great-grandfather.”¹⁶² While people stated that they most often purchased food at the markets, respondents also described selling animals for cash in order to pay for school fees, health costs, and veterinary medicine.

The seasonal dimension to animal sale follows two predominant logics. First, households often sell animals in the dry season to manage seasonal hunger. At the time of our fieldwork, the drought that began in early 2015 had pushed households into a more prolonged period of food insecurity. The high number of animals for sale at the market is first and foremost a sign of distress brought on by this extended drought.¹⁶³ Biological patterns also partially determine animal supply at markets. Animals give birth and produce milk in the wet season, and herders bring fewer animals to markets at this time. As a result, prices are generally higher in the wet season than the dry season.

The interviews conducted with livestock sellers at markets told a story of drought-induced food shortages and distress sales of livestock for household sustenance. Heifers—the most valuable asset in a herd—were present in Kotido and Moroto livestock markets. The majority of people selling their heifers reported that this was due to “hunger.”¹⁶⁴

Market Characteristics

Markets can be characterized into primary and secondary markets. A primary market is near to producers and feeds the larger secondary markets. There are normally more producers present in primary markets and more traders present in secondary markets. Secondary markets have links to central domestic markets, exports markets, and abattoirs. In this study, Kanawat (Kotido), Amudat, and Nadunget (Moroto) are considered secondary markets.

¹⁶¹ The Karamoja Livestock Assessment (see Rockeman et al. 2016) provides a detailed assessment on livestock markets in Karamoja.

¹⁶² FGD with male youth, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County.

¹⁶³ Interview with LCV Kotido, echoed by *kraal* leaders in Kaabong District.

¹⁶⁴ Note that one young man was selling a heifer for school fees at Kanawat Market.

The team observed that markets in Kanawat, Kaabong, and Karita are well-organized, with marketing structures in place. They are fenced, with loading ramps for vehicles, and established offices. Mercy Corps has supported Kanawat and Kaabong markets, and the international organization ACDI/VOCA has supported the Karita livestock market. Nadunget and Amudat markets were open, without fences or other facilities.

Actors at the markets included predominantly male producers, local traders and agents, and buyers from other districts in Uganda, Kenya, and South Sudan. In addition, there were butcher and abattoir agents, veterinarians and drug suppliers, salt and supplement suppliers, and market managers. Women were selling sorghum beer, food, and other beverages as well as some chickens. The team observed that police were present at the Kotido and Kaabong markets to manage any disputes that may arise during market transactions.

Each market has a manager. A manager's role at a livestock market is primarily to collect taxes, facilitate the health and transportation permits for animals, and maintain marketing structures. In regard to taxes, at Kaabong, 5,000 UGX was paid for each head of cattle sold, 1,000 UGX for each sheep or goat, and 500 UGX for each chicken. Livestock products such as eggs and milk are not taxed. Those who sell brew, other beverages, or food pay 1,000 UGX for setting up their stalls at the market.

Middlemen play a critical role at markets. Middlemen purchase animals from sellers outside the fenced market area and then enter the market to resell the animals. They do not bring animals to the market, nor will they leave with animals; their interest is in making a profit from this quick sale. This out-of-market transaction is appealing to some sellers, because the process is quick and the sale is guaranteed (as the middlemen do not leave the market with

animals).¹⁶⁵ A member of the Mercy Corps team explained that the middlemen often have good networks with the traders and market managers and can secure a fast sale. These connections may allow them to take advantage of the vulnerability and ignorance of sellers, who may also face a language barrier with traders who have come to Karamoja from elsewhere in the country.¹⁶⁶

The markets visited as part of the study draw traders from distant locations. For example, in Kaabong, there were buyers from South Sudan. In Kanawat (Kotido), there were several traders from Kampala, Mbale and Soroti, and Gulu. On the day of the team's visit to Kanawat, we witnessed 27 trucks loaded with animals to be transported out of Karamoja. This is a significantly higher rate of truck traffic than observed at the other markets visited. In Kaabong, for instances, we saw no trucks at all, which is in line with it being a primary market. Animals trek in and out on foot from the Kaabong market. In Amudat, Kenyan traders were plentiful. In terms of marketing differences, the demand from South Sudanese traders was predominantly for sheep and goats. Kenyan traders were primarily interested in slaughter bulls. A marketing officer in Amudat reported that 25% of all slaughter bulls sold at the market were bought by Kenyan traders and destined for Nairobi abattoirs.

