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Friendship, kinship and social risk management strategies among pastoralists in Karamoja, Uganda

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Abstract

This paper describes risk-pooling friendships and other social networks among pastoralists in Karamoja, Uganda. Social networks are of critical importance for risk management in an environment marked by volatility and uncertainty. Risk management or risk pooling mainly takes the form of “stock friendships”: an informal insurance system in which men established mutually beneficial partnerships with unrelated or related individuals through livestock transfers in the form of gifts or loans. Friends accepted the obligation to assist each other during need, ranging from the time of marriage to times of distress. Anthropologists and economists claim that social networks are critical for recouping short-term losses such as food shortage, as well as for ensuring long-term sustainability through the building of social capital and rebuilding of herds. To this end, I present ethnographic data on friendship, kinship, and other networks among male and female pastoralists in Karamoja. Using qualitative and quantitative data on these relationships and norms of livestock transfers and other mutual aid, I show the enduring importance of social networks in the life of Karamoja’s pastoralists today. I also demonstrate how exchange networks were utilized by participants during a drought. On this basis, I argue that appreciating historical and traditional mechanisms of resilience among pastoralists is vital for designing community-based risk management projects. I discuss how traditional safety net systems have been used successfully by NGOs to assist pastoralists in the wake of disaster, and how the same can be done by harnessing risk-pooling friendships in Karamoja.

Keywords: Resilience, Stock friendships, Informal social protection, Livestock transfers, NGOs

Introduction

Risk and uncertainty in pastoralism

In Karamoja, Uganda, pastoralism is the dominant way of life. Despite the myriad changes to their social and economic conditions brought about by volatile events in recent history, Karamoja’s pastoralists strive to increase and safeguard their livestock assets by any means possible. In so doing, they confront tough environmental conditions in the form of high temperatures, high rainfall variability, and recurrent drought. These and other threats to the wellbeing of people and animals, such as unchecked livestock diseases, intercommunity livestock theft, relatively unproductive agricultural conditions, and

lack of institutional support to pastoralism, are dominant preoccupations (Levine 2010a). Risk management, or the combination of strategies through which the effects of disasters can be moderated, is, thus, inherent in the pursuit of pastoralism.

Risk is understood as “the unpredictable variation in environmental and economic conditions” or “the probability of loss or hazard” (Cashdan 1990, pp. 2–3; Wiessner 1977). Although pastoralism is known to be well-suited for the drylands (Fratkin et al. 1994; Chang and Koster 1994), there exist several constraints that necessitate risk management. These constraints include among others the fixed biological cycles and limited fertility rates of livestock, a long recuperation phase in the event of loss of livestock from disease or drought, and the labour needs of a

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household (Bollig and Gobel 1997; Catley et al. 2013; Dahl and Hjort 1976). In order to persist in the face of these constraints, pastoralists use a few key strategies that can be viewed as *buffering* mechanisms or “practices designed to lessen the impact of variability by dampening its effects” (Halstead and O’Shea 1989, pp. 3–4).

Besides such strategies as herd accumulation, livelihood diversification, and spreading of livestock in other management units, a principal risk pooling mechanism is through informal networks of mutual insurance¹ (Dercon 2002; McPeak 2006). Risk pooling relationships among pastoralists are known variably as stock or bond friendships or associations. These informal yet institutionalized relationships allowed an individual herder to seek help from a network of individuals unique to him during times of livestock need such as marriage, herd multiplication, and stress to one’s asset base from shocks (Lybbert et al. 2000; Gulliver 1970; Bollig 2006). Informal exchange relationships help herders recoup short-term losses to and ensure long-term sustainability of their herds with the help of others.

Stock friendships

The pastoral animal is a vehicle in a dual sense: not only does it transport its owner’s effects, it carries around his social relations as well. (Ingold 1986, p.168)

Among East African pastoralists, risk-pooling social exchange networks are commonly known as “stock associations” or “bond friendships”² (Gulliver 1970; Sobania 1991). Although the term “stock associate/friend” draws its essence from livestock, agricultural harvest and immaterial transfers are equally important in these relationships. A great deal of information on stock associations among African pastoralists comes from classic ethnographies as well as recent studies.³ In general,

stock associations are initiated with individuals based on a combination of their economic, social, and personal qualities. These individuals could be either related through varying degrees of kinship (agnatic or related by blood and affinal or related by marriage) or were entirely unrelated. Friendships were forged at various stages of life—from childhood to adulthood using gifts ranging from herding sticks to livestock, and with different norms and rituals. Whereas some stock associations required the tracking of gifts exchanged (e.g. among Pokot), others paid little attention to such account keeping (e.g. among Maasai) (Bollig 2006; Cronk 2007).

Irrespective of the norms governing the founding, development, and continuation of the friendship, the element that holds supreme is the importance of these associates in a herder’s life, and the great responsibility that came with being a stock associate. Stock associations are a form of fictive kinship where a herder’s stock friends become a reliable source of “affection, sympathy, assistance and confidence” (Gulliver 1970, p. 196). Livestock transactions—whether as gifts or loans—also created continual emotional indebtedness between the giver and the receiver and, thus, guaranteed their perpetuity (Bollig 1998). Not all livestock transactions, however, carried the same emotional burden. For example, among Turkana and Karamojong herders, two distinct types of transactions—*akilokony* and *akilip*—can be distinguished based on the mutual bond between the individuals who conduct them (Broch-Due 1999; de Vries et al. 2006; Johnson 1990). *Akilokony* (barter) is a type of trade through which different species of livestock can be exchanged for herd diversification. *Akilip* (“to pray” and “to beg or request”) is another form of acquisition in which animals are requested from other individuals. Whereas the former is transactional, the latter is not necessarily so.

