LIVESTOCK-CENTERED DIVERSIFICATION AND LIVELIHOOD RECOVERY IN POST-DISARMAMENT KARAMOJA

Frank Emmanuel Muhereza, PhD

Senior Research Fellow, Centre for Basic Research, 15 Baskerville Avenue, Kololo, P.O. Box 9863, Kampala. Email: fmuhereza@gmail.com

17 May 2019

Abstract:

This paper seeks to explain how the promotion of diversification of sources of income by supporting formerly predominantly pastoral households to adopt settled crop farming and non-agricultural alternatives as a strategy for livelihood recovery in most development interventions being undertaken in Karamoja is problematic. Drawing insights from several studies as well as an extensive review of secondary literature, this paper argues that while diversification is the way to go, not all forms of diversification are always beneficial. By analyzing the various options open to targeted Karamojong households, this paper argues that while opportunities for diversifying within non-crop and non-livestock based enterprises have relevance, there were very limited such options available for majority of households in Karamoja. Diversification within crop-based enterprises such as growing a variety of crops, processing along crop-based value chains involving food processing and alcohol brewing were extremely limited and highly constrained. Diversification within pastoralism remains the most sustainable and more widespread, although difficult to sustain under the prevailing circumstances.

1. Introduction

This paper¹ explores the trajectories of diversification among livestock dependent households, seeking to understand the relationship between access to livestock, multiple sources of livelihoods and recovery dynamics in post-disarmament Karamoja. It is argued in this paper that while diversification has been central to the recovery of livelihoods of pastoral and agropastoral households in the aftermath of forceful disarmament, not all forms of diversification are

1

¹. The analysis in paper draws insights from primary and secondary data collected between June and December 2018 during three studies the author was involve in, namely: (i) 'Emerging Land Tenure and Land Conflicts Dynamics in Post-Disarmament Karamoja focusing on Abim, Kaabong, Kotido and Napak districts' for ADRA Uganda; (ii) Final Performance Evaluations of the Mercy Corps Uganda's Growth, Health and Governance (GHG) Project in Northern Karamoja for USAID's Office of Food for Peace (FFP), and; (iii) A Comparative analysis of the process of post-conflict livelihoods transformation, recovery, and peace building in the Uganda sub-regions of Acholi and Karamoja for Feinstein International Center (FIC), Tufts University, and the UN Food and Agricultural Organization (FAO).

always beneficial in the same way to all categories of pastoralists. The paper explores different diversification patterns and choices, in order to explain how some create better opportunities for recovery in post-disarmament Karamoja. The paper underscores what needs to be done to enhance the sustainability of pastoralism in the context of livelihood diversification.

When government launched a concerted forceful disarmament campaign in 2004, Karamoja was characterized by a general breakdown in enforcement of law and order. Livestock raids were rampant due to the proliferation of illicit firearms. Recurrent droughts and livestock disease outbreaks following the breakdown of veterinary services delivery infrastructure, coupled with the disarmament strategies adopted to deal with resistance to disarmament by armed youth (*karachuna*) led to a conflagration of armed violence. The ensuing loss of livestock led to not only high levels of inequity in animal ownership, but also impoverishment among most ordinary Karamojong (Catley and Ayele 2018, 15; Muhereza 2018; Stites *et. al.* 2017, 48; Broughton and Wathum 2014; Burns *et al.* 2013, 32).

Mercy Corps (2018, 4) estimated that Karamoja's livestock holdings declined from around 2.7 Tropical Livestock Units (TLUs)/person in 1959 to 1.3 TLUs/person in 2002. In 2018, it was estimated that almost 70 percent of the livestock in Karamoja was owned by 30 percent of the wealthiest agro-pastoralist and pastoralist population. In addition, 57 percent of households in Karamoja fell below the livestock threshold of 3.3 Tropical Livestock Unit (TLU) per capita, equivalent to 4.7 cattle (or 33 goats per capita) required for each household's food and nutrition security, and hence lived in absolute poverty (Catley and Ayele 2018, 15). This implies, many of those who owned livestock, were still poverty because they owned too few animals.

In many ways, the period during disarmament between 2004 and 2010 and post-disarmament contexts in Karamoja are a remarkable contrast. During forceful disarmament, there was a sense in which armed violence and raiding escalated in many places before subsiding. This period was also associated with widespread human rights violations, livestock destruction and food insecurity (Muhereza 2018; Human Rights Watch 2007). In the period after disarmament, while livestock thefts had continued, and illicit firearms were still being reported in civilian possession; large scale culturally sanctioned violent livestock raiding ended in most parts of Karamoja. There are no more road ambushes in Karamoja. The latter notwithstanding, there are still isolated incidents of large livestock raids orchestrated by armed pastoral groups from Kenya and South Sudan (Vondal *et. al.* 2019; Mercy Corps 2016, 46).

A lot of development interventions have been undertaken by government and development partners in Karamoja in the aftermath of government proclamation of a successful forceful disarmament in July 2010. Livelihood conditions in post-disarmament Karamoja today are much better than they were 10 years ago. Moroto and Nakapiripirit district towns are accessible by tarmac road from Soroti; and both, in addition to Abim and Amudat have been connected to the National electricity grid. The local economy has grown, is still growing, and is expected to get even better. Even where improvements are discernible, especially where government and NGOs have intervened with support initiatives, it is not a steady upward trajectory of recovery (Vondal *et.al.* 2019; Marshak *et.al.* 2017; Stites *et.al.* 2017; Levine 2016).