Although the markets appear dynamic, local respondents in many rural areas feel that the distance to urban markets is prohibitive. *Kraal* leaders, elders, and some district officials described the need to develop local-level markets to improve accessibility.¹⁶⁷ This finding was uniform across our study sample, with the exception of Amudat, where participants in the *manyatta* and *kraal* described that markets (Amudat and Karita) were accessible.¹⁶⁸ Some of the smaller primary markets in existence might be less desirable because they fetch lower prices than urban markets.¹⁶⁹

¹⁶⁵ KII with middleman at Kanawat Market, Kotido.

¹⁶⁶ Email conversation with Mercy Corps staff member.

¹⁶⁷ KII with LCV, Kotido District; *Kraal* leader, Losera *Kraal*, Kalapata Sub-County, Kaabong; Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County; *Kraal* leaders, Kaloboki-Nasiduk *Kraal*, Kaloboki Parish, Kalapata Sub-County, Kaabong.

¹⁶⁸ FGDs with members of Popei *Kraal* and Kakoruron *Manyatta*; Lokales Parish, Karita Sub-County, Amudat.

¹⁶⁹ *Kraal* leaders at Loongor Dam, Kacheri Sub-County, Kotido, in reference to Kanawat Market. Interviews with traders at Kanawat Market.

Animal Products

Livestock transactions take place at *manyattas*, mobile *kraals*, on roadsides, and at established formal markets (inside and outside the fenced areas). Formal markets concentrate on cattle, sheep, goats, chickens, and, in the case of Kaabong, donkeys. The trade of animal products such as hides, skins, milk, milk products, and eggs is embedded in a different market system involving both formal and informal processes. As with chickens, the management and trade of these animals products is largely controlled by women.

Milk availability was extremely limited during the study period. The primary reasons stated were poor animal health and disease¹⁷⁰ and prolonged drought resulting in poor-quality pasture and water scarcity.¹⁷¹ Study participants described that milk is currently reserved for calves and that there was presently no human consumption. However, the research team did observe young women and men transporting fresh milk in 5-liter jerry cans to sell in Kaabong town. This milk is apparently accumulated from many cows at a *kraal* and combined in order to sell.¹⁷²

Milk is more abundant in the rainy season. It is first consumed at the household level, with priority given to children, and the surplus is sold at sub-county centers.¹⁷³ One exception was in Nakwakwa parish in Kotido where women described that even during the wet season, milk was not abundant enough to sell. In several locations, men and women reported that surplus milk was also given as gifts to poorer community members, including those households without animals.¹⁷⁴

Surplus milk is often soured and made into butter using a traditional calabash churn called an *adere*. Butter is preserved in the form of ghee, which involves heating the butter and removing the milk solids. Ghee can be transported more easily to markets than butter, and keeps for a longer period. Butter making is possible during the wet season when cows have given birth and milk production is highest. The team did not witness the sale of sour milk, butter, or ghee at *manyattas* or markets during the study.¹⁷⁵ Figure one on next page shows traditional butter/ghee-making process and utilization.

Eggs are sold at larger livestock markets, sub-county markets, and other trading venues. Egg prices varied between market locations, with the lowest prices in Kaabong (100–200 UGX) and the highest in Moroto (450–500 UGX).¹⁷⁶ Research from the recent *Market Assessment Report* recommended supporting a poultry value chain “as a path to improved child nutrition, improvement household livelihoods, and the gateway to livestock production enterprises” (Rockeman et al. 2016, p. 45).

Animal hides and skins are used to make mattresses within households. Respondents in one *manyatta* reported that they sell excess hides to buy veterinary drugs or food, but otherwise we did not hear of sale of these items.¹⁷⁷ Mercy Corps staff, however, described a market chain from slaughter slabs in Kotido (in particular) to traders in Lira.¹⁷⁸ Blood was reportedly for household use only, although in some areas, consumption has decreased as a result of livestock disease.¹⁷⁹

¹⁷⁰ FGD with women in Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido District.

¹⁷¹ FGDs in other study sites at Kaabong, Amudat, and Nakapiripirit District.

¹⁷² Female FGD Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

¹⁷³ Female FGD Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County; FGD with elders at Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; FGD with elders at Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

¹⁷⁴ KII with CAHW, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido District. The general spirit of sharing with less fortunate was echoed in all locations.

¹⁷⁵ However, this trade may have gone on in other locations, or we may not have been aware of this transaction taking place.

¹⁷⁶ Interviews with female egg sellers at Amudat, Moroto, Kaabong, and Kotido markets.

¹⁷⁷ FGD with elders at Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

¹⁷⁸ Email conversation with Mercy Corps staff member.

¹⁷⁹ FGD with women, Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County, Kotido.