Viewed differently, stock friendships provided a way for an individual herder to have a network of persons unique to him and on whom he could depend. In environments characterized by disequilibrium, this was a necessity during times of distress and scarcity. In continuously giving and receiving animals from a range of stock associates (friends, full brothers, half-brothers, affinal relatives, and others), a herder not only gradually amassed his herd (de Vries et al. 2006) but also built his social capital, which in turn would help reconstitute his herd in the event of a disaster (Little et al. 2008). Stock friends were entitled to call on one another for help, whether or not the request would necessarily be met; the fulfilment of a request was dependent on the ability of the giver. The fulcrum of these relationships is the concept of “need”; need-based transfers are a system of risk pooling in which individuals agree to help one another during times of need if they are able to do so (Cronk et al. 2019).

¹In this paper, I use “informal insurance”, “mutual insurance”, “traditional social safety net”, “informal social protection”, and “social networks of exchange” interchangeably while recognizing their complexity. For the purpose of this paper, all these terms imply the system of risk transfer within social networks of support through exchange of livestock and other items.

²The terms “stock association”, “stock friendship”, and “bond friendship” are used interchangeably. Where relevant, the vernacular for these terms is presented in italics.

³Scholars have comprehensively examined such relations as *lopae* among Turkana, Jie, and Karimojong (also called *ekone* or ‘friend’ relations) (Dyson-Hudson 1966; Gulliver 1970; Johnson 1998; Renfrew 1990); stock friendships among Pokot (*tilyai*) (Bollig 1998, 2006; Schneider 1953); *engelata*, *osotua*, and other networks among Maasai and Samburu (Spencer 1973; Cronk 2007; Potkanski 1999; Archambault 2016); and *lil-metch* bonds among Dassanech (Almagor 1978). Descriptions of livestock exchange systems also exist for Gabra (Torry 1973), Barabaig (Lane 1996), and West African Fulbe herders (Moritz 2013; van Dijk 1994; White 1990).

Building on studies of stock friendships among East African pastoralists, the overarching goal of this paper is to present an abridged ethnography of social networks of gift and other exchange among Karamoja's male and female pastoralists. It will describe Karimojong⁴ stock friendships or *akoneo*, types of exchange, norms of transfers, and their enduring importance in mitigating future risk. Although often overlooked, this paper will consider women's network of exchange as well. Further, I demonstrate how exchange networks were utilized by participants during a recent drought period. Informal insurance through social networks continues to be the dominant form of social protection among pastoralists and other rural communities due to the absence or weakness of formal institutions (Devereux and Getu 2013). This paper, therefore, intends to demonstrate to development practitioners and policy makers that appreciating historical and traditional mechanisms of resilience among pastoralists is vital for designing community-based risk management or social protection projects.

Study area

Data for this paper were collected as part of a dissertation project⁵ over a period of 14 months between October 2013 and August 2015 in Rupa and Tapac Sub-Counties of Karamoja's Moroto District (see Map 1). Moroto District borders Kenya's Turkana County to the east. Geographically, the district is primarily a vast stretch of semi-arid plains, punctuated by inselbergs and flanked by the Mount Moroto range. A vast portion of the district falls under the *pastoral livelihood zone*, characterized by dry spells, high temperatures, and low and poorly distributed rainfall (300–500 mm per annum) (Levine 2010b; Robinson and Zappacosta 2014). Due to the permeability and low fertility of the soil on the plains, crops besides sorghum and bulrush millet are generally difficult to grow⁶ (Robinson and Zappacosta 2014). In contrast, the upper reaches and inner valleys of the Mount Moroto range, which is also in this livelihood zone, support agriculture marginally better thanks to its springs and a few perennial water sources.

The plains of Moroto District, comprising Rupa and Nadunget Sub-Counties, are home to the Matheniko section of Karimojong pastoralists. Karimojong communities are related (socioculturally and linguistically) to

Turkana of Kenya, Jie and Dodoth of Uganda, Nyangatom of Ethiopia, and Toposa of South Sudan. Tapac and Kati-kekile Sub-Counties, situated along the Mount Moroto range, are home to Tepeth agro-pastoralists who belong to the *Kuliak* linguistic cluster. Tepeth communities are said to be the original inhabitants of Karamoja, having subsisted primarily through hunting-gathering and crop agriculture until the gradual adoption of Karimojong practices such as livestock rearing and the Karimojong language in the early twentieth century (Weatherby 2012; Laughlin et al. 1979).

Participants in the study live in a village cluster on the eastern edge of Rupa Sub-County and scattered throughout the Tapac Valley area (inside the valley, on the plains, and close to the trading centre). In Rupa, male participants are primarily pastoralists who engage in opportunistic agriculture and a variety of other livelihoods such as small-scale mining (of gold, marble and limestone), wage labour, and petty trade among others (Iyer and Mosebo 2017). Men from Tapac Sub-County, however, practise agro-pastoralism in addition to diversified livelihoods. Although all pastoralists engage in some form of the livestock trade, approximately a quarter of participants from both locations are part of livestock trade groups and depend largely on sales of livestock for livelihoods. Women from both sub-counties—who bear the primary responsibility for household nutrition (Catley et al. 2018)—engage in agriculture, small-scale livestock trade, and other livelihoods such as small-scale mining, brewing, petty trade, firewood and charcoal production, and daily labour in urban and peri-urban centres (Iyer and Mosebo 2017).

