

## CSRF Briefing Note: February 2018

# Famine, Access and Conflict Sensitivity: What opportunities do livestock offer in South Sudan?

*This desk research was conducted by Naomi Pendle and the Conflict Sensitivity Resource Facility (CSRF) in 2017, and funded by the UK, Swiss, and Canadian Donor Missions in South Sudan.*

*The CSRF is implemented by a consortium of NGOs including Saferworld, swisspeace, and CDA Collaborative Learning. It is intended to support conflict sensitive donor programming in South Sudan.*

# CSRF

Conflict Sensitivity Resource Facility  
SOUTH SUDAN



## Famine, Access and Conflict Sensitivity: What opportunities do livestock offer in South Sudan?

### Summary of Recommendations

#### Ending Famine

- Donor investment needs to better take account of South Sudanese prioritisation of livestock in emergencies.
- Livestock programming needs to go beyond livestock vaccinations whenever the situation allows.
- A pastoral livelihood monitoring system is urgently needed.
- There are opportunities for investments in the livestock value chains through public-private partnerships.

#### Improving Access

- Livestock interventions have been humanitarian success stories in South Sudan.<sup>1</sup> These can be repeated.
- In places where humanitarian access is difficult, livestock health services can be supported by investing in pre-existing networks of Community Animal Health Workers (CAHWs).

#### Remaining Conflict Sensitive

- The humanitarian response to a famine that is caused by conflict must be conflict sensitive in order to ensure that aid is not inadvertently contributing to the factors that drive the famine.
- Support to pastoralism has the potential to reduce conflicts caused by livestock disease and competition over resources.
- As with all humanitarian assistance in South Sudan, support to livestock programming is not just a technical exercise: it has implications for power, conflict and violence. Detailed, local contextual knowledge and conflict sensitivity will mitigate harm.
- Interventions with small ruminants and poultry may offer opportunities to support the most vulnerable (including women and youth) if coupled with contextual conflict sensitivity.

#### Questions for future research

- How has cattle ownership changed in South Sudan and have elites increasingly acquired cattle at the expense of small-scale herders? Have property rights in cattle also changed? Are the most vulnerable still able to demand access to the herds of the wealthy? Is this causing conflict?
- In South Sudan, atypical livestock movement in times of conflict have been interpreted by host communities as indicative of their lack of government protection and lack of citizen rights. How have cattle movements and their politics varied since December 2013? How are all humanitarian and development interventions impacting livestock movement? What is the impact of changing land rights?
- What impact does in-kind food assistance have on pastoralist livelihoods?
- What is the political economy of the cattle trade in and out of South Sudan?
- In what circumstances are livestock keepers more likely to contribute to armed conflict and violence in South Sudan? Can livestock still be used to build peace and end feuds?

#### Mayendit and Leer

People in these famine-classified areas rely on livestock to survive their challenging ecological conditions that annually include both flooding and a dry season. From the outset of the civil war, people had to flee their homes and found it almost impossible to cultivate. They relied on the milk and cattle to survive, as well as selling cattle or using the cattle to draw on social networks. In 2015, large offensives raided tens of thousands of cattle from these areas. Many people lost almost all their herds. People have been struggling to protect the surviving herds from disease. For example, this year there is a reported outbreak of foot and mouth disease and other endemic diseases such as Contagious Bovine Pleuro Pneumonia (CBPP) and Hemorrhagic Septicemia (HS) in Mayendit. Restoring the health of herds will be crucial for the ending of famine and creating food security in these regions.

## Ending Famine

- **Donor investment needs to better take account of South Sudanese prioritisation of livestock in emergencies.**

### *The Benefits of Livestock*

In times of emergency, South Sudanese prioritise livestock because of its resilience during conflict.<sup>ii</sup> For example, research in 2015 showed that in conflict-affected areas near Leer, people were increasingly reliant on their livestock for survival.<sup>iii</sup> Livestock accounted for as much as a third of their food and income sources.<sup>iv</sup> Relief aid accounts for as little as 5% of livelihoods in similar, conflict-affected areas.<sup>v</sup> Especially for children under five, as well as for lactating women, livestock milk can offer unrivalled nutritional value.<sup>vii</sup>

Livestock are critically important to many South Sudanese populations as they provide resilience not only to conflict but also to the climatic variability that is a feature of the vast, fluctuating swamplands that dominate the ecology of over a third of South Sudan.<sup>viii</sup> Many of the areas that currently are most severely food insecure border the Sudd wetlands and the people who live there are particularly reliant on livestock.<sup>ix</sup> Pastoralism and its mobility constitute a rational use of this otherwise marginal environment, where both droughts and floods are frequent visitors.<sup>x</sup> In these difficult ecological conditions, people without livestock are the most vulnerable.<sup>xi</sup>