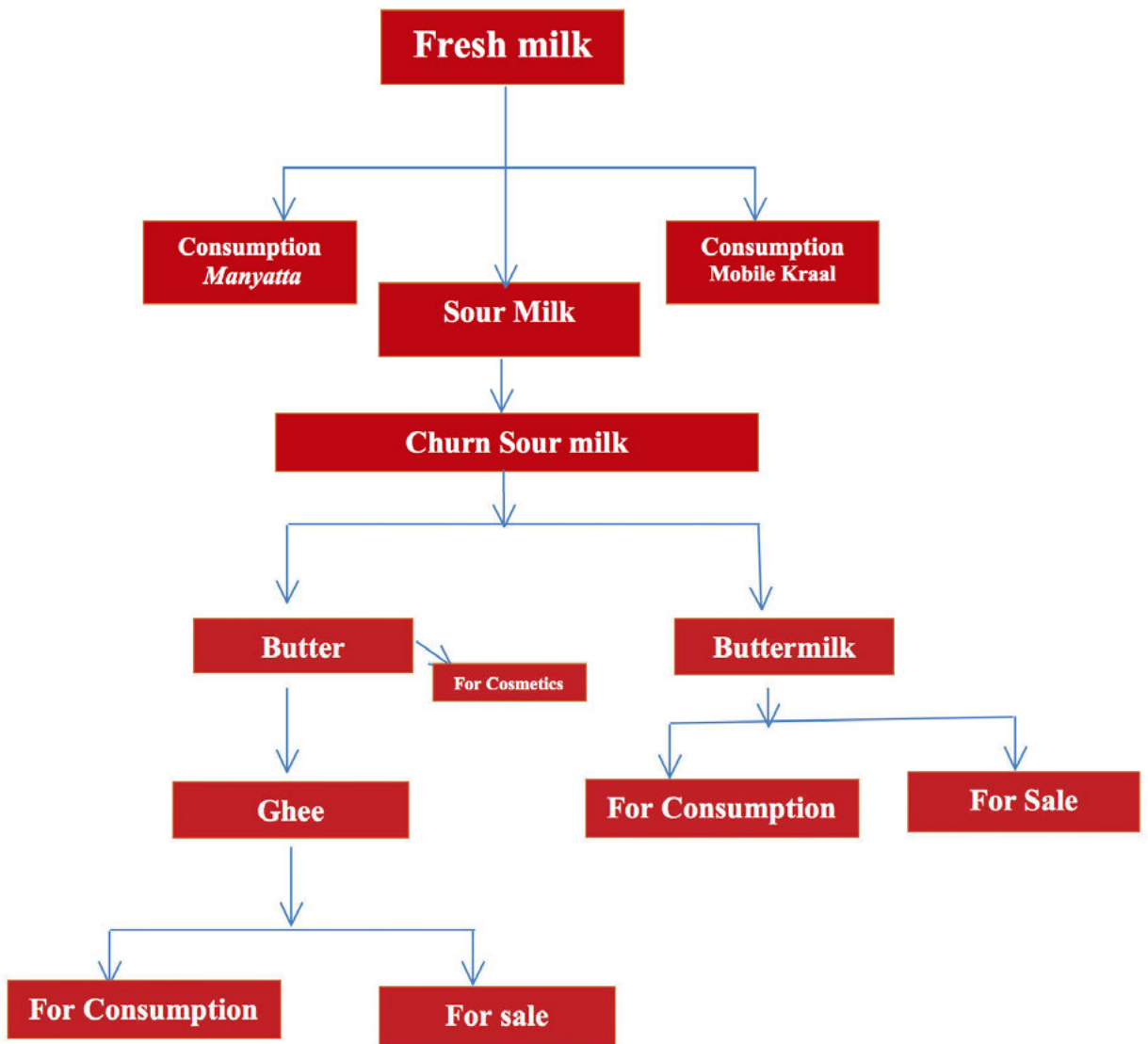


Figure 1. Traditional butter/ghee-making process.

LIVESTOCK PRODUCTION ACTIVITIES AND SERVICES

The central government has long favored agricultural development and pro-sedentarization policies over pastoral livelihood support, although there is some anecdotal evidence and talk that this might be shifting. However, government capacity to support the livestock sector remains weak, with a shallow Ministry of Karamoja Affairs and limited support to relevant district offices or policies. In Kotido, for example, of the 26 staff at the district level to cover five sub-counties and the town council, only four are concerned with livestock.¹⁸⁰ The position of DVO has been filled for an extended period by an acting head who is not a veterinarian. The private sector is also scant, with services limited to a smattering of drug shops in district seats and occasionally at sub-county centers.