Methods

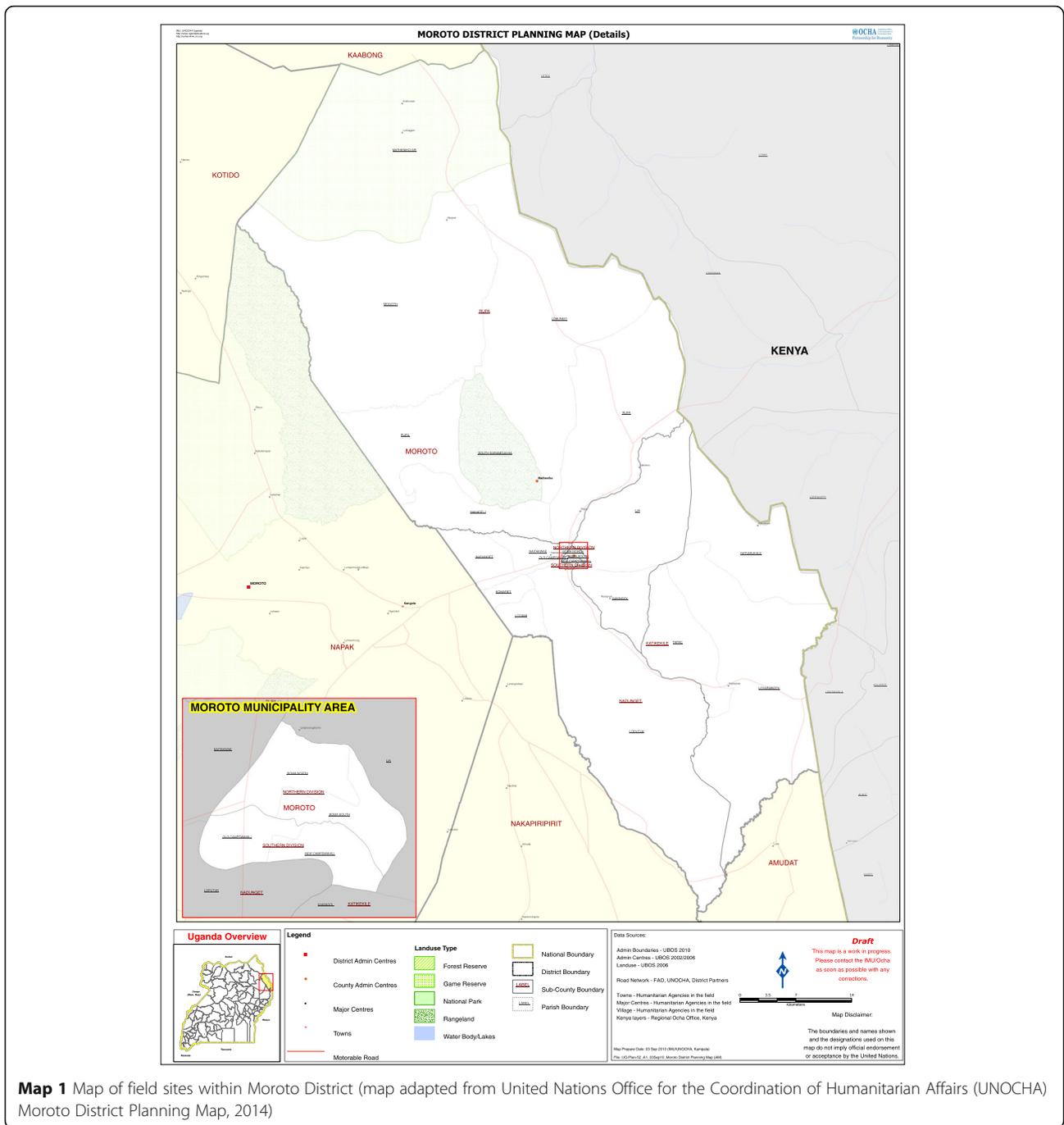
A total of 45 men and 30 women participated in the study, which employed participant observation, interviews, surveys, focus group discussions, and economic games. The same participants were interviewed several times over the research period in order to build trust, avoid respondent fatigue, and understand time- and context-dependent strategies. The first interview consisted of a demographic and economic survey, livelihood strategies, and a social support questionnaire. A second interview examined details of stock friendships including attributes of friends such as names, locations, kinship, and items given to and received from them. Finally, a list of recent transfers “since the last harvest”⁷ in the form of

⁴I use the word Karimojong as the umbrella term for both Matheniko Karimojong and Tepeth in several places in the paper.

⁵The dissertation project resulted in the following: (1) an ethnographic investigation of friendship contracts among men and women; (2) an examination of the characteristics of friendship networks, including size, composition, geographical spread, and relational content; (3) a study of how individual level and external factors influence friendship networks and risk sensitivity; and (4) an analysis of social exchange networks that are activated during drought induced stress.

⁶Although maize is cultivated, the success rate of the crop is generally lower than that of sorghum.

⁷Although agriculture is opportunistic, “since the last harvest” was an appropriate time marker as “harvest” season is a specific period in the Karimojong calendar and has common understanding.



Map 1 Map of field sites within Moroto District (map adapted from United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Moroto District Planning Map, 2014)

loans, gifts, and other help received was noted for all participants. A follow-up study was conducted shortly after the end of the research period to collect missing data, verify qualitative information, and collect another list of recent transfers. This allowed for an understanding of flow of goods and services within the community within a limited timeframe as well as an assessment of study participants' actual network of social support, because the follow-up study coincided with an extended lean season

and Integrated Phase Classification 3 (Crisis).⁸ Findings presented below are an overview of the norms, role, and importance of stock friendships in Karimojong pastoralists'

⁸Where at least one in five households faced significant food consumption gaps with high or above usual acute malnutrition or is marginally able to meet minimum food needs only with unsustainable coping strategies such as liquidating livelihood assets (FEWS NET, 2014).