Livestock are lifesaving as they provide milk, blood and meat. In parts of South Sudan, people have shared rights to cattle and their produce, making lifesaving livestock resources easier to share in times of dire need.<sup>xii</sup> This keeps more people alive for longer, yet when livestock run out, it runs out for everyone almost simultaneously. Cattle also have social capital and can be exchanged in good times to build networks of loyalty that can be drawn on for material support in emergencies.<sup>xiii</sup> Livestock are also kept as a wealth store that is not dependent on currency fluctuations or access to banking, and can be sold in times of need;<sup>xiv</sup> South Sudan has well-institutionalised livestock markets.<sup>xv</sup>

The ongoing conflict has had detrimental consequences for pastoralists, but livestock are still prioritised by South Sudanese. Herds have been depleted through raiding and 'taxes' from armed groups.<sup>xvi</sup> New migration patterns have created new patterns of disease and natural resource conflict resulting in further loss.<sup>xvii</sup> FAO estimated the loss to the livestock sector because of the crisis is as high as \$2.03 billion.<sup>xviii</sup> Sharp swings in herd size make food security less predictable.<sup>xix</sup> Domestic and international livestock trade has been interrupted, but not totally halted, by the war.<sup>xx</sup> Many South Sudanese continue to rely on livestock and use innovative methods to make the best of the new wartime context. For example, some pastoralists are using phone technology to sell cattle to the growing diaspora by sharing photos of their herds.<sup>xxi</sup> Humanitarian interventions also have the opportunity to innovatively support livestock.

### *International Humanitarian Response*

Despite many South Sudanese being so reliant on livestock for their livelihoods, donor investment in livestock does not reflect these priorities and is minimal compared to spending on direct food assistance.<sup>xxii</sup> According to FAO, veterinary services in South Sudan are currently almost entirely limited to FAO/NGO vaccination campaigns following outbreaks.<sup>xxiii</sup> Other pastoralist interventions in South Sudan are almost non-existent. This has serious short-term implications for South Sudanese livelihood patterns and vulnerability to the conflict, but it has also weakened the capacity and access of international donor partners who work with livestock. This weakened capacity is primarily not about a lack of training but a lack of financial resources. This is despite some of these partners having decades of history and established networks that give them the potential to work in the most remote and conflict-affected places. This has meant that there is now a lack of capacity amongst donors and partners in South Sudan to respond to exhausted herds and the populations that depend on them.<sup>xxiv</sup>

There is recognition by humanitarians that livestock interventions are part of a famine prevention package.<sup>xxv</sup> The two branches of *Vétérinaires Sans Frontières* (VSFs) have worked with pastoralists in South Sudan for over two decades, and 29 other actors were recently mapped as supporting livestock or fisheries by the Food Security and Livelihoods Cluster.<sup>xxvi</sup> In recent years, FAO has scaled up its vaccination and treatment of the national herd, established an expansive network of cold chain system in the country, and is advocating for a pastoral livelihood monitoring system.

FAO is now supporting transboundary livestock health on the South Sudan-Uganda trade route.<sup>xxvii</sup> FAO is also now implementing a pastoralist education programme jointly with UNESCO in the Lakes State. USAID-funded VISTAS has financed some infrastructure projects to support pastoralists, and has also supported the VSFs to carry out vaccination campaigns. ICRC has significantly increased the magnitude of its livestock operations in South Sudan since 2011, focussing on vaccination campaigns and animal health care provision, as well as training of CAHWs. In 2016 they vaccinated 793,000 head of livestock and treated 325,500 animals, benefitting 288,300 individuals.<sup>xxviii</sup>

- **Livestock vaccinations remain needed.**

Livestock vaccinations and treatment are still crucial. Since December 2013, there have been dangerous, new levels of livestock disease in South Sudan as the conflict disrupted animal health services.<sup>xxix</sup> In addition, herders have also adopted radically new migration patterns due to the conflict and have concentrated their herds, prompting new spreads of diseases. For example, East Coast Fever has spread from the Equatorias into former Jonglei and Lakes States, causing a devastating number of deaths.<sup>xxx</sup> There have been new strains of Foot and Mouth disease in Eastern Equatoria and Lakes States.<sup>xxxi</sup> In May 2017, there were Foot and Mouth outbreaks, including in Mayendit, Guit, Duk and Aweil (the centre, east, and west of South Sudan).<sup>xxxii</sup> By June 2017, the outbreak had also been confirmed in Nimule, near the Ugandan border.<sup>xxxiii</sup> Tackling these diseases requires both treatment and vaccinations.