Little appears to have changed in terms of the overall recovery of the livelihoods of ordinary Karamojong. The general food production and agricultural incomes for the majority of the Karamojong have not increased as much as they were anticipated.² Those deemed to be

². According to the 2016/17 Uganda National Household Survey (UNHS), 86 per cent of the people surveyed in Karamoja expressed inability to afford three meals per day for their children (UBOS 2017, 95). It is not only access

recovering in post-disarmament have only managed what Levine (2016, 13) described as 'a few steps forward' and 'several steps backwards'. The general poverty conditions and indicators were still poor in Karamoja. In the 2016/17 Uganda National Household Survey (UNHS), Karamoja returned the highest poverty incidence in Uganda, with 61 per cent of its people considered income poor, compared to a national average of 27 per cent.³

Karamoja still lags behinds not only the whole country but also the rest of Northern Uganda with regards the bulk of human development indicators. By 2017, 51 per cent of the population aged 6 to 24 years in Karamoja had never attended school (UBOS 2017, 34). Only 37 per cent of the persons aged 6 to 24 years were attending school, compared to a national average of 70 per cent across all sub regions. 63 per cent of people in Karamoja, the highest in Uganda, have had no formal schooling (UBOS 2017, 43).

Nationally, Karamoja also had the lowest percentage of literate females with only 21 per cent able to read with understanding and write meaningfully in a given language (UBOS 2017, 40). Without equitable access to livestock, whatever small progress that was being achieved in Karamoja was increasingly becoming very difficult to sustain due to continuing vulnerability to shocks and hazards among the greatest number of ordinary Karamojong (Stites *et. al.* 2017; Levine 2016, 31; Mayega, *et.al.* 2015, 2; Burns *et al.* 2013). It was no longer surprising to find a successful household or individual struggling one or two years later (Levine 2016, 31).

The paper seeks to examine the type of diversification of pastoral livelihoods to understand that which is associated with the most resilience. The paper aims to contribute to an understanding of the various dimensions of livestock centered diversification in order to shed light on the following research questions, among others: (a) Why are the livelihoods of the ordinary Karamojong not transforming as much as was anticipated through diversification? (b) Why is the pace of livelihood recovery in Karamoja so slow even among some of those who appear to be succeeding?, and; (c) What forms of diversification improves not only incomes and welfare of pastoralist households, but also their resilience to shocks without undermining the long-term sustainability of pastoralist livelihoods?

2. Unpacking the Concept of Diversification

Post-disarmament Karamoja elicits different forms of vulnerabilities to shocks and hazards. This necessitates an engagement seeking an understanding of how these vulnerabilities can be mitigated and addressed through livelihood diversification. Many studies call for diversification of livelihoods as one of the strategies for strengthening the resilience of poor households. Resilience has been defined as the abilities to adjust and recover from shocks and hazards, which is a function of, among others, access to resources, individual skills (capacities and capabilities) and beliefs. Diversification therefore, encompasses the deployment of multiple livelihood strategies, resources and economic activities, pursued through diverse social networks

to food that was still problematic, the majority of households were not accumulating wealth assets such as livestock (see Marshak *et. al.* 2017; Levine 2016; Mercy Corps 2016).

³. Income poverty measures the proportion of the population whose personal income lies below the poverty line, which is US\$1.25 (about UShs. 4,500) a day for Uganda (UBOS 2017, 85). Catley and Ayele (2018, 6) used the livestock threshold required for their food and nutrition security as a measure of absolute poverty. The former revealed higher poverty levels (61 percent) than the latter (57 percent), although both were still very high.

⁴. This paper is aware, as noted by Kurtz and McMahon (2015, 1-5) that resilience is a function of many factors. Diversification, which is the focus of this paper is just one of them.

and engagements to enhance survival in response of adversity or in taking advantage of existing/emerging opportunities (Levine 2016, 13; Kurtz and McMahon 2015).

Studies on diversification in pastoralist communities have been concerned, among other issues, with understanding what it means, and why it is important, how it takes place, who is diversifying, and who benefits the most and how (e.g. Persha and Farrell, *et. al.* 2017; Little 2016; McCabe *et.al.* 2010; Iiyama *et. al.* 2008; Ellis and Allison 2004).

There are two dominant trends in the literature that explain the meaning of diversification. The first trend considers diversification in terms of wealth-creation, where the focus is usually on the multiple economic activities that increase wealth and incomes, and targets higher return areas such as processing of livestock products, petty trade and rental properties (Mayega *et. al.* 2015, 1; Iiyama *et. al.* 2008, 384). In such writings, diversification is associated with mainly the more affluent who own large numbers of livestock. The second trend focusses on diversification as a response to adversity, and is usually about the fate of livestock poor households for whom diversification always leads to adoption of non-livestock activities, considered as a form of 'bad diversification' (see Catley and Ayele 2018, 8; Little 2016, 6; Ellis and Allison 2004).

