Karamoja Resilience Support Unit

Evidence Brief

September 2016

Livestock for Livelihoods

Priorities for livestock development in Karamoja, Uganda

The policies of the African Union and the Intergovernmental Authority on Development recognize the economic importance of mobile livestock production in Africa's rangelands, and the need to support these systems for economic growth.

The context - regional policies for pastoralism in Africa

Many areas of East Africa are responding to growing demands for livestock products, from both within the region and internationally. In Ethiopia and Kenya, pastoralist and agropastoralist producers supply most of the animals and milk to domestic markets, and live animals and chilled meat for export. This supply from the region's drylands is supported by a changing policy environment at regional and national levels, with increasing recognition of the economic contributions of extensive, mobile livestock production systems, and the value of these systems in areas with highly variable rainfall. Notably, the African Union's *Policy Framework for Pastoralism in Africa* describes the importance of the 'strategic mobility' of pastoral herds[i], and the more recent IGAD Transhumance Protocol aims to support cross border movements of pastoral herds to ensure access to rangelands and maximize production. These developments in regional policies reflect a shift towards more evidence-based policy, and the use of research that explains the economic and ecological reasoning behind mobile livestock production in Africa's rangelands.[ii]

The Karamoja Region of Uganda has often been associated with marked underdevelopment, human food insecurity and malnutrition, and protracted conflict. However, a number of recent reports describe improvements in peace and security, and the central role of livestock in the region's economy. This Evidence Brief summarizes these recent reports and three priority areas for supporting livestock development in Karamoja – reducing the impact of livestock diseases, improving water for livestock, and securing access to productive rangeland.

Livestock in Karamoja

Situated in the north east of Uganda and bordering Kenya and South Sudan, Karamoja is a semi-arid areas covered mainly by savannah grasslands, and with variable annual rainfall of 500mm to 1000mm. Historically, agropastoralism has been the main livelihood, with an emphasis on livestock production relative to crop production. The region's physical environment and marked variations in rainfall each year make it well suited to livestock rearing. Indeed, various reports explain why livestock production is a logical and relatively robust livelihood option in much of Karamoja relative to cropping, and how households with livestock cope better with crises such as drought compared to those without livestock.[iii]

Although the exact number of livestock in Karamoja remains open to question, various reports point to a marked decline in livestock numbers during a government disarmament programme that ended in 2011.[iv] However, in 2016 livestock production was reported to be recovering, along with very active livestock markets.[v] Similarly, cross-border livestock trade was continuing with Kenya and South Sudan. Despite this recovery, there are still multiple constraints to livestock development in Karamoja as well as marked disparities in livestock ownership.

Priorities for livestock development

There is good agreement between different recent reviews of livestock issues in Karamoja in terms of the priority areas that need support from government and development partners. In all areas, strategies also need to recognize Uganda's wider macro-economic policies of liberalization and privatization, in place since 1987, as well as various national policies related to veterinary services, livestock feed and other specific technical areas of livestock development.[vi]

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

USAID
FROM THE AMERICAN PEOPLE

1. Livestock diseases and veterinary services

Across many recents reports on Karamoja, the impacts of livestock diseases stand out for at least five main reasons:

- The direct impact of livestock diseases on household production and consumption of livestock products especially milk, and affects on household food security; milk is a particularly important food for young children
- The direct impact of livestock diseases on herd growth, with disproportionate impacts on poorer households with few animals who are trying to expand their herds for better food security and more financial capital
- The direct impact of livestock diseases on herd growth which limits the availability and supply of animals to markets, especially for poorer households with fewer animals
- The impact of certain "transboundary animal diseases" (TADs) on domestic and cross-border livestock trade, with disease outbreaks leading to movement and market restrictions
- The impact of certain zoonotic animal diseases on human health; these are diseases such as brucellosis and tuberculosis which can be transmitted from animals to people.

In normal years, the most important cause of livestock loss is disease, with impacts on human food security and economic growth. These losses could amount to US$ 92 million per year.

Although reliable livestock mortality data is not available for Karamoja, in other pastoralist areas of East Africa livestock disease is the single most important cause of preventable livestock losses in normal years, with annual losses of between around 5 and 15% of animals depending on livestock species. Using livestock population estimates and prices for Karamoja[vii], and an average, annual disease mortality estimate of 10%, the value of disease-related mortality in the region would be in the order of US$ 92 million per year. The cost of veterinary medicines and vaccines are usually very low relative to the value of livestock – disease prevention or treatment has a high benefit-cost ratio.