- **Support is needed for mobility and access**

However, there are other constraints on livestock production that include raiding, lack of food and water, and lack of shelter.<sup>xxxiv</sup> South Sudan has abundant rivers and grazing lands, however, many of the richest nutritional grazing lands have become inaccessible because of conflict.<sup>xxxv</sup> Shifting land tenure systems and practices may also have made it difficult for herders to find pastures.<sup>xxxvi</sup> Complications have also arisen when new state and county borders were created or when conflict frontlines interrupted migration routes.<sup>xxxvii</sup> South Sudan is also unique in East Africa as grazing scarcity occurs at the height of both the dry and wet seasons. The wet season decreases grazing when the Nile floods, leaving limited dry land for the cattle to walk and graze on.<sup>xxxviii</sup> Some of the most successful donor interventions in the post-CPA period have supported local negotiations for stock routes and grazing rights.<sup>xxxix</sup> Cattle's ability to access good grazing land directly benefits their health, and their milk and meat yields.

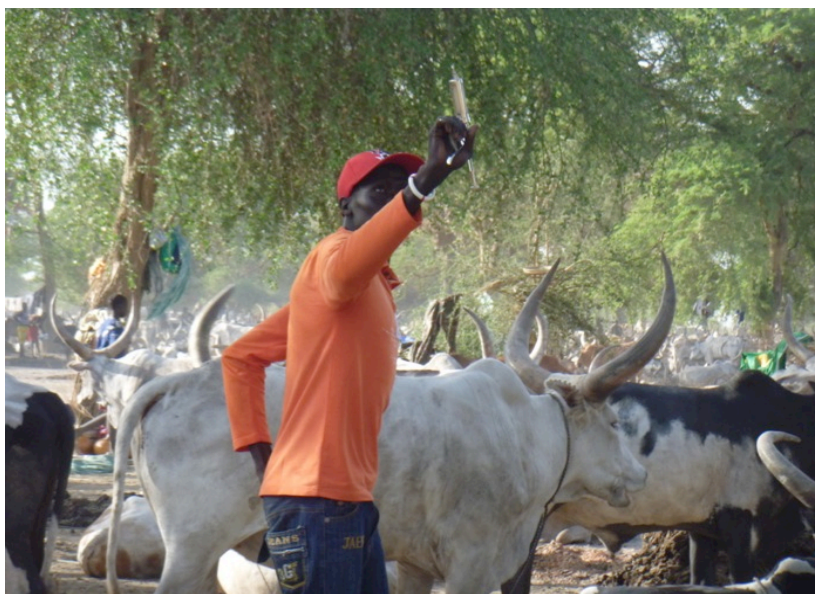


Photo: Local animal health worker supported by VSF Germany vaccinates cattle.

- **There are opportunities for investments in the livestock value chains through public-private partnerships.**

Such partnerships could involve the construction of slaughter-houses to support the livestock trade, and provision to private veterinary drugs supplies. In areas of conflict, both private and public support to livestock was severely damaged and need support to rebuild.<sup>xl</sup>

- **A pastoral livelihood monitoring system is urgently needed.<sup>xli</sup>**

Pastoralist needs are often invisible to humanitarians even when losses of herds result in famine; pastoralists' mobility removes them from international sight.<sup>xlii</sup> In 2015, Sue Lautze (then FAO Representative in South Sudan) described the livestock crisis as a 'silent emergency'.

Better livestock information systems are needed to provide humanitarians with important baselines and warning systems to improve programming and evaluation. FAO and WFP collect and analyse seasonal information for the crop sector but not for the livestock sector.<sup>xliii</sup> Neighbouring countries in East Africa already have livestock information systems.<sup>xliv</sup> South Sudan now submits reports to the World Organisation for Animal Health (OIE) indicating that an information system might be possible.<sup>xlv</sup> Currently, however,

the FAO warns that a total breakdown in reporting is possible in South Sudan, particularly in conflict-affected states.<sup>xlvi</sup> It seems likely that a lack of reporting was the cause of reports of reduced disease outbreaks after December 2013.<sup>xlvii</sup>

## Improving Access

- **In the most difficult areas to access, livestock interventions have been humanitarian success stories in South Sudan.**<sup>xlviii</sup>
- **In places where humanitarian access is difficult, livestock health services can be supported by investing in networks of Community Animal Health Workers (CAHWs) who are already embedded in the affected communities.**

Humanitarians are facing huge difficulties in safely accessing the most food insecure regions because of ongoing insecurity.<sup>xlix</sup> Work in South Sudan has pioneered mobile, local livestock support when international humanitarian actors had little access.

During the wars of the 1990s, humanitarians developed a large network of CAHWs in South Sudan to allow animal health interventions in the absence of international aid workers. At the time, this required impressive flexibility in donor funding. By 2001, there were approximately 1,400 active CAHWs supervised by 180 Animal Health Assistants, Stockpersons, and Veterinary Assistants, supported by 35 veterinarians and livestock officers working for 16 NGOs plus FAO in collaboration with local partners.<sup>l</sup> By 2005, there were about 4,000 CAHWs in the country.