Programs of international NGOs funded by foreign donors have a better reach than national actors in regard to livestock services. The two largest projects are Mercy Corps' GHG program in northern Karamoja and the RWANU (Resiliency through Wealth, Agriculture and

Nutrition) program of ACDI/VOCA in southern Karamoja, both funded by USAID. (The KALIP program funded by the EU and managed by OPM is also large, but has a heavier focus on cultivation than livestock.) Although these projects are extensive and multi-faceted, need is still great, and the region is vast and sparsely populated. *Kraal* leaders, elders, NGO staff, and district officials acknowledge that these programs struggle to effectively reach many communities, particularly those in mobile *kraals*.

Pastoralists have extensive knowledge as to practices to support livestock production. The following pages describe these community-based practices, as well as local interactions with private, public, and non-governmental services. Table 9 provides a summary of livestock production practices and access, with details on each to follow.

Fodder

Study participants described engaging in two primary practices (aside from regular grazing) related to livestock feeding. The first involves

Table 9. Local practices and use of external livestock production services

	Kaabong	Kotido	Nakapiripirit District	Amudat
Use of <i>apero</i>	Yes	Yes	Yes	Yes
Animals feed on cereal stalks	Yes	Yes	Yes	No data
Purchase commercial feed	No	No	No	No
Purchase salt supplements	Occasional	Yes	No	No ¹⁸¹
CAHWs at <i>manyattas</i>	Yes	Yes	Yes	No
CAHWs at <i>kraals</i>	Occasional visit	No	No	No
Dips/crush	No	No	Defunct	No
Extension services	No	No	No	No
Mobile phone use	Yes	Yes	No	Yes

¹⁸⁰ KII with district marketing and production officer, Kotido.

¹⁸¹ Note that women at Kakoruron *Manyatta* said that they occasionally buy salt licks, but men contradicted them.

setting aside *apero*, a pasture area near to the *manyatta* reserved for livestock (discussed in section on herd location and balance). The purpose of *apero* is to provide grass feed to village animals, including those pregnant or ill, during the dry season or periods of drought.¹⁸²

A second activity involves a mutually beneficial practice for both cultivation and animal-based activities. After a cereal harvest (particularly sorghum), livestock are invited to feed on the stalks of the crops.¹⁸³ This practice provides nutrition for the animals, while the manure improves soil quality for the next planting season. In Kaabong, respondents at *kraals* explained that feeding on cereal stalks was often reserved for the weaker *kraal* animals and those based at the *manyatta*.¹⁸⁴ One elder reported that milk yield improves as a result of feeding on the cereal stalks.¹⁸⁵

The sampled communities do not engage in practices related to hay production or conservation. When discussed, however, an LCI in Kotido expressed a wish for his community to conserve grass for hay.¹⁸⁶ More investigation is required into the specific reasons this practice is not being utilized. This could be due to cultural constraints, a lack of awareness, absence of technical skills, or lack of demand for this input. Further research could focus on the efficacy of this practice and related barriers to implementation.

Livestock owners interviewed in all four districts reported relying only on natural resources for fodder; no respondents reported purchasing commercial feed. (Salt supplements, discussed below, are an exception.) The research team observed that vendors at livestock markets including Kanawat, Kaabong, Amudat, Karita, and Moroto do not stock commercial feeds.

Access to Water

Study participants in all locations cited the availability of water as a top concern. Water access is the key determinant in livestock movement, and water scarcity negatively impacts livestock health and productivity. The leader of a large *kraal* in Kaabong prioritized water as his number one concern.¹⁸⁷ In Amudat, water was listed as the second-most serious challenge after animal disease.¹⁸⁸ Herders and *kraal* leaders requested dam construction and articulated the exact locations of these desired dams. Most of these sites already serve as water sources during part of the year and/or are historical stopover points on migratory herd routes, but lack reliable water throughout the dry season or in all years.¹⁸⁹

Challenges to water access fall into two categories. The first is a supply issue: the total number of water points—including boreholes, dams, tanks, and pans—is perceived as being too few. The second aspect relates to water quality and longevity. Study participants described a problem with silting of water sources, as well as evaporation during dry seasons and droughts. According to the RDC of Kotido District, the central government has built more than 20 valley tanks (holding 10–15,000 cubic liters of water) at the parish level, but these tanks dry up after six months in the absence of rain.

Study participants were aware of the involvement of some NGOs in dam creation and water-site rehabilitation, including the involvement of Mercy Corps in funding boreholes. Some respondents had complaints about the implementation of certain projects. For example, we witnessed a team of mostly women digging a large pit in Kaabong. This was reportedly a

¹⁸² Male FGD at Nayonaangikalio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; KII with elder at Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong.

¹⁸³ Male FGD at Nayonaangikalio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; KII with Losera *Kraal* leader and male FGD at Kaloboki/Nasidok *Kraal*, Kalapata Sub-County, Kaabon.