In the writings on the two trends, it is possible to distinguish between typologies and forms of diversification; such as on-farm and off-farm types of diversification (Iiyama *et. al.* 2008); as well as voluntary and involuntary forms of diversification. Voluntary is largely the result of push (internal) factors while involuntary results from pull (external) factors (Little 2016; Ellis and Allison 2004). In some of the writings, diversification is celebrated as a panacea to the challenges of overall economic growth and income inequality (Persha and Farrell, *et. al.* 2017, 3). Such writings consider diversification towards non-farm/nonagricultural activities which makes possible formalized wage employment not only desirable, but also the penultimate stage in a unidirectional process of agricultural transformation through which recovery is achieved (Persha and Farrell, *et. al.* 2017, 3).

There is a sense in which livelihood diversification is positively associated with improvements in the wealth and livelihoods of households (Marshak *et.al.* 2017, 23), to the extent that the higher the degree of livelihood diversification, the better the livelihood outcomes (Levine 2016, 7). The latter presupposes that the more endowed in terms of wealth assets such as livestock are more likely to diversify than the less endowed (see Stites *et.al.* 2017, 9). This literature is relevant to diversification of pastoralist livelihoods to the extent narratives therein consider diversification as an indicator of not only the end of nomadism, but also the replacement of pastoralism as the main source of livelihood as well as productive activity (see Little 2016, 6).

It has been rightly argued that diversification is not always a straightforward linear process (Levine 2016, 12-4). While diversification is often considered as the key to livelihood improvement and resilience, it does not necessarily imply that all categories benefit the same from diversification. Benefits are not always evenly spread out between and within households. Sometimes it strengthens pastoral livelihoods and sometimes it doesn't. Sometimes diversification-associated improvements disadvantaged certain social categories in pastoral households such as women and children by increasing demands on their labor. Under different circumstances, both girl and boy children have been forced out of school, to look after families and herding of small stock respectively (Mercy Corps 2016, 48-9; IOM 2014).

Even if diversification is generally beneficial, it does not mean the less diversified are the more vulnerable, and vice versa (Levine 2016, 12). It also doesn't mean those with less

assets don't diversify, or diversify less. It is not only the more affluent that diversify. Even the less affluent pursue multiple diversification strategies, even if it does not generate the same robust livelihood improvements. In Karamoja, Catley and Ayele (2018, 16) revealed that for survival, households below the livestock threshold relied heavily on diversified livelihood activities including multiple small jobs in towns.

In post-disarmament context of Karamoja, even where livelihoods have manifestly diversified, recovery can never be expected to be a smooth and steady upward progression from bad to good. Instead, recovery was not only dynamic, but also sometimes volatile, with many ups and downs, twists and turns. Many times, even those considered to have, in 'relative' terms, succeeded in recovery are still trapped in poverty, live lives of misery characterized by high levels of instabilities (Marshak *et. al.* 2017, 27; Levine 2016, 15). An uncertain and unpredictable future stills hangs over the lives of most households including those deemed to have recovered as a consequence of diversification.

The above suggests that while diversification is significant to pastoral livelihoods, the relationship between diversification, livelihood recovery and resilience among pastoralists is much more complex than is often acknowledged. As argued by Persha and Farrell, *et. al.* (2017, 3), diversification needs to be conceptualized beyond wealth creation and income generation. The extent to which diversification strengthens pastoral livelihoods or accelerates the speed of post-conflict recovery, on one hand, or enables pastoralists respond to adversity while seizing opportunities that become available, on the other hand, depends on the nature and scope of diversification, how it is undertaken, when and where. One factor cannot be denied, though - the more diversified livelihoods are, the less likely pastoralists are to suffer the worst possible effects of adverse conditions in the rangelands they inhabit.

How diversification is played out in real life therefore needs to be interrogated. The central premise in this paper is that among the ordinary Karamojong, the more beneficial diversification is that which permits livestock acquisition and investment in livestock-based alternatives around which other livelihood activities are adopted.

3. Crop-centered Diversification

3.1 Adoption of Permanently Settled Crop Farming

The Karamojong have been historically known to practice some crop farming alongside their transhumant livestock rearing to the extent permitted by the physical environment. A section of the household that remains in the permanent settlement survive more predominantly on crop cultivation, with livestock products supplementing diets of households. However, the Karamojong are being encouraged and supported to abandon this kind of diversification and permanently adopt settled crop cultivation as an alternative to pastoralism. And with significant investment by government and some development partners, settled crop farming is being pursued so it becomes the main source of survival of the Karamojong.

Any form of diversification which entails making crop farming the main source of livelihood of the Karamojong faces challenges. Whether crop farming is adopted voluntarily or involuntarily, it is still highly vulnerable to drought and the high rainfall variability as the farming is exclusively rain-fed. It has been known since the 1920s that given Karamoja's unpredictable and variable rainfall regimes, and prolonged drought conditions, livestock-based

livelihoods were the most viable⁵, a fact which has been re-iterated by many recent studies (Bushby and Stites 2016; Levine 2010). Although large scale irrigated farming was tried by the British, it failed and was abandoned. The NRM government is still keen to introduce large scale irrigation farming. Increased adoption of settled crop farming as an alternative source of livelihood raises serious issues of sustainability of livelihoods of former pastoralists involved.

Crop farming is no longer confined to the permanent settlements on one hand, and the labor of the women, on the other hand. It has not only been diversified to other spaces, it is also carried out by both men and women, young and old. Relative peace has enabled different categories of Karamojong to move into greenbelts wherever these can be found for crop farming. In Napak, the energetic members of a household move into new settlement areas in Apeitolim, Kobulin and Nyarkidi to open up crop fields to support those who remain in the traditional settlements. This movement into greenbelts for crop farming is unlike the traditional migrations into dry season grazing camps. The more greenbelts in rangelands are put to permanent crop farming by an ever increasing number of former pastoralists and non-pastoralists as their main source of livelihood, the more the longer term viability of livestock production is undermined.