Research carried out by FAO in 2015 found that CAHWs were still the preferred animal health service providers in South Sudan.<sup>li</sup> CAHWs' ability to do essential work is reaffirmed by recent research in relation to human health.<sup>lii</sup>

However, after the CPA, donors failed to continue to invest in livestock as their priorities shifted to state building and development.<sup>liii</sup> The initial hope was that the system could be privatised. Yet, adequate cold chain systems were too difficult for most private investors. Programmes like USAID's SSTCM supported some private pharmacies with the initial needed capital and contacts. However, veterinary drug shops were slow to open and few survived in conflict areas. In Unity State, the conflict had closed nearly 85% of veterinary drug shops, excluding most livestock from access to treatment.<sup>liv</sup>

### Crossing Frontlines for Vaccinations

One of the main challenges faced by CAHWs is the lack of access to vaccinations and medicine. Since December 2013, CAHWs in SPLA-IO areas in Unity State have risked their lives to walk overnight to collect drugs provided by donors from the Bentiu POC. CAHWs life-risking work shows the importance of livestock to these communities. CAHWs need better logistical and diplomatic support to ensure that they have safe, humanitarian access and supply chains. Logistical support for livestock vaccinations and medicine is often not prioritised.

### A Humanitarian Success Story

In similar contexts of war and famine in South Sudan, donors invested in the training of a network of CAHWs during the humanitarian response in the 1980s and 1990s. It allowed vaccines to be given irrespective of the ongoing insecurity and inaccessibility for international aid workers. With the help of CAHWs, the vaccination rate increased over tenfold and Rinderpest eradication was possible even during ongoing conflict. Many human lives were saved through the preservation of these herds.

Because of the lack of funding in veterinary services after 2005, Leyland et al. estimated that 70 percent of the 4,000 CAHWs trained were forced to look for alternative work, and many ironically in the army. This resulted in a deterioration of veterinary provisions.<sup>lv</sup> Veterinary provision remains limited. For example, in May and June 2015, there were only 108 CAHWs known to the government in Unity State – one of the dominant pastoralist areas of South Sudan.<sup>lvi</sup> Yet, flexible, financial support would rapidly re-establish a strong CAHWs network that has proven capability of providing humanitarian access in insecure situations.



## Remaining Conflict Sensitive

### Background: Cattle and conflict

Humanitarian programming in relation to livestock, as with all other humanitarian interventions, has implications for power and conflict dynamics, especially in the South Sudan context where so much conflict at both the elite and local level is based around resource appropriation.

Livestock can play a positive role in conflict mitigation. South Sudanese have long used cattle sacrifice and compensation to bring justice and reduce conflict.<sup>lvii</sup> Many chiefs' courts still use cattle to stop revenge and reconcile feuding families even after the most serious crimes. However, the use of cattle to make peace has evolved and these changes are still not fully understood.

Like any valuable resource, livestock can also contribute to conflict. For example, the crisis has caused livestock movements that have spread livestock diseases to new herds. This prompts tension between the displaced and host communities that can be mitigated through animal health interventions. Herders may also use armed violence to acquire cattle, and will risk their lives to defend their herds.

In the post-2005 CPA era, international diplomatic and development actors focussed on supporting the nascent South Sudanese state,<sup>lviii</sup> and pastoralists were often presented as 'potential spoilers' to the state-building project.<sup>lix</sup> Since December 2013, the analysis of conflicts in South Sudan has radically changed. There is an increasing international awareness that a system of elite, oil-funded kleptocracy is a significant cause of conflicts in South Sudan.<sup>lx</sup> Livestock economies, therefore, can represent either an alternative or a reinforcing resource for national and local politics and conflicts. They can help to shield populations from the depredations of government and insulate them from political manipulation, but they can also be controlled by powerful figures who are driving the armed conflicts. They may also play a role in the war economies if armed groups in South Sudan fund their wars by raiding or taxing cattle.<sup>lxi</sup>

#### Example of Conflict Mitigation

In 2014, tensions arose between hosts in Mingkaman (Lakes State) and IDPs from Bor because of the large numbers of cattle they brought with them. Tensions increased as cattle were not vaccinated and carrying diseases. Livestock health interventions are able to mitigate such tensions.

There is much more to be understood about the current role of pastoralists and livestock in war and peace in South Sudan. For example, much of the ownership and trade in times of war and peace in South Sudan remains invisible to international observers. For instance, the formal livestock trade in Sudan was formerly oligopolistic<sup>lxii</sup> but it is unclear now who controls and benefits from both the visible and invisible trade in livestock in South Sudan. Many of the governing elite have their homes in pastoralist communities and have invested some of their oil wealth in large herds.<sup>lxiii</sup> Cattle play a unique role in the construction of public authority and allow their owners to build networks of power and loyalty.<sup>lxiv</sup> Even at the national level, government officials will slaughter bulls to welcome foreign officials. Therefore, it is sensible to be aware that livestock interventions may be subject to elite capture, with unintended implications for power, wealth distribution and conflict. This is particularly the case when interventions, such as restocking, directly increase livestock assets.