¹⁸⁴ Male FGD at Kaloboki/Nasidok *Kraal*, Kaloboki Parish, Kalapata Sub-County.

¹⁸⁵ KII with elder at Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County, Kaabong.

¹⁸⁶ KII with LCI at Nangolmuria *Manyatta*, Nakwakwa Parish, Rengen Sub-County, Kotido.

¹⁸⁷ KII with Losera *Kraal* leader, Kalapata Sub-County, Kaabong.

¹⁸⁸ Male FGD in Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

¹⁸⁹ FGDs with *kraal* leaders Loongor Dam, Kacheri Sub-County, Kotido; KII with LCs at Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County; Male FGD at Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

food-for-work project sponsored by World Vision. Women reported that they receive a certain amount of food after three months of work. Problems listed included the extreme heat (it was between 35 and 40 degrees Celsius at the time of our visit) and the heavy physical labor for women, including those who were pregnant or had small children. Time taken away from regular livelihood activities was also a problem, particularly when food payments were not guaranteed or regular. One *kraal* leader described: “We don’t get any outside support. Just the two dams we are digging. But it is not helpful. Women are miscarrying. It is such hard work and people are starving.”¹⁹⁰ One woman who was digging the dam described she had worked for eight months without receiving food, and reported that someone she knew had tried to collect food support at the sub-county, but that “lists had been lost.”¹⁹¹

Access to Salt

Salt, whether naturally found in water, soil, or grass or provided as a supplement, is essential for animal health. Like water and pasture, salt is a central component of the calculus that determines animal movements. *Kraal* leaders in Kaabong explained that the ban on grazing in Kidepo was particularly problematic, because Kidepo grass has a high salt content. *Kraal* leaders and herders reported that they seek out other locations with salt grasses, although these are considered to be of lower quality than the grazing in Kidepo. (These sites are shared between Dodoth and Jie herds.¹⁹²) Herders purchase salt supplements when animals develop deficiencies illustrated through pica behaviors.¹⁹³

Manyatta animals appear to have greater difficulty accessing naturally occurring salts than *kraal*

animals. Salty grass, soil, and water may be at a greater distance from *manyattas*, and these animals are less likely to travel far distances due to herd composition and available human labor. These resources may also lie in areas that require security force protection to access. One female community leader in Kaabong explained, “The salt is too far for the *manyatta* animals to go. It takes three days to get there. Those from the *kraal* travel there, but with the LDU.”¹⁹⁴

Respondents in Kotido uniformly described the need to purchase salt blocks or to add salt to livestock drinking water. The LC of Nakwawa Parish reported that the lack of naturally occurring salt grass in the area was one of his main concerns. This was also a problem around Loongor Dam, and herders reported that traders bring salt rocks to Loongor to sell. Salt slabs were also for sale at Kanawat Market in Kotido, priced at approximately 10,000 UGX for a two kilogram block.¹⁹⁵

Access to salt pasture appears to be less of an issue in southern Karamoja. Respondents in *manyattas* and *kraals* did not report purchasing salt supplements, and said that they can move freely to areas where salt naturally exists.¹⁹⁶ If needed, herders reported that salt supplements are available for purchase at the Karita Market and in Kenya.¹⁹⁷

Access to Medicines, Extension Services, and Infrastructure

As described in the section on animal health, disease represents one of the greatest barriers to livestock production. In all study sites, community members and *kraal* leaders described high animal mortality rates and limited access to veterinary drugs. The main obstacle to access is

¹⁹⁰ Leader of Kaloboki-Nasiduk *Kraal*, Kaloboki Parish, Kalapata Sub-County, Kaabong.

¹⁹¹ Member of female FGD at Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

¹⁹² Interviews with Losera *Kraal* leader and Kaloboki/Nasidok *Kraal* leaders, Kalapata Sub-County, Kaabong.

¹⁹³ KII Losera *Kraal* leader, Kalapata Sub-County, Kaabong; KII with elder at Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

¹⁹⁴ KII with female leader, Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County.

¹⁹⁵ This quantity of salt can last a herd of sheep/goats for approximately one week or two to five cows approximately two days.

¹⁹⁶ Male FGDs, Nayonaangikatio *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District; Naaratom *Kraal*, Napak, near Iriiri (people from Kosike Parish, Nabilatuk, Nakapiripirit District); Popei, in Sebeiland; people from Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat; Male FGD, Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat.

¹⁹⁷ FGD with herders of Popei *Kraal* at Sebeiland.

low purchasing power to a) buy the drugs at all or b) to buy a large-enough supply to treat all infected animals for the appropriate duration. The remote location of mobile *kraals* also complicates access. While drug salesmen periodically travel to these *kraals*, they often lack the technical knowledge to administer drugs properly.¹⁹⁸ An additional issue has to do with the general expertise of CAHWs and their ability to reach the *kraals*.