Some of the key approaches for strengthening veterinary services and disease control include:

- Support central and local government veterinary departments to develop a **common strategy** for veterinary services, with the involvement of the private sector, communities and NGOs, and taking account of Uganda's policy on veterinary privatization – the strategy should define clear roles for public and private sectors
- Strengthen **community-based delivery systems** and linkages to private suppliers of veterinary inputs for input supply, and district veterinary offices for quality control and disease surveillance
- Review the **quality of veterinary medicines** available in Karamoja, noting the reports of fake or sub-standard medicines in neighbouring countries[viii]
- Improve information on the **epidemiology and economics** of livestock diseases in Karamoja, and update disease control policies and strategies as needed
- Support government-led **coordination** of all actors involved in veterinary service delivery.

2. Water for livestock

Although there have been substantial investments in water development in Karamoja, inadequate water for livestock is a major constraint to herd production and mobility. The region has various water sources for livestock, including boreholes, dams, water pans, ponds and shallow wells. However, in common with other dryland areas of East Africa there are weaknesses with the initial design or siting of these facilities, and with their long-term management and maintenance. For example, in 2010 there were 257, 260, and 317 functioning boreholes in Kaabong, Abim, and Kotido respectively, but there were well over 100 broken or non-functioning boreholes in each district.[ix] There seem to be only 30 permanent livestock water sources in the region; these include 26 dams, but with only 2 of these holding sufficient water.[x] In terms of design, a fundamental issue in pastoralist and agropastoralist areas is to position water facilities based on an understanding of seasonal mobility and critical dry season demands for water. This requires participatory approaches leading to:

The poor design and management of water facilities for livestock is a major concern. An overall strategy for livestock water development should be based on an understanding of herd mobility – this needs participatory approaches and planning.

- An understanding of the rangeland context for effective planning
- Rehabilitation and development of water sources, with sensitivity to rangeland dynamics and the needs of livestock owners

- An emphasis on securing access through capacity building, user contributions, and strengthening and using customary institutions and practices.[xi]

3. Securing access to rangeland

Secure access to rangeland requires a mix of higher-level policy support for herd mobility, and local participatory land use planning involving local government and communities. Continuing peace and security is also essential.

Access to productive rangeland is central to pastoral and agropastoral livestock production, yet such access is declining in Karamoja due to factors such as the expansion of agriculture, the exclusion of livestock from wildlife reserves, and in some areas, local conflicts. Although it may be possible to grow fodder for livestock, maximizing the use of existing natural rangeland should take precedence. The three broad strategies could be:

- Continuing to support peace and security in the region, and conflict management between groups with contested access to grazing resources
- Working on land tenure arrangement in Karamoja, including appropriate policy support e.g. from the Government of Uganda's emerging *Rangeland and Pastoralism Policy*
- Make policy makers, academics and researchers aware of new evidence on the economic and environmental basis for pastoralism in East Africa through workshops and site visits.[xii]

There are also opportunities to learn from decentralized land use planning methodologies such as those currently in use in parts of northern Kenya, whereby local government works with communities to map resources, and plan resource access and use.[xiii]

Other issues – livestock marketing

Recent reports describe active and responsive livestock markets in Karamoja.[xiv] In this situation, the main need is to understand how these markets operate, and the marketing behaviors of different producers before investing in market development. For example, experiences from other countries show the very limited impact of new market infrastructure on the prices or sales of livestock in pastoralist areas, and the importance of demands to which producers respond.[xv] In many situations, general investments in roads and communications, coupled with improved animal production, will support markets better than market infrastructure or market information systems. As Karamoja becomes increasingly connected to urban centers in Uganda through new infrastructure, future strategies could also pilot livestock value additions and market linkage support.[xvi]

Conclusions

There is huge potential to support livestock development in Karamoja. Revitalization of veterinary services is a priority, with very substantial economic losses occurring each year due to diseases that can be prevented or treated at relatively low cost. Water development for livestock is a second priority, and needs participatory planning and local capacities to manage water facilities in the long term. The African Union's *Policy Framework for Pastoralism in Africa* provides an overarching Africa-wide policy to which new policies on rangeland and pastoralism in Uganda can be aligned, with recognition of the importance of strategic herd mobility. Local land use planning by local government with communities is also needed.