In addition, large movements of cattle since December 2013 have been highly contentious. This is because, in the South Sudan context, these cattle movements often raise a complex bundle of political issues. Similar movements of cattle occurred during the 1980s and 1990s, and the SPLA often used their military force against other communities to demand access to grazing land for their herds. In the current context, the movement of cattle owned by groups associated with the government into new areas raises the ghosts of these old tensions and conflicts, and contributes to a narrative of marginalisation of minority groups and predatory behavior of political elites. For example, in Nimule, old tensions have reemerged around land and cattle as cattle have migrated with IDPs from Jonglei.<sup>1</sup> These tensions are often expressed in terms of pastoralist-farmer tension. However, people's grievances are intimately tied up with their insecurity about the nature of the government as a predator or a protector. Tensions have also been heightened when cattle bring disease or move their herds to avoid disease. Donor interventions in livestock health have the ability

to directly ease this source of conflict but they need to be designed and implemented in a conflict sensitive fashion. Donor funding also needs to recognise that crop farmers' inherent concern may not be with livestock but with the militarised power of certain elite actors.

### Conflict-sensitive Livestock Programming

Humanitarian support to livestock can help to prevent and address food insecurity, improve access to the most conflict-affected populations, and support South Sudanese to manage the effects of the conflict using locally- and culturally-appropriate mechanisms. However, support to livestock, like any externally-provided support, has the potential to either contribute to, or reduce conflict. As the current famine in South Sudan is a product of conflict itself, humanitarian assistance must be sure that it is not contributing to the conflict, but rather taking advantage of opportunities to help reduce both the conflict and its impacts on vulnerable populations. This section explores practical considerations that donors and humanitarian actors should consider when designing or implementing livestock-related programming.

#### Political Economies and Protection

- Understand who will benefit from the programme. Who owns livestock in the area? Which communities in the area and what parts of these communities are livestock owners? Are some communities or parts of the community excluded from livestock ownership? Is livestock ownership relatively equal, or does one powerful figure own most of the livestock?
- Understand the local power structures in the area and how they will interact with your intervention. Is there competition between different leaders, or groups such as civil authorities, military authorities, and traditional authorities? Will your intervention empower one group over another? Will your intervention help to fund and support the local war effort?



*Photo: Elders and chiefs prepare a bull for sacrifice.*

#### Market Economies

- Understand the role of livestock in local trade. Does trade exist, and is it mutually beneficial or exploitative? Trade that links communities across conflict lines has the ability to reduce conflict by binding their fortunes, but can also be extractive or can invite military reprisals if not sanctioned.
- Who does trade benefit within a community? What is the relationship between the local community and the merchants involved in the cattle trade? Are profits reinvested in the community, or do they benefit others? Do women equally benefit from trade?
- What is the impact of the intervention on livelihood options for young men? Does it make young men more resilient to elite attempts to capture them for their own armed conflicts and struggles for power?

#### Population and Displacement Patterns

- Understand the intervention's impact on displacement patterns. Are you creating a pull factor for large herds to travel to an area? What are the implications for local natural resources such as pasture, water, and agricultural lands? Or are you increasing the pasture available by expanding the grazing lands that are free from disease?
- Understand the intervention's impact on migration patterns. Similarly to displacement, migration carries burdens on natural resources, though it can also provide benefits of trade. The example of the Misseriya and Rezeigat

migration across the Sudan-South Sudan border demonstrates that, properly managed, livestock migrations can have both positive humanitarian and conflict-reduction impacts.

- How are pastoralists' movements perceived in the context? Are they associated with paramilitary forces, or seen as receiving special military protection at the expense of the local population? What are the implications for local capacities for peace or conflict?

### **Social and Cultural Systems**

- Understand the social and cultural significance of different forms of livestock. Are small ruminants less desirable by "powerful" figures, and therefore more likely to benefit women and vulnerable populations? How will your intervention affect the status of the beneficiaries within their communities?
- What is the role of livestock in local judicial, conflict resolution, and compensation systems, and will your intervention impact this? Will it provide implicit authority to local authorities, and if so, how are they likely to leverage their increased authority?
- What is the role of livestock in social obligations and cultural values? Does your intervention take these into account and interact with them in a constructive way?

### **Next Steps: Improving Contextual Awareness**

Many of the above questions are difficult to answer. However, resources exist to help. CAHWs, as well as other local authorities and partners' staff, often have access to detailed knowledge about the herds they work with that surpasses much of the current access to information about who benefits from direct food assistance. At the same time, a nuanced understanding of property rights in livestock is needed. If the most vulnerable are able to benefit from elite herds, decisions need to be made accordingly. A range of academic literature is also available that is often overlooked when programmes are being designed. Experts, such as anthropologists, economists, historians, and political scientists who study South Sudan, can also be consulted to help donors and humanitarian actors better understand a given context. Finally, investments must be made in learning from both beneficiaries and non-beneficiaries about how all humanitarian interventions (whether intentionally or unintentionally) affect local power and conflict dynamics, and the implications for breaking the cycles of violence.