Table 1 Characteristics of men and women's friendship networks in Rupa and Tapac

	Men in Rupa (N = 24)	Men in Tapac (N = 21)	Women in Rupa (N = 15)	Women in Tapac (N = 15)
Average no. of friends	9.4	6.1	3.5	2.6
Range (largest to smallest)	32–3	12–3	6–2	5–2
Percent kin friends	31%	38%	28%	18%
Percent agnatic friends	38%	29%	55%	45%
Percent affine friends	62%	71%	45%	29%*
Female friends	7	9	N/A	N/A
Male friends	N/A	N/A	8	10
Geographic dispersal				
Same village	34%	27%	55%	31%
Same sub-county	51%	54%	34%	62%
Diff. sub-county	5%	9%	6%	5%
Diff. district	10%	9%	4%	3%

*Remainder are those who are either in the “unknown” relation category or “far relation”

contemporary lives. Findings represent both field sites and reported norms for Matheniko and Tepeth communities.

Friendship networks in Karamoja

“The animals you entrust to someone is like the money you put in a bank”

Stock friendships in Karamoja were described first by Dyson-Hudson (1966, p. 85) in his seminal work on Karimojong politics as follows: “Any adult with reasonable cattle assets expends them in part on creating formal bonds of mutual friendship and assistance with non-relatives to whom he feels personally attracted and whom, for a variety of reasons he respects. Men so bound address and refer to each other as “friend” (*ekone*,⁹ *ngikonei*) and are obliged to assist each other as if they were close kin and express the tie by repeated reciprocal stock gift”. In contemporary Karamoja, friendship networks span geographic, economic, relational, and generational divides. Men and women develop friendships and acquire relatives and friends at all stages of life, through a multitude of avenues and of both genders (see Table 1). Friendships can also be intergenerational and pass on from parents to children. Among men, stock friendships (*akoneo*) are established frequently at childhood: young shepherds meet each other on the grazing grounds, young men befriend others during ceremonies or at *kraals*, and at every stage, no matter how old, men are introduced to new friends through their existing friends or befriend others through marriage. Typically, friendships between unrelated individuals do not begin with animal gifts; rather, a herding stick (*ebela*) is requested or voluntarily gifted to potential friends. From there, the two individuals go on to share items of clothing such as blankets and sandals. Finally, the

sharing of tobacco (*etaba*) occurs, which is the first significant item that changes hands between imminent friends.

Whereas friendship initiation customs may vary, the paramount aspect of friendship remains “attraction through blood”¹⁰ or “when one person’s blood matches with another’s”. The notion of “blood attraction” signifies the chemistry that attracts people to one another.¹¹ This concept also plays a role in romantic relationships where men and women are said to marry the one with whom their “blood matches.” This attraction, in the words of study participants, is predicated on very specific traits, such as the way a person lives, talks, and the way a person’s heart is exhilarated by the other’s words and actions. The importance of a person’s attitude towards others and especially his (or her) “peaceful” nature have great prominence, and are highly sought-after qualities in friends and spouses.

A person’s network of friends is a galaxy of individuals with varying degrees of relation, including their own/step/half siblings, their age-mates, neighbours, and various individuals. Stock friends are considered “friends of the heart” (*ekone ke a etau*), signifying a deeper and long-lasting bond forged through animals. They are generally distinguished from other, less serious friends known as “friends of the water” (*ekone angakipi*). These terms are also used for relatives who are differentiated into two classes: cattle kin (*ngiyenet angaatuk*) and water kin (*ngiyenet angakipi*). According to Dyson-Hudson (1966, p. 91):

¹⁰From the verb *acamun*, to desire, want, agree, or *akinir*, to like much, to desire. I choose the word “attraction” (*arikun*) as some participants also used it, and the English word “attraction” fits well.

¹¹“Blood attraction” is not to be confused with “blood brotherhood”, which requires the ingestion of blood of another as a ritual act in order to seal an alliance not just between two individuals but between two sets of kin (Evans-Pritchard 1933).

⁹sic

Cattle kin share stock received through bridewealth or gift, and accept an obligation to provide stock at need: they form an interest group in relation to the cattle transactions involving any of their members. Water kin are under the strongest obligation of mutual hospitality short of cattle transfer... It is cattle kin, as a group, that provide any man with his most reliable supporters, since quarrels of any kind are likely to involve payment or receipt or at least well-being of cattle, and in terms of cattle the interest of one member is substantially the interest of them all.

A similar distinction is made when speaking of friends, with *ngikonei angakipi* or “water friends” occupying a lower rung than friends with whom animals are shared. The depth of the relationship, however, goes beyond the value of the cattle. Participants highlight the difference in the two categories of friends in the following way:

He (“water friend”) is the one with whom your words do not match (there is a difference of opinion). When you have a problem, he does not rush to your rescue. He sees your children hungry, your wife sick, but he does not help. He does not have love for you. The real real (sic) friend comes home and checks how people are getting on. He is concerned about

you. He visits you even if you have no food to offer. This is the person with whom you share animals. You share food. This friend really loves you.

Relatives form an important part of the stock friendship network; not all relatives, however, are stock friends. The same criteria used for founding a friendship with a “stranger” or a non-relative are applied when choosing friends who are relatives. Those with qualities desirable in a stock friend are chosen for the exchange relationship. Although 90% of participants in Rupa and 85% in Tapac reported having stock friends who are related, these friends only comprised 30% and 38% of the total number of unique friendships in each field site respectively. In Rupa, a sister’s husband was the most frequently cited kin member, followed by half-brother (son of a different wife of the father), and among Tepeth, half-brother is a predominant stock friend, closely followed by the father’s brother’s son. One’s own brothers were also frequently listed as stock associate among Tepeth.