Those who adopt crop farming plant not only self-preserved local seeds, they have also adopted improved drought tolerant, fast maturing, and high yielding seeds and planting materials. They grow not only traditional cereals (sorghum and millet); vegetables (pumpkins) and root crops (sweet potatoes) but also have adopted newly introduced crops such as groundnuts, sunflower, water melon. Traditional farming methods (broadcasting) as well as modern agronomic practices are both in use (Vondal *et.al.* 2019).

From the various interventions undertaken to modernize and commercialize crop farming in Karamoja, more land has been put to crops, and more households have taken up crop farming. While there have been modest improvements in adoption of modern agronomic practices and increases in food production, the overall outcome from the support was not transformative (Broughton and Wathum 2014, 72).

The increased crop production and productivity was associated with a high level of investment to ensure a regular supply of improved seeds and other modern inputs. Farmers are also facilitated and supported to adopt improved seeds and farming methods to boost crop productivity. This kind of investment necessary to sustain crop farming in Karamoja can only be marshalled in the context of robust government and donor-supported project funding for the various interventions entailed (see Vondal 2019, 12-3; Muhereza 2018).

There is no doubt anything can grow anywhere in Karamoja anytime. However, to achieve that in Karamoja, a high level of investment is needed compared to livestock production. Investment in improvement of quality and health of livestock as well as livestock marketing infrastructure has increased, leading not only growth of livestock trade with more buyers from outside Karamoja and Uganda but also to increased incomes to livestock owners (Stites *et al* 2014). Higher incomes are more likely to accrue to more individuals if the level of investment in improving the quality and health of livestock is at par with the level of investment in improvement of crop production and productivity.

6

⁵. See para. 3-4 of 'Notes of a meeting held at Government House on 21st December, 1923, to discuss the future policy to be followed in Karamoja. In attendance was: H.E the Governor, the Chief Secretary, the Provincial Commissioner, Eastern Province, and the Ag. Assistant Secretary for Native Affairs (*pp*.1). In File No. N135/25: Karamoja Reports, Uganda Protectorate.

3.2 Diversification along Crop Value Chains

Apart from adoption of crop cultivations, pastoralists including the women, especially divorced or widowed, have sought alternative livelihoods in non-livestock activities along the crop value chain such as brewing alcohol, buying and selling of food stocks, among others. Alcohol brewing and trade, as an alternative to dependence on pastoralism and crop farming, creates adverse consequences that undermine the productivity of those involved because of its association with wasting away of able-bodied young men, petty crime, sexual and gender-based violence and loss of productivity (Mercy Corps 2016, 45; Mayega, *et.al.* 2015, 13). Some have resorted to wage employment as helpers in food serving kiosks and restaurants.

4. Adoption of Non-Farm alternatives

4.1 Wage Employment

Some Karamojong men and women have sought wage employment in the formal and non-formal sector outside agriculture. They are employed as domestic workers, and cleaners in business premises and offices. Years of armed conflicts and lack of education means most Karamojong who have lost livestock lack requisite skills to get employment in the formal wage sector. Without livestock, the only skill they possess, of livestock herding, is rendered redundant. Most end up employed in low-paying casual work in the informal sector (Little 2016, 9). Those who work at mining sites are underpaid and work under despicable conditions (Human Rights Watch 2014, 73-5).

Another alternative source of income is remittances from Karamojong who migrate to urban centres and towns in districts neighboring Karamoja, to as far as Jinja, Busia and Kampala. These include not only men, but also women and children. While the adults may end up in informal employment, the children are largely trafficked into begging and prostitution. Most have been exposed to different forms of abuse, including trafficking and sexual exploitation (IOM 2014).

4.2 Natural Resources Extraction and Exploitation

Alternative sources of incomes adopted by households in different parts of Karamoja include extraction and exploitation of above and below ground natural resources. The former includes harvesting of woody biomass and dryland biodiversity resources such as: grass for thatching and building poles for construction of houses and fences; charcoal making and firewood gathering for sale to urban residents; and brick-making. In households where women had taken on new responsibilities from alternative economic activities such as, weaving and basket making, crocheting and sometimes bread-making for income generation. This increased the demand on their labour, and in some cases had become bread winners.

Subsistence and commercial harvesting of woody biomass for charcoal production had become not only a common past time, but important economic activity around most emerging settlements concentrated along the highways in and out of the districts towns in Karamoja. These activities also degrade the environment which eventually undermines the health of herds and livelihoods of pastoralists (Little 2016, 9-10; Nikolaeva-Schniepper 2013).

The exploitation of below ground natural resources refers mainly to small scale artisanal mineral extraction by ordinary Karamojong of sand, gravel, gold and gemstones. Those involved lack the requisite equipment to make it worthwhile as a main source of livelihood. The monopoly exercised around then marketing of these artisanal minerals keeps them trapped in poverty (Ecological Christian Organization 2011).