### **Questions for future research**

Donors will be better informed about how to intervene with livestock if the role livestock plays in peace and conflict in South Sudan is fully understood. Key questions for future research include:

- How has cattle ownership changed in South Sudan and have elites increasingly acquired cattle at the expense of small-scale herders? Have property rights in cattle also changed? Are the most vulnerable still able to demand access to the herds of the wealthy? Is this causing conflict?
- In South Sudan, atypical livestock movement in times of conflict have been interpreted by host communities as indicative of their lack of government protection and lack of citizen rights. How have cattle movements and their politics varied since December 2013? How are all humanitarian and development interventions impacting livestock movement? What is the impact of changing land rights?
- What impact does in-kind food assistance have on pastoralist livelihoods?
- What is the political economy of the cattle trade in and out of South Sudan?
- On what circumstances are livestock keepers' more likely to contribute to armed conflict and violence in South Sudan? Can livestock still be used to build peace and end feuds?

### **Methodology**

This briefing paper draws upon a review of literature collected during two stages of search. The first stage was a database search of recent (post December 2013), empirical literature on livestock and pastoralism in South Sudan. The second stage used a 'snowball' search to find relevant literature including literature from before December 2013. This was supplemented by the author's own knowledge of the literature including previous work that made use of Tvedt's 2000 bibliography. Only English language material has been used. The paper also benefited from comments by Martin Barasa, Tinega Ong'ondi, Abdal Monium and Guido Govoni.