Sharing or exchange (*ameanakin*) of animals among stock friends, whether as gifts or during need, is a significant feature of friendship. Despite the infrequency with which it happens (food, money, and other immaterial help are shared more frequently), the transfer of animals from one friend to another occurs for a number of reasons (see Table 2). These include the following: to increase herd size through

Table 2 Animals exchanged between stock friends in field sites by major categories (rounded %)

	Rupa		Tapac	
	Cattle* (314**)	Small stock (512)	Cattle (150)	Small stock (103)
Bridewealth transactions	45%	32%	65%	59%
Ceremony	0.3%	3%	0	7%
Dispute resolution	1%	0	0	0
Fertilize	0.6%	0	0	0
Friendship/kinship	31%	37%	23%	19%
Hunger	0.6%	4%	0.7%	2%
Herd	0.3%	5%	0	5%
Herd increase	0.6%	5%	0	0
Milking	2%	1%	3%	0
<i>Ngarobai</i> ***	11%	7%	3%	1%
Survival	8%	6%	3%	5%
Help during illness	0	1%	2%	3%

*Includes donkeys and camels

** Total reported number of animals exchanged

***Decorated animals (*Ngarobai*, in a strict sense, refers to a band made from strips of animal skin that is tied around certain prized animals. Often, these are castrated male animals, although on rare occasions *ngarobai* animals can be female. These animals are decorated through branding and manipulation of horns (see also Dyson-Hudson 1966, p. 100). A *ngarobai* animal usually conforms to someone’s preference, be it the colour or pattern on the skin, or the shape of the animal. Men tend to know their friends’ preferences for animals, and if an animal of the colour or pattern admired by a friend is born into an individual’s herd, he will call for his friend to come and take it. The giver may also make a *ngarobai* band for this animal in anticipation of his friend’s imminent visit to claim this animal)

fertilization, provision of milk for family, dispersal of risk by entrusting animals to others, fulfilment of social obligations such as initiation and marriage, payment of fine in a dispute, and for other ceremonial and practical uses. Although typically requested, for instance during bridewealth accumulation or for ritual sacrifice (*ajulot*), livestock can also be gifted of the giver's own volition. For the giver, gifting for 'no reason' or without being specifically asked for the animal can be a way of maintaining and solidifying the budding relationship, disperse his risk by spreading animals in other herd management units, or a way to simply help a friend.

Crucially, livestock transfers have implications for property rights in animals, and often, multiple people have rights over the same animal (Khazanov and Schlee 2012). For instance, while gifting of an animal for fertilization of one's own animal (*eketepan*) does not transfer property rights to the receiver, exchanges for ceremonial purposes—e.g. bridewealth or for men's rite-of-passage (*asapan*)—results in the complete transfer of property rights to the receiver. On the other hand, property rights over an animal given for milk (*alepot* or *nginakidala*) are more complex where the giver becomes a "requestor" for any animals that may be born of the milking animal despite retaining rights over the original animal. Therefore, while many categories of transfers are technically debts, where the giver continues to "own" the animal and may re-claim the animal or receive an animal in its place, the debt is symbolic in that the animal remains in the receiver's herd and ensures the continuity of the relationship between the two friends.

Although norms of property rights according to the conditions of the transfer and need of the recipient do exist, they are subject to tremendous variation depending on the nature of friendship and the circumstances of giver and receiver. The notion of "debt" between stock friends remains fluid; the long-running relationship that continues to hold parties to debt strengthens their bond over time and reflects the trust between partners. Among Karimojong, the instances of livestock transfer in which the notion of strict debt (*eden*; *amica*) applies are animals borrowed for ritual sacrifice (*ajulot*), animals speared to feed other people (*apukin/akiamakin/akitocol ngikilyok*), and the ox for the initiation (*asapan*) ceremony. Although norms dictate that the loan of animals for these purposes should always be paid back, creditors may choose to forgive the debt, particularly for the sacrificial animal and the initiation ox. In the event of the debtor's demise, debts may be assumed by other members of the family, for instance, a son; such

transfers of debts propel the friendship from one generation to the next. Furthermore, if the debtor had helped the creditor in a significant way, such as in the accumulation of bridewealth or feeding his children in a time of hunger, the creditor may forego the debt out of goodwill and appreciation of the way his friend helped him in the past. Whatever the nature of the arrangement between giver and receiver, the mutual indebtedness between friends facilitates the perpetuity of the friendship and keeps friends emotionally tied to each other (Werner 1998; Bollig 2006).

Women's friendship networks

The ethnographic literature on pastoralism is generally silent on the topic of women's friendships, exchange networks, and the role of these relationships in risk management—as discussed for male pastoralists. A few exceptions, however, do exist. These include a study of friendship networks among Rendille women (Beaman 1983), a study on nomadic Fulani women's health networks in central Chad (Hampshire 2002), women's *napae*¹² relationships among Turkana of Kenya (Renfrew 1990, 1991), and *tilia* relationships among Pokot and Marakwet women (Pollard et al. 2015). These studies provide exceptional insight into the norms of friendship networks among pastoralist women and their indispensable role in accessing social support. Critically, recent research among Maasai of Kenya shows that women's networks are particularly critical in accessing grazing areas in an era of increased land fragmentation, a finding that also has implications for women's role in pastoralist production (Archambault 2016).

Similar to male stock friendships, women in Karamoja also possess a wide network of exchange relationships comprising kin and non-kin, men and women. Although the process of friendship among women may not be as formal as among men, the underlying emotions and the accompanying rights and obligations are similar.¹³ In many of the same ways that men build and maintain stock friendship networks, women cultivate relationships via exchange, at various times in their lives; these networks become critical for women during a time of need. Interestingly (and perhaps unexpectedly), women also use animal gifts in these friendships to build and nurture these relationships. Contrary to a previous observation that agricultural produce is generally transferred from women to men and livestock from men to women (Quam 1976), data collected during this study (Fig. 1) show the popularity of animal exchange among women

¹²Feminine form of *lopae*—friends in Turkana

¹³For example, women also differentiate between "friends of the heart" and "friends of the water".