The above notwithstanding, there are many forms of non-farm diversification alternatives that need to be considered for support due to their untapped potential. There are a number of residual aspects of beneficial traditional livestock production practices of the Karamojong that could gainfully be turned into some form of well-packaged cultural tourism integrated with wildlife tourism for income generation. What comes to mind are cultural villages depicting different aspects of the rich cultural heritage of the Karamojong including, but not limited to the *akiriket*, *asapan* festivals for initiations, and others. A consideration could be made for annual cultural festivals of livestock migration along clearly demarcated movement corridors.

The above extractive alternatives as well as emerging opportunities in tourism have not yet generated robust new livelihood opportunities for former pastoralists due to high levels of exploitation (Broughton and Wathum 2014, 2; Human Rights Watch 2014).

Apart from long term undesirable effects on the environment, it is evident without a fall back to livestock, those who indulge in harvesting biodiversity and mining activities end up in a vicious cycle of impoverishment. Without access to livestock, household that indulge in these activities remain vulnerable to annual food shortages. It is misleading, as also pointed out in USAID (2016), to depict as beneficial the processes of diversification that involve degrading the environment.

4.3 Petty Trading activities

As pastoral communities open up, they create demand for products produced outside the pastoral economy which provides opportunities to traders to sell non-livestock products to pastoralists (Little 2016, 8). These include: utensils, clothes, household commodities, human medicines and veterinary drugs. Traders buy these commodities from larger urban areas and bring them closer for retail consumption by pastoralists who bring their livestock for sale during livestock markets days.

5. Livestock-centered Diversification

5.1 Pastoralism's Diversity Premise

The pastoralism practiced by the Karamojong is by its very nature founded on diversification of the composition and species of their herds. The main livestock kept by Karamojong include cattle, donkeys, goats, sheep, pigs and poultry (chicken, ducks and Turkeys). Camels are common in Amudat, Moroto and Napak districts. Pastoralists keep a diversity of local livestock types and breeds. The best of available breed is selected for herd multiplication. Amongst those who keep cattle, exotic cross-breeds are slowly being adopted to increase not only milk production, but also the quality of their breeds.

The logic of pastoralists' herding practices is usually to diversify production in order to minimise and manage risks. Diversified herding practices allow herd owners to maximize the different grazing/browsing demands on pastoral resources while making the most of resources variability in the physical environment. Under the circumstances, they make the most of their

herds, how they do it, and what they do are as good for rangeland ecosystem health as it for the survival and sustainability of pastoral herds and livelihoods, as well as the local and national economy, although their economic contribution is seldom acknowledged.

The Karamojong do not simply diversify their livestock-based livelihoods. They also diversify how they pursue these livelihoods. They are not aimless nomads, but scientific transhumants who practice a system that allows them and their herds to make the most of two worlds - the sedentary formation in which a part of the herd and household remain in permanent settlements where they depend on opportunistic crop cultivation; and the mobile formation which enables the main herd and youths to opportunistically track seasonally available resources. This combination is acknowledged as the most productive for drylands such as Karamoja (Bushby and Stites 2016, 11; Lind & Sabates-Wheeler, *et.al.* 2016, 24-5).

The pastoralism of the Karamojong is not simply about mobility. It is as much a process spreading risks while taking advantage of seasonal variabilities through opportunistic tracking of resources scattered across disparate ecological niches in different territorial spaces; as it is a strategy for maximizing livestock returns and enhancing social reproduction. The weak, elderly, mothers and children remain in the permanent settlements, while the able-bodied men and women move with the herds to the dry season grazing camps. Homestead diversity and the subdivision of the herds enable households to maximize the use of scarce labor available between critical survival responsibilities.

As pastoral households embrace different economic activities for increased incomes, there is usually a tendency for such households to shift a section of their household from the traditional cattle camps and *manyattas* to settlements close to urban centres, although this seldom diminishes the importance attached to livestock. A form of pastoral dualism emerges where the section of the household closest to urban areas, makes the most of opportunities open to them in urban centres by venturing into different economic activities. It does not mean they abandon livestock keeping. Proximity to urban areas offers pastoralists more opportunities for adoption of alternative livelihood options outside both crop and livestock production (Little 2016, 7) but does not mean that in rural areas diversification does not take place whatsoever.

5.2 Diversification within Pastoralism

The British knew as early as the 1920s that livestock production was the most viable source of livelihoods for the Karamojong. Many recent studies agree that livestock-based livelihoods are still the most viable source of survival for the Karamojong, and that when pastoralists have access to livestock and livestock products, they survive better the conditions of adversity in rangelands such as drought, diseases, floods, and poverty (see Inter-Agency Regional Analysts Network 2017; Bushby and Stites 2016; Catley, Lind, and Scoones 2013; Levine 2010; Anderson and Broch-Due 1999; Behnke, Scoones, and Kerven 1993). Considering revelations by the 2016-17 UNHS that Karamoja had the highest percentage of households in the whole country that reported animal rearing as their major economic activity (UBOS 2017, 170), such literature simply affirms that livestock will continue to play a dominant role in the sustainability of the livelihoods of the Karamojong.

⁶. See para. 3 of 'Notes of a meeting held at Government House on 21st December, 1923, to discuss the future policy to be followed in Karamoja. In attendance was: H.E the Governor, the Chief Secretary, the Provincial Commissioner, Eastern Province, and the Ag. Assistant Secretary for Native Affairs (*pp*.1). In File No. N135/25: Karamoja Reports, Uganda Protectorate.