## Endnotes

- <sup>i</sup> See, for example, OLS- Southern Sector (February 1993), *OLS Southern Sector 1992/1993 Situation Assessment*, p.31; Wassara, Samson (July 2002), *Nairobi Trip Report*; Catley, Andy, Leyland, Tim and Bishop, Suzan (2008) "Policies, Practice and Participation in protracted crises: The case of livestock interventions in Southern Sudan", In Alinovi, L, Hermich, G. and Russo, L. *Beyond Relief: Food Security in Protracted Crises*, FAO; <http://clippings.ilri.org/2012/09/15/ilris-jeff-mariner-speaks-on-what-he-learned-from-the-eradication-of-rinderpest-and-his-new-fight-against-goat-plague/>.
- <sup>ii</sup> Gebreyes et al, *Impact of Conflict*, pp.49-50. The South Sudanese interviewed were in Greater Upper Nile. They explained that they preferred livestock as they could flee with their cattle. Therefore, pastoralism has a higher resilience to conflict. Gebreyes et al, *Impact of Conflict*, p.xv.
- <sup>iii</sup> Gebreyes et al, *Impact of Conflict*, p.51.
- <sup>iv</sup> This was shown by two significant, independent pieces of empirical research for FAO and VISTAS. VISTAS (2015), *Pastoralism in Greater Upper Nile: Veterinary Report*, p.24; Gebreyes et al, *Impact of Conflict*, p.50.
- <sup>v</sup> VISTAS, *Veterinary Report*, p.24. During OLS, Bailey and Harragin (2009) suggest that even during OLS food aid covered also only about 5 percent of the food needs. Reliance of relief aid can extend to about a third of people's food source at times of heightened distribution VISTAS, *Veterinary Report*, p.22.
- <sup>vi</sup> A widely reported statement asserts that "In conflict areas, humanitarian assistance has become people's main source of food and it is now insufficient to meet all their needs, mainly due to severe humanitarian access restrictions". *South Sudan Food Insecurity: 2015-2017*, <<http://reliefweb.int/disaster/ce-2015-000183-ssd>> viewed June 2017.
- <sup>vii</sup> Sadler, Kate, Kerven, Carol, Calo, Muriel, Manske, Michael, and Catley, Andrew (2009), "Milk Matters: A Literature Review of Pastoralist Nutrition and Programming Responses", Addis Ababa: Feinstein International Center, Tufts University and Save the Children; FAO (31 May 2017), *South Sudan: Situation Report*, <[http://www.fao.org/fileadmin/user\\_upload/emergencies/docs/FAOSouthSudan\\_SitReport\\_31May2017.pdf](http://www.fao.org/fileadmin/user_upload/emergencies/docs/FAOSouthSudan_SitReport_31May2017.pdf)> viewed May 2017; Gebreyes et al, *Impact of Conflict*, p.xvii..
- <sup>viii</sup> Southern Development Investigation Team (1955), *Natural Resources and Development Potential in the Southern Provinces of the Sudan: A Preliminary Report by the Southern Development Investigation Team. 1954*, London: Sudan Government; Hutchinson, Sharon (1996) *Nuer Dilemmas*, Berkeley and Los Angeles: University of California Press; VISTAS (2015), *Pastoralism in Greater Upper Nile: Socio-Political Report*; Gebreyes et al, *Impact of Conflict*.
- <sup>ix</sup> Sosnowski, Amelia, Ghoneim, Eman, Burke, Jeri J., Hines, Elizabeth, Halls, Joanne (2016), "Remote regions, remote data: A spatial investigation of precipitation, dynamic land covers, and conflict in the Sudd wetland of South Sudan", *Applied Geography* 69, pp.51-64.
- <sup>x</sup> Humanitarian Policy Group (2009), *Pastoralism and Climate Change: Enabling Adaptive Capacity Synthesis Paper*, Overseas Development Institute, London; The African Union's Policy Framework for Pastoralism in Africa (2010), <<http://rea.au.int/en/sites/default/files/Policy%20Framework%20for%20Pastoralism.pdf>> as viewed May 2017.
- <sup>xi</sup> NRC (15<sup>th</sup> April 2016), 'Pastoralism, Conflict and Recovery in South Sudan', [http://southsudanhumanitarianproject.com/wp-content/uploads/sites/21/formidable/Pastoralism-Conflict-Recovery-Roundtable\\_May2016-1.pdf](http://southsudanhumanitarianproject.com/wp-content/uploads/sites/21/formidable/Pastoralism-Conflict-Recovery-Roundtable_May2016-1.pdf) viewed June 2017.
- <sup>xii</sup> VISTAS, *Socio-Political Report*.
- <sup>xiii</sup> VISTAS, *Socio-Political Report*.
- <sup>xiv</sup> VISTAS, *Socio-Political Report*.
- <sup>xv</sup> Ngigi, Margarte (July 2008), *Structure, Conduct and Performance of Commodity Markets in South Sudan: Linkages Food Security*.
- <sup>xvi</sup> Gebreyes et al, *Impact of Conflict*; Mercy Corps 2015; VISTAS, *Socio-Political Report*.
- <sup>xvii</sup> (2016) *Humanitarian Needs Overview*, <[http://reliefweb.int/sites/reliefweb.int/files/resources/2016\\_HNO\\_South%20Sudan.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/2016_HNO_South%20Sudan.pdf)> viewed June 2017.
- <sup>xviii</sup> Gebreyes et al, *Impact of Conflict*.
- <sup>xix</sup> Maxwell et al 2013.
- <sup>xx</sup> Gebreyes et al, *Impact of Conflict*; VISTAS, *Veterinary Report*. For example, in Ler and Mayendit, the war stopped the export market in cattle from these Nuer areas to Bor, Bentiu and Juba. The SPLA-IO explicitly stopped the sale of cattle and the context of war made it almost impossible. This interruption in the livestock market resulted in a dramatic fall in cattle prices, meaning that people could no longer get the same value from their cattle to buy food. By 2015 in Ler, cattle prices had fallen by 30%. At the same time, with increasingly high rates of inflation, cattle have been proved a much better way to save for difficult times in comparison to money. VISTAS, *Socio-Political Report*.
- <sup>xxi</sup> Gebreyes et al, *Impact of Conflict*, p.54.

<sup>xxii</sup> This reflects donor priorities in the post CPA era. For example, the USAID FARM project in 2011 in response to USAID's request dropped some activities including its proposed activities with small ruminants. It also ended the inclusion of livestock in FARM's marketing activities. USAID (2012) Food, Agriculture, and Rural Markets (FARM) Project: Mid-Term Evaluation Report, < [http://pdf.usaid.gov/pdf\\_docs/pdacu715.pdf](http://pdf.usaid.gov/pdf_docs/pdacu715.pdf)> viewed May 2017, p.6.

<sup>xxiii</sup> Gebreyes et al, *Impact of Conflict*.

<sup>xxiv</sup> FAO (May 2015), 'South Sudan Livestock Strategy Paper', < <http://www.fao.org/resilience/resources/resources-detail/en/c/282106/>> viewed June 2017.

<sup>xxv</sup> Global Food Security Cluster (April 2017), *Nutrition and Food Security Famine Prevention Response: South Sudan* < [http://fscluster.org/sites/default/files/documents/ssd\\_famine\\_presentation\\_april\\_2017\\_final.pdf](http://fscluster.org/sites/default/files/documents/ssd_famine_presentation_april_2017_final.pdf)> viewed June 2017.

<sup>xxvi</sup> As of May 2017, 31 actors were mapped as livestock and fishery actors in South Sudan. South Sudan Food Security and Livelihoods Cluster (May 2017), *FSL Cluster minutes of meeting* < [http://fscluster.org/sites/default/files/documents/south\\_sudan\\_fsl\\_juba\\_mom\\_24\\_may\\_2017\\_final\\_0.pdf](http://fscluster.org/sites/default/files/documents/south_sudan_fsl_juba_mom_24_may_2017_final_0.pdf)> viewed June 2017.