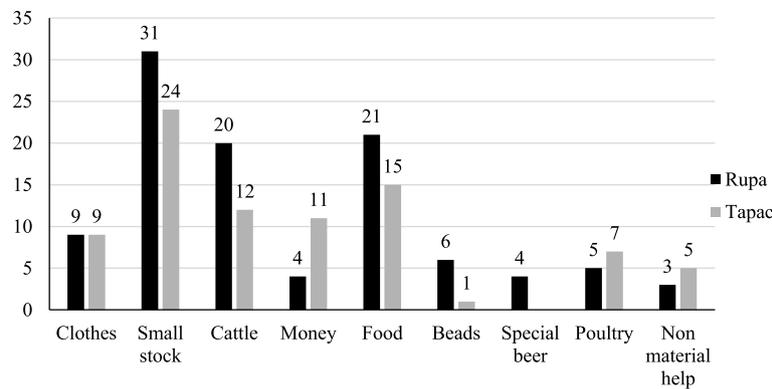


Fig. 1 Frequency distribution of gifts exchanged by women and their friends by location

(with female and male friends). Over 90% of small stock exchanged in Rupa was “for friendship”, or as a gift to support a friend. Over 60% of small stock exchanged in Tapac was the recipient’s share of bridewealth from the marriage of daughters or other female relatives, and 20% of small stock was exchanged as friendship gifts.

Food is the second most important item exchanged between friends. Women can give each other food from their harvest if they have a surplus, a share of purchased food, or from NGO food aid rations. Men do not engage in food exchange (of rations) as frequently as women because agriculture and food supply to the household remain, largely, women’s responsibility. Moreover, women have greater access to food even if they depend on food aid because the World Food Programme favours women beneficiaries.

However, the importance of friends for women goes beyond economic concerns. Several women reported taking care of friends’ children when hunger was unevenly distributed. At these times, those with nothing to feed their children handed over the responsibility of their progeny to their friends. Consequently, the children came to treat the friend as their own mother and even after the passing of their biological mother continue to maintain a relationship with their mother’s friend. In this way, among others, intergenerational transfer of friendships between women mirrors the dynamics of male stock friendships.

In recent years, money has played a critical role in informal social protection among pastoralists—both men and women—where stock friends or other mutual aid

relations exchange cash. Although cash gifts were the least frequently cited item of exchange among men and women (when asked about personal network of friends and items exchanged with them), money changes hands frequently—between close friends and others—in daily life in Karamoja. A likely reason for the low frequency of monetary gifts reported by participants is the disparate status of money and livestock. The types of bonds created by animals solidify friendships, fortify existing bonds, and create a feeling of mutual obligation, money may create envy (Schlee 2012). Furthermore, the fungibility of money makes it less emotionally or socially important as compared to animals, which are imbued with the complexity of multiple and overlapping rights of individuals connected to one another in an intricate web of social relationships (Broch-Due 1999; Goldschmidt 1986). Nonetheless, monetary exchange is a relatively recent phenomenon and can be used as replacement, selectively, for livestock gifts (e.g. during bridewealth accumulation). Similarly, friends who are unable to contribute livestock may assist with the purchase of ceremonial beer for weddings and other occasions.

Exchange networks during drought

Towards the end of 2014 and in early 2015, eastern Karamoja was dealing with the dual onslaught of a foot-and-mouth disease outbreak and poor rainfall resulting in low harvest conditions. Intensification of alternative livelihoods was the main coping strategy for most study participants, since replenishment of household harvest stocks was not possible. Cash income was necessary to meet household consumption needs, particularly as prices of staple foods increased. To investigate networks of support during stress, I collected data in mid-2015 on all exchanges in the preceding 6 months (see Table 3). Exchanges of livestock, money, food, and other items were extremely common in this period, with a total 551 transfer events (received and given) recorded for men

Table 3 Frequencies of exchange by gender and field site

	Rupa		Tapac	
	Men	Women	Men	Women
Total transfers	176	138	158	79
Transfers in	91 (52%)	80 (58%)	79 (50%)	46 (58%)
Transfers out	85 (48%)	58 (42%)	79 (50%)	33 (42%)

and women. Of 314 exchange events in Rupa, 20% were loans (men, 22%; women, 17%), and in Tapac, loans made up 23% of 237 exchange events (men, 27%; women, 15%). Money transfers were the most frequent type of loans (71%), followed by animals (21%). A variety of relationship networks were involved in the exchange of goods as I explain below.

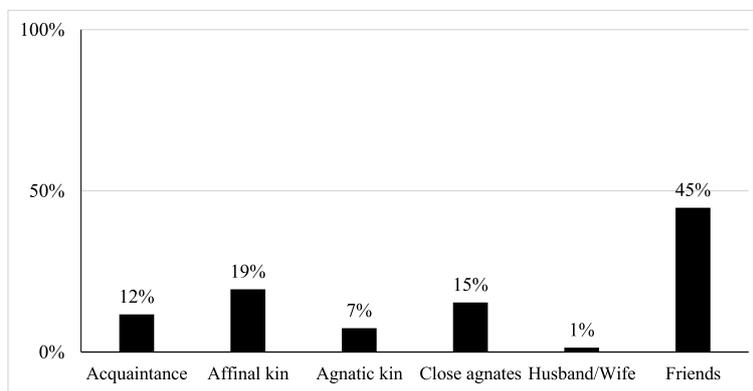
Despite the postponement of chief sociocultural events that require animals, such as initiations and weddings, animal exchanges comprised 36% of all items exchanged during this period. Livestock transactions were not limited to friends and relatives; 13% of these exchanges involved individuals classified as “chat mate”, “village mate”, neighbours, and general acquaintances. Of these, nearly half of the exchanges incurred debt on the part of the recipient. Money featured as the next highest category of transfers, used to fulfil household nutrition and other needs. *Apwataria* (to eat) was a common response from participants when they were asked for the reason behind the transfer; while the meaning of *apwataria* implies food purchases, the word connotes general help where the receiver can make decisions over its use ad libitum. Finally, food transfers were the last most frequent commodity of exchange (21% of total observations) with women responsible for 75% of these.