Even amongst households with a few livestock, there is always an attempt to process available livestock products such as milk to make ghee; cow horns to make ornaments. Households also diversify into piggery, poultry and apiary. The more households establish new livelihood enterprises whether or not along the livestock value-chain, the more sustainable their livelihoods become. However, the outcomes of diversification are influenced by the centrality of livestock to the livelihoods of the pastoralists at the time diversification takes place. If livestock is still the dominant source of livelihood, diversification that creates opportunities to enhance returns from livestock is more beneficial.

The more livestock ceases to be anchor of the livelihoods of the Karamojong as more adopt settled agro-pastoral livelihoods the less sustainable livelihoods of the Karamojong become (Broughton and Wathum 2014, 8). Many of those who move out of pastoralism remain linked to livestock activities through employment. Some become milk vendors and traders. Others buy and sell livestock. Opportunities exist in operating meat butcher and dealing in hides and skins and their allied products such as hand-made belts, bags, shoes, sandals, caps, traditional dresses, armlets, drums, stools, etc. Some of the transporters and livestock traders are former pastoralists (Little 2016, 8). Many who have become successful as town-based businessmen often earn their initial capital through livestock production and trade (Little 2016, 8). Households were taking up the rearing of poultry as a source of income. Some women invest in food kiosks and restaurants.

However, not all forms of diversification are beneficial. Diversification that leads pastoral households to divest away from livestock as their main stay often does not translate into strengthened livelihoods of the ordinary Karamojong. The Karamojong are diversifying their sources of livelihood by taking advantage of opportunities along the livestock production and marketing value chains. The most beneficial form of diversification for pastoralists is that which occurs around livestock and its various products.

6. Integrating Crop and Livestock Production

Income poverty in Karamoja is extremely high and increasing, affecting 6 out of every ten persons (UBOS 2017, 85), and this is partly because agricultural incomes were not increasing as fast as had been anticipated, despite significant investment in modernizing crop farming. A study by Broughton and Wathum (2014) revealed that inequality among the Karamojong was becoming wider the more Karamojong become sedentarized by adopting settled crop farming as their mainstay. Ability of pastoralists to adapt and survive is determined by the ability to diversify the composition of their diets by integrating cereal-based sourced foods into their conventional animal sourced proteins diets, and not putting emphasis on crops at the expense of livestock. Research has revealed that households integrate livestock in their agricultural systems are more likely to live above the poverty line than those that do not (Mercy Corps 2018, 1).

For post-disarmament pastoral and agro-pastoral households in Karamoja, the most beneficial form of diversification is not that which makes crop farming their mainstay, but that which is built around livestock. Diversification is more beneficial to the livelihoods of pastoral and agro-pastoral households if support provided makes it possible to supplement livestock production with crop farming. Households that had access to livestock, and were able to diversify their livestock-based enterprises acknowledged that when assistance was provided with adoption of modern agronomic practices, household members were healthier than in households that depended exclusively on either cereals or livestock products alone.

There is a sense in which a seamless integration of crop cultivation and livestock production allows both to simultaneously exert positive feedback mechanisms that make possible exaction of maximum benefits from each other, for example, in terms of maximizing utilization of labor and land for both activities. Interventions that present either of them as an alternative to the other miss the opportunities of building maximum synergies from their positive feedback mechanisms.

The inability to diversify livestock-based activities limits the alternatives available for adoption outside pastoralism, in the same way it does for crop-based livelihoods. Once pastoralists are unable to diversify their livestock-based livelihoods, any attempt to adopt alternatives usually but not always entails a movement away from pastoralism. The more successful pastoralists are in diversifying within pastoralism, the easier it is to succeed in securing survival with the adoption of alternative livelihoods. For the Karamojong who had settled in the green belt areas, a life of permanent crop cultivation is not because it offers the best escape route out of pastoralism, but an indication of the limited opportunities available in the diversification of livestock-based undertakings.

Even in the greenbelt areas, even if crop cultivation was extremely attractive to the extent its beneficiaries acquired livestock from proceeds of surplus crop sales, crop farming remained vulnerable to external environmental shocks and stresses, which is one of the major risks for recovery of livelihoods (Marshak et. al. 2017, 28; Mercy Corps 2016, 46). In greenbelt areas, it was evident that no matter how successful one is in crop farming, one is better insured against disaster with livestock or something else, and that is why indulging in crop farming was considered as a temporary detour that leads one back to livestock production. Contrary to government narratives, for the Karamojong, crop cultivation was not their final destination.

As also pointed out by Lind & Sabates-Wheeler, *et.al.* (2016, 24), those who combine livestock-based livelihood with other alternative economic activities have the highest level of wellbeing and the least vulnerability. The more households were able to diversify their livelihood activities within and beyond pastoralism, the more they increased their opportunities for adapting to the shocks in their physical environment complicated by climate change. Diversification anchored around livestock production is more beneficial than that which is removed from it. Once pastoralists lose access to livestock and livestock-based products, diversification becomes constrained.

It is becoming obvious that the less the Karamojong are divorced and removed from livestock as their main source of livelihood, the easier it is to re-enforce their livelihoods through either livestock-based, even crop-based and non-agricultural interventions linked to their main livelihoods.