More information
For more information on the Karamoja Resilience Support Unit please visit www.karamojaresilience.org

Endnotes

[i] African Union (2010). *Policy Framework for Pastoralism in Africa: Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralist Communities.* African Union, Addis Ababa http://www.au.int/en/documents/30240/policy-framework-pastoralism-africa-securing-protecting-and-improving-lives

[ii] Behnke, R.H. and Scoones, I. (1992). Rethinking range ecology: implications for rangeland management in Africa. Dryland Networks Programme Issues Paper no. 33, International Institute for Environment and Development, London http://pubs.iied.org/pdfs/7282IIED.pdf

[iii] Reviewed by Aklilu, Y. (2016). *Livestock in Karamoja: A review of recent literature*. Karamoja Resilience Support Unit, USAID/Uganda, Kampala www.karamojaresilience.org

[iv] For example,

- Burns, J., Bekele, G. and Akabwai. D. (2013). *Livelihood Dynamics in Northern Karamoja: A Participatory Baseline Study for the Growth, Health and Governance Program, Mercy Corps*. http://fic.tufts.edu/publication-item/livelihood-dynamics-in-northern-karamoja/
- Stites, E., Howe, K., Redda, T. and Akabwai, D. (2016). *"A Better Balance:" Revitalized Livelihoods in Karamoja, Uganda.* Feinstein International Center, Friedman School of Nutrition Science and Policy, Tufts University, Somerville, USA http://fic.tufts.edu/assets/TUFTS_1645_Revitalized_Karamoja_V2_online.pdf

[v] Resilience Learning Project (2016). Karamoja Livestock Market Assessment Report. USAID/East Africa Resilience Learning Project, Nairobi http://pdf.usaid.gov/pdf_docs/PA00M1W9.pdf

[vi] Wiaswa, C. (2016). *Improving Animal Health and Livestock Production to Achieve Food Security in Karamoja*. CAP Policy Briefing Paper no. 1/2016. Council for African Policy, Kampala http://cap-u.org/wp-content/uploads/2016/03/Improving-Animal-Health-Final.pdf

[vii] The calculation used livestock population estimates from the Ministry of Agriculture, Animal Industry and Fisheries/Uganda Bureau of Statistics (2008) http://www.agriculture.go.ug/userfiles/National%20Livestock%20Census%20Report%202009.pdf of 2.2 million cattle, 2 million goats and 1.7 million sheep, and market prices from RLP (2016)(*ibid*) of US$350 for cattle, and US$35 for a sheep or goat.

[viii] Leyland, T., R. Lotira, D. Abebe, G. Bekele, and A. Catley (2014). *Community-based Animal Health Care in the Horn of Africa: An Evaluation for the US Office for Foreign Disaster Assistance.* Feinstein International Center, Tufts University Friedman School of Nutrition Science and Policy, Addis Ababa and Vetwork UK, Great Holland http://fic.tufts.edu/assets/TUFTS_1423_animal_health_workers_V3online.pdf

[ix] Burns *et al.* (2013), *ibid*, citing OCHA (2010).

[x] RLP (2016) *ibid.*

[xi] Mugerwa, S., A. Stephen, and A. Egeru (2014). Status of Livestock Water Sources in Karamoja Sub-region, Uganda. *Journal of Resources and Environment* 4 (1): 58–66

[xii] For example, use of the Pastoralism and Policy Course developed by the International Institute for Environment and Development, Tufts University and other partners in Ethiopia and Sudan http://www.iied.org/pastoralism-policy-training-addressing-misconceptions-improving-knowledge

[xiii] http://www.iied.org/responding-climate-change-east-africa-strengthening-dryland-governance-planning

[xiv] RLP (2016) *ibid*; Aklilu (2016) *ibid*; Waiswa (2016) *ibid.*

[xv] PLI Policy Project. 2010. *Impact Assessment of the ACDI/VOCA Livestock Markets in Pastoralist Areas of Ethiopia*. PLI Policy Project, Feinstein International Center, Tufts University Friedman School of Nutrition Science and Policy, Addis Ababa. http://pdf.usaid.gov/pdf_docs/pa00ktd3.pdf

[xvi] Aklilu (2016) *ibid.*