Upon further exploration of intra-village exchange trends in Rupa, I observed that animal traders from the village were a dominant source of monetary transactions. Animal traders generally have better cash flow, which makes them an important source of credit for the village. Traders are not necessarily the wealthiest individuals in the village when their self-reported tropical livestock units (TLU) are taken into account. However, cash-in-hand proves more valuable when individuals are less willing to liquidate assets during emergencies. Traders, hence, are

the “prestigious lenders” in the village, or those whom many individuals named as lenders (Caudell et al. 2015).

Among women, the primary help-givers were those who received relief food aid and local brewers. Recipients of food aid are typically allotted food in bulk and may use rations to assist other members of their extended kin network, friends, and neighbours with food shortage. Similarly, women engaged in the brewing business operate a system of credit for those who want to drink and cannot pay. At baseline, several women reported owing money to brew traders, and in 2015, this number increased drastically. The brewing business showed a sharp spike during the 2015 drought because of the increase in demand. Consequently, brewers in villages became critical sources of sustenance as well as for credit.

Importantly, the highest frequency of transfers occurred between individuals labelled as “friends” (see Fig. 2). Besides affinal and agnatic kin, transfers also involved individuals classified as “chat mate” (*ekirworet*), “village or walk mate” (*erukitoth*), “neighbours”, and other acquaintances—these latter, although not as close as “water friends” and certainly not in the category of “stock friends”, comprise the vast and varied network of Karamoja’s pastoralists. They may be friends of friends, neighbours, relatives of friends, and other acquaintances. Geographically, 58% of transfers in Rupa occurred within the village cluster and an additional 38% within the same sub-county or within a day’s walk from residence. In Tapac, on the other hand, only 17% of transfers took place between participants and village residents; participants reported exchanges with 68% of individuals living in the same sub-county. This discrepancy is readily explained by the shifting residential patterns in Tapac (at the time of research) where, because of failed harvests and greater investment in alternative livelihoods, many able-bodied



- Close agnates: brother, sister, son, daughter, father, mother
- Acquaintances includes “neighbours”, “walk mates”, “chat mates” and “village persons”
- Transfers from government and NGO aid programs not included above

Fig. 2 All exchanges in 2015 in both field sites by relationship categories. Close agnates: brother, sister, son, daughter, father, mother. Acquaintances includes “neighbours”, “walk mates”, “chat mates”, and “village persons”. Transfers from government and NGO aid programs not included above

individuals tend to spend varying amounts of time in their village, in mining areas, or at the trading centres.

In an environment characterized by frequent adverse weather events, other sources of instability, and lack of institutional support, even those who could be considered rich in asset wealth can sometimes fail to effectively ensure household safety on their own. For the asset poor, networks of support can prove lifesaving and can deter (or defer) their ejection from the pastoralist economy. Both the wealthy and the poor can find themselves in need under varying circumstances; not long ago in Karamoja's history, the loss of livelihood could occur overnight in a livestock raid and leave even the wealthy wanting. Analysing stock friendships as risk pooling through need-based transfer arrangements, it can be said that while both parties are likely to suffer losses from the unpredictability of the environment, the severity of the loss is decreased by entering into institutionalized forms of informal exchange (Hao et al. 2015). The costs associated with engaging in stock friendships are offset by the benefits friends provide in the event of larger, more significant losses.

The closely knit community structure also influences the flow of help in Karamoja. Under stressful circumstances, and resources permitting, assisting a friend-of-a-friend, neighbours, and other casual acquaintances is not a cost to oneself if the uncertainty of the future may prove costlier. Furthermore, helping those with whom no exchange contract exists serves to elevate one's social capital in the community. A circle of friends unique to a person is advantageous in that these people are the first to be approached for help. Nevertheless, herders in Karamoja acknowledge the unpredictability of receiving of help from a particular person: "in a time of need, you do not know who is going to help you." For this reason, the flow of help extends over a wide network that includes those with whom there may not exist a profound and binding relationship such as kinship or close friendship. In an uncertain environment, the transfers based on need become critical for survival.

Discussion: Harnessing informal social networks

Despite their largely accepted importance in ensuring resilience, research has called into question the tangible importance of social exchange relationships in recouping loss and mitigating future risk. For instance, studies have shown that whereas livestock exchange may have short-term benefits following a shock to the herd or household, its importance in the longer term on herd viability particularly remains questionable (Moritz 2013; Aktipis et al. 2011). On the other hand, inter-household livestock transfer data from herders in northern Kenya points to the importance of livestock transfers in longer-

term herd rebuilding rather than immediately following a shock (McPeak 2006). Moreover, there is some evidence that informal social protection mechanisms may be more effective during an idiosyncratic shock (those affecting individuals) than weather-related covariate shocks (Watson 2016).

These contradictions notwithstanding, risk-mitigating social exchange relationships, besides being of ethnographic interest, have far ranging implications for humanitarian and development organisations. For one, exchange of livestock and movement of livestock between different herd management units for risk dispersal has critical implications for estimating an individual or a household's livestock wealth. Norms of property rights over livestock will mean that multiple individuals have overlapping rights over the same animal; this has further implications for counting animals and, possibly, making assumptions on wealth and poverty (FAO 2016). Moreover, findings on informal risk management networks call into question the "household" as a unit of analysis frequently employed by development researchers and practitioners—as illustrated above, members of a household have far-flung networks of support, which can have a significant impact on determining wellbeing (O'Laughlin 2014; Guyer and Peters 1987).