The importance of integrating livestock and crop production in Karamoja is underlined by statistics obtained in government documents. According to the Agriculture Sector Development Strategy and Investment Plan (DSIP) for 2010/11 to 2014/15, poverty trends analyzed using time series data showed that households that include livestock in their enterprise mix tended to be generally less poor (Republic of Uganda 2010, 8). Analysis also revealed that between 1992 and 2005/6, poverty headcount index households predominantly dependent on agriculture declined from 64 to 37 (by 42 percent points) while in households whose livelihoods are dependent on livestock, the poverty headcount index declined by 46 percent points from 52 to 28 over the same period (Republic of Uganda 2010, 10).

7. Concluding Remarks

Livestock-based livelihoods can be sustainable diversified without necessarily diminishing the importance of livestock to the livelihoods of the cattle keepers. The more Karamojong are successful in diversification within livestock production, the more beneficial diversification outside livestock production will become for them, and the better enabled to respond to the adversities in their physical environment they become. The best form of diversification is that which occurs around livestock not only for livestock's sake, but for the overall improvement in livelihoods of pastoralists and the rangelands they inhabit. It is even far much better for diversification to integrate multiple activities involving livestock and crops, and non-agricultural activities at the same time. Households that were able to do so enhanced their ability to take advantage of available as well as emerging opportunities for improving their livelihoods much better than those that were not able.

The Karamojong diversify their livestock-based livelihoods by indulging in other activities that are not only compatible but also complementary with livestock production. The more successful they are in doing so, the better they are enabled to respond to the adversities in their physical environment as well as the changes occasioned by the developments being undertaken in Karamoja.

Households whose sources of livelihood were most diversified were able to make the most of the available resources and were also likely to increase their herds. Households that also had multiples sources of survival within and outside livestock production were far much better off than those which do not have. It is therefore misleading to present pastoralism and diversification as if they are mutually exclusive. For the Karamojong, diversification is neither inimical to pastoralism, nor does it mean a movement away from pastoralism.

Much as diversification is desirable, in most households it was not always sufficient to earn them enough incomes to meet their food and nutrition requirements let alone secure their livelihood needs. Diversification did not also necessarily entail a movement away from pastoralism. It is therefore a misrepresentation of the processes entailed to conceptualize diversification as a form of transition away from pastoralism, and for this process to be constructed as inherently beneficial.

The more households are compelled by adversity to become less associated with or less dependent on livestock, the more vulnerable they become to food shortages occasioned by the adverse ecological conditions due to limited opportunities for building positive feedbacks within diversified non-livestock-based enterprises. In households that have lost livestock, and where livestock products are no longer a significant source of survival, diversification will often emphasize alternatives to pastoralism.

Similarly, the more a process of diversification results in Karamojong households becoming less dependent on pastoralism, without viable alternative sources of livelihood, the more vulnerable they became to temporal shocks that led to food insecurity. This was partly because within livestock production there were more internally reinforcing opportunities for diversification compared with livelihoods where crop farming or non-agricultural activities are the primary source of livelihood.

Meaningful livestock-centered diversification should mostly serve to make possible an increase in returns to and from livestock, whether or not the alternative adopted is associated with livestock. It is argued that diversification needs to be understood as an initiative that enhances the achievement of maximum benefit from livestock production in general and pastoralism in particular, rather than one that seeks to supplant pastoralism.

8. References

- Anderson, M. David and Vigdis Broch-Due. (eds.) 1999. *The poor are not us: Poverty and Pastoralism in Eastern Africa*. Oxford and Nairobi: James Currey and E.A.E.P.
- Behnke, Roy, Ian Scoones and Carol Kerven, eds. 1993. *Range Ecology at Dis-equilibrium: New Models of Natural Variability and Pastoral Adaptation in African Savannah*. London: ODI.
- Broughton, Bernard and Peter Wathum. 2014. "An Assessment of the Outcomes of FFS and APFS Components of ALREP and KALIP in Northern Uganda and Karamoja: Final Report." Cardno Emerging Markets Ltd.
- Burns, J. C., Bekele, G. & Akabwai, D. 2013. Livelihood Dynamics in Northern Karamoja: A Participatory Baseline Study for the Growth, Health and Governance Program, Mercy Corps Uganda. Somerville, MA: FIC, Tufts University.
- Bushby, Kristin and Elizabeth Stites, 'Resilience and risk in pastoralist areas: Recent trends in diversified and alternative livelihoods, Karamoja, Uganda', in *USAID*. 2016. Resilience and Risk in Pastoralist Areas: Recent Trends in Diversified and Alternative Livelihoods. USAID East Africa Resilience Learning Project. Feinstein International Center, Tufts University, pp. 11-31.
- Catley, Andrew and Mesfin, Ayele. 2018. *Livestock and poverty in Karamoja: An analysis of livestock ownership, thresholds, and policy implications*. Karamoja Resilience Support Unit, USAID/Uganda, UK aid, and Irish Aid, Kampala.
- Catley, Andrew, Jeremy Lind, and Ian Scoones, eds. 2013. *Pastoralism and Development in Africa. Dynamic Change at the Margins*. Routledge: New York and Oxford.
- Ecological Christian Organization. 2011. Baseline Assessment Report of the Mining and Minerals Sector in Karamoja Region: Development Opportunities and Constraints. Kampala: ECO and Irish Aid.
- Ellis, Frank and Edward Allison, *'Livelihoods Diversification and natural resource access'*, FAO Livelihood Support Programme (LSP), Working Paper 9, January 2004. Overseas Development Group, University of East Anglia. http://www.fao.org/3/a-ad689e.pdf
- Human Rights Watch, "Get the Gun!": Human Rights Violations by Uganda's National Army in Law Enforcement Operations in Karamoja Region. Vol. 19, No. 13(A), Sept. 2007.
- Human Rights Watch. 2014. "How Can We Survive Here?" The Impact of Mining on Human Rights in Karamoja, Uganda. Washington DC: Human Rights Watch.
- Iiyama, Miyuki, Patrick Kariuki, Patti Kristjanson, Simeon Kaitibie and Joseph Maitima, 'Livelihood Diversification Strategies, Incomes and Soil Management Strategies: A Case Study from Kerio Valley, Kenya', Journal of International Development, Vol. 20, 2008, pp. 380-397.
- Inter-Agency Regional Analysts Network. 2017. Future Livelihoods in Karamoja: A Scenario Analysis Looking Forward to 2022. Action Against Hunger and IRIS.
- International Organization for Migration (IOM), 'Child Migration from Karamoja', February 2014. Kampala: IOM (Mimeo).
- Kurtz, J., and McMahon, K. 2015. Pathways from Peace to Resilience: Evidence from the Greater Horn of Africa on the Links between Conflict Management and Resilience to Food Security Shocks. Washington, DC: Mercy Corps.
- Levine, Simon, "Livelihood recovery in post-conflict northern Uganda." SLRC Working Paper 42, March 2016. Somerville, MA: Feinstein International Center, Tufts University.