The overall lack of extension services was a concern for *kraal* leaders, herders, and district-level officials.¹⁹⁹ An interview with Kotido's interim DVO shows the connection between purchasing power, extension work, and animal health:

[T]he five sub-counties in Kotido District have no extension staff at all. Introduction of incentives by INGOs (like Mercy Corps) in order to spray cattle against ticks and tsetse flies have also faced challenges in that the community could not pay the little charges levied on each animal to receive spraying... The challenge will be overcome when the extension workers are employed, because they will convince the livestock owners to save their animals from dying from a tick-born disease for only 200 shillings!!²⁰⁰

Certain types of infrastructure can facilitate livestock health and mitigate against animal diseases. Functioning dips and crushes were not found in proximity to the study sites, but the wish for both was a common refrain in interviews.²⁰¹ In Nakapiripirit, four dips, boreholes, and generators had been supported during the colonial era, and by the central

government during the transition period. Subsequent years witnessed the withdrawal of central government support and the gradual deterioration of these facilities. The team observed that at least some of this infrastructure remains largely intact and could be repaired without much difficulty, which might help to alleviate the reported high rates of tick-borne diseases in the Nakapiripirit area.²⁰²

Mobile Phones

Study participants described the benefits of mobile phones to facilitate communication among *kraals*, between *manyattas* and *kraals*, and between communities and authorities. People use their phones to warn against potential raids and to alert peace committees and security personnel after a theft occurs. Mobile technology also allows for communication on livestock illness and to discuss the procurement of medicines. Herders, families, *kraal* leaders, and elders all reported using phones to stay in touch and to relay messages to each other. Mobile communications were active in all study locations with a cellular signal.²⁰³ People were very enthusiastic about the expansion of mobile phone reach in recent years. As pointed out by a *kraal* leader in Kaabong, it is fortunate that this expansion has overlapped with a period of peace, as cell phones could have had a much more nefarious purpose if used to assist raiders:

Technology like mobile phones has helped and facilitated animal production. It helps report on sickness of animals, insecurity, raids, networking with *kraal* leaders and local authorities on community affairs. It is better than the gun! Elsewise it could have been bad to mix the two—the mobile and the gun!²⁰⁴

¹⁹⁸ FGDs with various *kraals* at Loongor Dam, Kahceri Sub-County, Kotido.

¹⁹⁹ KII with DVO, Kotido; Interviews at all *kraal* locations.

²⁰⁰ Interview with Acting DVO, Dr. Constantine, Kotido. Mercy Corps staff reported that people were paying for treatment, although uptake of the program was slow in some areas.

²⁰¹ Nangolmuria Village, Nakwakwa Parish, Rengen Sub-County; KII with elders and male FGD in Nakwakachel Village, Kaloboki Parish, Kalapata Sub-County; Losera *Kraal* leader, Kalapata Sub-County, Kaabong; Male FGD, Kakoruron *Manyatta*, Lokales Parish, Karita Sub-County, Amudat; Nayonaangikalia *Manyatta*, Kosike Parish, Nabilatuk, Nakapiripirit District.

²⁰² The team visited the dips in Namalu, Lolachat, and Napiananya in Nakapiripirit. The fourth dip in the district is in Tokora.

²⁰³ There were three communities without cell coverage at the time of our fieldwork (*manyattas* in Kaabong and Nakapiripirit and the *kraal* in Napak), although coverage may have been possible in nearby locations. Given the rapid expansion of cell phone coverage in Karamoja, we expect this to change.

²⁰⁴ KII with Losera *Kraal* leader, Kalapata, Sub-County, Kaabong.

CONCLUSIONS AND RECOMMENDATIONS

Despite decades of insecurity and government policies encouraging sedentarization, animal-based production systems are rebounding in Karamoja. This study has shown that traditional *kraal* systems are in place, as well as more contemporary configurations such as less-mobile grazing areas near to water points and herds in peri-urban settings in response to growing urban demands. The improved security in the region has facilitated a revitalization of many of these systems. Markets are vibrant, and there is potential to further increase livestock production and to expand the household benefits of livestock ownership.

While livestock-based production systems appear to have significantly rebounded, this study identified several critical challenges and barriers to the success of these livelihoods. The first is inequity in livestock ownership and holdings, with a clear link to vulnerability. Struggling households include those who own few or no animals and those who may have transitioned fully to agriculture in hopes of better opportunities, only to be faced with the 2015 devastating drought.²⁰⁵ Women infrequently own livestock and have limited decision-making power over animals that they may own. Many households, however, do report joint decision-making between women and men on the use of assets. Such decisions included when to sell an animal to meet a particular need and if certain milking animals should remain in the *manyatta*. Women remain actively involved in animal husbandry at the *manyatta* and have various marketing opportunities through the production and sale of chickens and eggs, and through the sale of milk and butter in the wet season.