More crucially, informal insurance or social networks of exchange—if understood and integrated meaningfully—can serve a key role in development programming in pastoral areas, specifically in building "resilience" of pastoral populations as well as contributing to social cohesion. A prominent example of this is the incorporation of the Wodaabe pastoralists' system of *Habbanae*—where a female animal is loaned out and stays in the borrower's herd for three calvings, following which it is returned to the lender (White 1997). Much like the *akoneo* friendship/social exchange institution described among Karamoja's pastoralists, *habbanae* serves as a traditional safety net through which bonds were created and strengthened over time, and eventually materialized in asset, consumption, and emotional support. *Habbanae* also serves a redistributive rather than lending function, because animals from better-off households go to those experiencing resource constraints.

A few international organizations have incorporated the *habbanae* system into their social protection programming. Between 1974 and 1984, Oxfam initiated the *Habbanae Project* in Niger to provide support in the wake of the Sahelian drought. The project, run in accordance with local traditions and managed by community leaders, loaned 500 destitute Wodaabe households two to three cows or camels and other small stock to restock their herds. After 5 to 8 years, recipients reimbursed the project following the rules of *habbanae*, and income acquired by the project from resale was injected into other initiatives (Calder and Tanhchareun 2014).

Lutheran World Relief has used *habbanae* in several projects in the Sahel in recent years and has learnt that not only does the system strengthen local level capital, but also it reinforces social networks of trust, aiding in long-term group formation and, ultimately, in resilience (Lutheran World Relief 2019). Besides *habbanae*, Somali support systems of *gargar/irb* have also been previously harnessed to support destitute pastoralist households (Lotira 2004).

Development practitioners and government policy-makers have (with notable exceptions), in large part, focused on non-livestock and non-brewing livelihoods for men and women respectively. The integration of customary institutions of support in decisions on programme design and targeting is negligible. Recognizing the significance of these informal networks of support in the daily lives of Karamoja's pastoralists is urgent because whereas pastoralism and its practitioners are adept at adapting to changing circumstances, the multilayered onslaught of climate change, continued marginalization, and large-scale economic changes are increasing vulnerability to shocks and stressors. In such a scenario, not only is it crucial to design development programmes that are firmly bottom-up and respond to the needs of the most vulnerable individuals and households, but it is also imperative to be sensitive to community values and institutions. As such, the importance of social relationships for communities in conflict, post-conflict, and other adverse situations can hardly be overlooked (Stites and Humphrey 2020).

The study of stock relationships and other social exchange falls under the wider study of informal insurance among agrarian and small-scale village economies. In the absence of formal risk management institutions, individuals and households enter into informal arrangements of gifts, loans, and transfers that help smoothe consumption in the face of volatile income streams (Attanasio et al. 2012; Townsend 1994). Risk-sharing in village economies as described by economists occurs in groups of households as well as in overlapping interpersonal networks. Group and network risk-sharing occur in small group sizes, are correlated with the risk preferences of group members, are contingent on pre-existing networks, and materialize according to the function of the group (reviewed in Attanasio et al. 2012).

Similarly, social networks of exchange in Karamoja have the potential to be utilized for disaster relief and for longer-term development planning, if integrated with relevant contextual knowledge and necessary safeguards to prevent exacerbation of stress. For instance, data from transfers during stress show the importance of cash lenders in village networks. In both study sites, the availability of surplus cash was a crucial determinant of transfers during stress. Individuals who had somewhat

regular access to larger sums of money—such as animal traders or women who have a brewing business—become sources of credit within the village economy. This trend may be interpreted as a proof of the unwavering importance of livestock trading in Karamoja and, to some extent, of the key role that local brewing plays in women's livelihoods. Therefore, understanding informal social protection can aid in designing poverty alleviation programmes that do not stigmatize the poor, take into account the pressures on informal exchange, and integrate formal social protection without destabilizing social structures (Calder and Tanhchareun 2014).

Conclusion

They say in Karimojong that even if you have hundreds of something, you cannot solve your problems by yourself. Even if you are rich, you go to a friend for help. This way you have also given your friend an opportunity to come to you for help when it is time. Suppose you have five herds of animals now and you are rich, what will you do if something happens to your animals? If you reach out to friends, you are keeping that connection for when something serious happens.

The brief snapshot of exchange during stress and the ethnographic data on stock friendships and other networks of friends, kin, and acquaintances shows the importance of informal insurance systems in Karamoja. Although wealth, geography, and other variables have critical bearing on the ability of individuals and households to maintain their social networks of support, the fundamental role of social networks in short-term support and long-term sustainability is undeniable. A circle of friends unique to a person is advantageous as these are the people first approached for help during need. However, the unpredictability of receiving help from a particular person necessitates that the flow of help extends over a wide network that includes those with whom there exists no profound and binding relationship such as kinship or close friendship. In an uncertain environment, the activation of need-based transfer arrangements with these individuals becomes critical for survival.

It is important to note that informal social protection systems are far from ideal and can exacerbate class divisions and poverty due to their inbuilt limitations and modern stressors (Calder and Tanhchareun 2014). The poorest can be easily excluded from social networks due to their inability to reciprocate/support. However, poverty targeting has its own pitfalls where, besides its questionable effectiveness, it can stigmatize households and individuals. Therefore, context-sensitive social

protection programming is a well-researched amalgam of informal and formal social protection systems, which considers local understandings of fairness and justice, prosperity, and resilience.

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Author's contributions

The corresponding author collected and analysed all data and is the sole author of the manuscript. The author read and approved the final manuscript.

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Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Informed verbal consent was acquired from each study participant at the time of enrolment in study. Due to the sensitive nature of acquiring signed consent, a waiver of formal consent was approved by Rutgers University.

Consent for publication

N/A.

Competing interests

The author declares she has no competing interests.

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