- Lind, Jeremy and Rachel, Sabates-Wheeler, et.al. 'Changes in the drylands of eastern Africa: case studies of pastoralist systems in the region', Sussex: Institute of Development Studies University of Sussex, March 2016.
- Marshak Anastasia, Dyan Mazurana, Jimmy Hilton Opio, Rachel Gordon and Teddy Atim, 'Researching livelihoods and services affected by conflict: Tracking change in livelihoods, service delivery and governance - Evidence from a 2013-2015 panel survey in Uganda', SLRC Working Paper 59, September 2017. London: ODI.
- Mayega, Roy William, Nathan Tumuhamye, Lynn Atuyambe, Dorothy Okello, Grace Bua, Daniel Komakech, Julius Ssentongo, and William Bazeyo. 2015. *Qualitative Assessment of Resilience to the Effects of Chronic Conflict in Northern Uganda*. Eastern Africa Resilience Innovation Lab, Makerere University, Uganda.
- McCabe J. Terrence, Paul W. Leslie, and Laura DeLuca. 2010. "Adopting Cultivation to Remain Pastoralists: The Diversification of Pastoral Livelihoods in Northern Tanzania", Human Ecology 38(3): 321-334. https://doi.org/10.1007/s10745-010-9312-8.
- Mercy Corps, 'Karamoja Strategic Resilience Assessment, Final Report'. Kampala: Mercy Corps Uganda, August 2016, (mimeo).
- Mercy Corps. 'The Karamoja Livestock Development Master Plan, 2018-2040'; Karamoja Livestock Development Forum and Mercy Corps Uganda, January, 2018 (Mimeo).
- Muhereza, Emmanuel Frank. 2018. *The Transformation of Karamoja: Sedentarization of Pastoralists*, PhD Dissertation submitted to Makerere University, Kampala, Makerere Institute for Social Research (MISR).
- Nikolaeva-Schniepper, Anna. 2013. *Dryland Commodities and Livelihoods in Karamoja: A Feasibility Study*. Stuttgart: Fairventures Worldwide FVW gGmbH.
- Persha, Lauren and William Farrell, et.al. 'Livelihoods Diversification Analysis (LDA) Literature Review', produced for review by the United States Agency for International Development (USAID), March 2017.
- Peter D. Little, 'Overview: recent trends in diversified and alternative livelihoods among pastoralists in Eastern Africa', in USAID. 2016. *Resilience and Risk in Pastoralist Areas: Recent Trends in Diversified and Alternative Livelihoods*. USAID East Africa Resilience Learning Project. Feinstein International Center, Tufts University, pp. 6-10.
- Republic of Uganda. 2010. Ministry of Agriculture, Animal Industries and Fisheries (MAAIF)

 Development Strategy and Investment Plan (DSIP) for 2010/11-2014/15 (mimeo).
- Stites, E., K., Howe, and D., Akabwai. 2017. "Five Years on: Livelihood Advances, Innovations, and Continuing Challenges in Karamoja Uganda." Somerville, MA: FIC, Tufts University.
- Stites, E., K., Howe, T., Redda and D., Akabwai. 2014. "A Better Balance:" Revitalized Pastoral Livelihoods in Karamoja, Uganda. Somerville, MA: FIC, Tufts University.
- UBOS. 2017. *Uganda National Household Survey 2016/17*. Kampala: Uganda Bureau of Statistics (UBOS). Available at: http://www.ubos.org/publications/household/.
- USAID. 2016. Resilience and Risk in Pastoralist Areas: Recent Trends in Diversified and Alternative Livelihoods. USAID East Africa Resilience Learning Project. Feinstein International Center, Tufts University.
- Vondal, Patricia, Anna Afferri, Agnes N. Lugwana, Frank E. Muhereza, Ramu Bishwakarma, Benita O'Colmain, 'Final Performance Evaluation of Northern Karamoja Growth, Health, and Governance', Final Report, submitted to USAID's Food for Peace (FFP), January 25, 2019.