The second challenge is poor animal health and the lack of preventative and responsive treatments. CBPP in cattle and CCCP in goats remain major problems, as do tick-borne diseases (such as East Coast Fever, Anaplasmosis, Heart Water and Red Water) and Trypanosomiasis, transmitted by tsetse flies. Preventative measures

such as vector control, animal dips, and vaccination campaigns are either non-existent, late breaking, or reach too few animals. Access to effective treatment by animal owners once an outbreak has occurred is limited, caused by low purchasing power and misuse of available medication. CAHWs are rarely present at *kraals*, due in large part to poor management and facilitation by the district-level veterinary offices. These offices, in turn, are hampered by limited and erratic funds from the central government, chronic understaffing (including at the DVO level), and extremely limited resources with which to operate. International organizations have worked hard to fill these gaps, including with vaccination campaigns and CAHW trainings. These measures have not been sufficient to tackle the magnitude and continuous nature of the problem.

A third challenge for the recovery of animal-based production systems is maintaining the mobility required to access resources, including water and a variety of pasture types. Mobility is the central tenet for successful pastoral and agro-pastoral livelihoods, and is particularly important in years of poor rainfall—a regular occurrence in a region of climate unpredictability such as Karamoja. Herders access resources through seasonal migration, normally along predicted and established routes, as demonstrated in this report. Movement along the stations in these routes is dictated by the conditions of the animals but is *determined* by security, relations with the relevant host communities, and the quality of the resources themselves. In this study, therefore, we saw that while the sampled Pian group was able to easily access their most remote station in Napak, the Jie group experienced problematic relationships with their Acholi neighbors. The Pokot had positive relationships with the Sebei at their most distant station in Kween, but, like the Dodoth, required active involvement of the UPDF and/or LDUs for protection. Bureaucracy also stands in

²⁰⁵ Such droughts are regular; the 2015 experience should not be taken as an anomaly.

the way of mobility, with some groups only able to cross district borders after fulfilling a range of administrative requirements. Mobility is further limited by restrictions on access to natural resources due to gazetted areas and park lands.

Related to the limits on mobility for pastoralists is the expansion of areas of cultivation. This is a normal and predictable trend in areas where pastoral and agrarian communities live in close proximity, but such interactions are increasing in Karamoja and the surrounding areas due to programs to foster agricultural production in the region. Over the course of this study, we found that, by and large, relations between herding and farming communities were generally positive and handled through local-level negotiation, including arrangements to keep animals out of gardens and more formal systems between visiting pastoral groups and hosting settled communities.

The fourth and perhaps greatest challenge for pastoral and agro-pastoral livelihoods in Karamoja remains the dearth of policies that are pro-pastoral and pro-poor. For instance, more than ten years after it was first discussed, there is still no publicly available national pastoral policy. There is no comprehensive national rangeland management policy. There is no comprehensive veterinary disease management policy. Related to this, there remains a general lack of understanding at the official, political, and Kampala level as to the value-added of pastoral production. Karamoja continues to be viewed as an isolated and problematic region, as opposed to a vibrant and integrated part of the country.

Although this study points to a number of challenges in regard to livestock-production, it perhaps more importantly highlights the benefits of livestock ownership for those households who have animals. The ability to sell a few chickens or a goat to manage hardship or to cope with a dip in consumption is crucial in order to maintain household food security. Respondents discussed having animals at the *manyatta* as a form of “insurance” that was simply not available through any other means. Households that have given up—freely or otherwise—their foothold in animal husbandry and are relying solely on agricultural production are highly vulnerable. In

contrast, those that are diversified across sectors—agriculture and livestock, or different varieties of livestock, or a combination of livestock, agriculture, and petty trade—were in a much better position to withstand shock. To note, all of those who are in a position of greater resilience have at least some continued engagement in the livestock sector. Taking this pattern into account, diversification should be encouraged and supported in a policy environment that seeks to reduce vulnerability and bolster the livelihood systems of the poor.

Recommendations

In response to inequity of ownership:

- Work to support the poultry value chain as an area controlled by women, a ready market opportunity, and a means of “trading up” to further engagement in larger-animal husbandry.
- Invest in infrastructure to improve economic development of the region, including secondary roads, electricity, and telecommunications.
- Invest in services to reduce poverty and improve quality of life, including improved water supplies, health centers, and basic education.
- Consider restocking programs of breed-appropriate animals only with thorough investigation of the positive and negative outcomes of such programs; ensure any such program includes ongoing evaluation of impacts, including on inequity and insecurity.
- Investigate opportunities for value addition at the *manyatta* level and in peri-urban *kraals* in recognition that they may be a staging area for marketed animals.
- Support infrastructure improvements for livestock markets, particularly in Amudat. Continue support to Moroto Market as the main link to domestic markets elsewhere in Uganda. Invest in a political economy analysis of markets to better understand power dynamics and factors contributing to inequity.
- Improve input supply and extension services for those practicing cultivation. These should include trainings on dry-land cultivation, appropriate seeds, and

storage and handling. This should be done only in areas appropriate for cultivation and settlement and should be combined with livestock programs to promote diversified livelihoods.

- Support urban livelihoods through continued investments in markets, urban planning, service delivery (water, schools, health care, roads, security, transportation, etc.), and a support to the urban private sector.
- Support skill development for diversified livelihoods through financial and basic literacy training programs, introduction of mobile banking, and expansion of pro-poor financial services.
- Encourage longer-term livelihood diversification through a focus on education, including providing support to teachers as well as schools, bridging the achievement gap for secondary-school leavers, continuing school-feeding programs, and working to create local sustainable employment opportunities through private sector development.
- Work to decrease discrimination against people from Karamoja who migrate to other parts of the country, including Kampala and Jinja. This is a form of livelihood diversification, and these migrants should be able to access social and protective services.

In response to poor animal health:

- Advocate for proper funding and facilitation of DVOs and their offices, including investment in CAHWs.
- Advocate for policies to be put in place on veterinary diseases and regulation and import of animal medicines. Work with DVOs to expand knowledge of such policies.
- Advocate for revitalization, funding, and facilitation of GoU extension programs in animal health.
- Until GoU extension programs are fully funded and supported, expand non-profit support of CAHWs, including facilitation to travel to *kraals*, regular refresher trainings, and increase in numbers. Investigate creative models for trainings, including involvement of private sector

actors, lessons from other countries, and evaluating weaknesses in previous efforts. Work to develop sustainable CAHW programs through cost-recovery or other mechanisms.

- Design and implement vaccination programs that follow animals to remote *kraals*. These should be cost-recovery programs to discourage dependency.
- Investigate market models for delivery of animal medicines to remote *kraals*.
- Consider lessons learned from other vector-control projects in East Africa.
- Conduct trainings for herders on proper use, storage, and dosing of drugs.
- Monitor markets for sale of expired or diluted medicines.
- Target *kraal* leaders and assistant *kraal* leaders for trainings, including possible visits to pastoral areas outside of Karamoja.
- Construct or rehabilitate crushes and dips.
- Continue to evaluate and encourage cost-recovery service programs, such as spraying and vaccination campaigns. Work with facilitated DVOs and CAHWS to implement and educate on such programs.
- Conduct regular evaluations of the outcomes of all programs and implement lessons learned.

In response to limited mobility:

- Investigate and respond to problems where conflict or tensions limit mobility, such as the Acholi-Jie border. Facilitate peace meetings and resource agreements in these locations between male elders, herders and farmers, LCIs, and sub-county and district officials.
- Continue to facilitate peace processes and resource agreements in other border areas, including with the Turkana, Toposa, Sebei, Teso, Acholi, and Langi.
- Continue to train and expand numbers of police as the UPDF presence decreases. Work on building community-police relations and decreasing corruption in police ranks.
- Educate appointed district leadership on the value and importance of mobility to pastoral production.

- Advocate for a reduction in bureaucratic hurdles as a component of livestock movement.
- Study lessons learned in other contexts to demarcate grazing zones near cultivated areas to minimize conflict.
- Negotiate community-managed access to select UWA areas to allow for grazing.
- Manage and maintain water points as a public good to prevent silting and disrepair.
- Ensure that grazing mapping exercises include water points, areas of restricted access, areas of continued insecurity, and areas with different forage types.
- Consider introduction of fodder production/hay-making, including a strong educational component and community buy-in.
- Create better linkages for *manyattas* to peace committees and theft-reporting structures.

In response to the poor policy environment:

- Encourage national-level investments in public goods that support livestock production, including support to Karamoja-based veterinarian labs that are properly facilitated, support to DVOs, and support to disease-control efforts (including dips, crushes, etc.).
- Advocate for release and public comment on policies on pastoralism, rangeland management, and veterinary disease management. Ensure that these policies are pro-pastoral and pro-poor.
- Educate district- and national-level politicians and civil servants as to the positive contributions of pastoralism to the national economy and identity.
- Advocate for policies that view Karamoja as an integrated part of Uganda, not an isolated and problematic region.

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