However, while many partners do supplementary programming relation to fisheries, few are involved in livestock work.

<sup>xxvii</sup> FAO (August 2015), *South Sudan Livestock Crisis*. < <http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/325706/>> May 2017.

<sup>xxviii</sup> ICRC (2016), *Annual Report*, p.196.

<sup>xxix</sup> Gebreyes et al, *Impact of Conflict*, p.xvii.

<sup>xxx</sup> FAO, *Livestock Crisis*.

<sup>xxxi</sup> FAO, *Livestock Crisis*.

<sup>xxxii</sup> FAO, *Operational Update*.

<sup>xxxiii</sup> FAO (June 2017), *Emergency Livelihood Response Programme Operational Update*, < [http://fscluster.org/sites/default/files/documents/fao\\_operational\\_overview\\_9\\_june\\_2017.pdf](http://fscluster.org/sites/default/files/documents/fao_operational_overview_9_june_2017.pdf)> viewed June 2017.

<sup>xxxiv</sup> FAO research in 2015 found a lack of mention of shelter. Gebreyes et al, *Impact of Conflict*, p.xvii. However, the VISTAS 2015 study recorded that some herders were struggling after their *luaks* (the cattle shelters) had been burnt during offensives. South Sudanese use cattle shelters to a different extent depending on ecology and diseases in their locality. The specific locations of the FAO research might have impacted results.

<sup>xxxv</sup> VISTAS, *Socio-Political Report*.

<sup>xxxvi</sup> Although these shifts in land tenure are under researched. Related work focused on northern Sudan has been done by Shazali and Ahmed. Shazali, Salah and Ahmed, Abdel Ghaffar M. (1999), *Pastoral Land Tenure and Agricultural Expansion: Sudan and the Horn of Africa*, DFID Workshop on Land Rights and Sustainable Development.

<sup>xxxvii</sup> Young, Helen and Cormack, Zoe (2013), "Pastoralism in the new borderlands: a humanitarian livelihoods crisis", *Humanitarian Practice Network*, < <http://odihpn.org/magazine/pastoralism-in-the-new-borderlands-a-humanitarian-livelihoods-crisis/#ftn-2>> viewed June 2017.

<sup>xxxviii</sup> Gebreyes et al, *Impact of Conflict*, p.41; Maxwell, Daniel, Santchi, Martina, Moro, Leben, Gordon, Rachel and Dau, Philip (May 2015), 'Questions and Challenges Raised by a Large-Scale Humanitarian Operation in South Sudan', *Working Paper* 33, p.29.

<sup>xxxix</sup> Cormack and Young, "Pastoralism in new borderlands". VISTAS, *Socio-political report*.

<sup>xl</sup> VISTAS, *Veterinary Report*.

<sup>xli</sup> Discussions in Juba (South Sudan), 2014. Gebreyes, Yacob Gebreyes, Lemma, Gezu Bekele, Deng, Luka Biong and Abdullahi, Shaif (February 2016), *Impact of Conflict on the Livestock Sector in South Sudan*, FAO.

<sup>xlii</sup> NRC, 15<sup>th</sup> April 2016, 'Pastoralism, Conflict and Recovery in South Sudan', < [http://southsudanhumanitarianproject.com/wp-content/uploads/sites/21/formidable/Pastoralism-Conflict-Recovery-Roundtable\\_May2016-1.pdf](http://southsudanhumanitarianproject.com/wp-content/uploads/sites/21/formidable/Pastoralism-Conflict-Recovery-Roundtable_May2016-1.pdf). > viewed May 2017.

<sup>xliii</sup> Gebreyes et al, *Impact of Conflict*, 72.

<sup>xliv</sup> Gebreyes et al, *Impact of Conflict*.

<sup>xlv</sup> FAO, *Livestock Crisis Update*.

<sup>xlvi</sup> Gebreyes et al, *Impact of Conflict*, p.69.

<sup>xlvii</sup> Gebreyes et al, *Impact of Conflict*, p.69.

<sup>xlviii</sup> See, for example, OLS- Southern Sector (February 1993), OLS Southern Sector 1992/1993 Situation Assessment, p.31; Wassara (July 2002), Nairobi Trip Report; Catley et al, "Policies, Practice and Participation", In Alinovi et al., *Beyond Relief*.

<sup>xlix</sup> Logistics Cluster (June 2017), *Physical Access Restraints*, < [http://reliefweb.int/sites/reliefweb.int/files/resources/ssd\\_lc\\_op\\_accessconstraints\\_a3l\\_201700609.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/ssd_lc_op_accessconstraints_a3l_201700609.pdf) > viewed June 2017.

<sup>l</sup> Leyland, T. (1996), "The Case for a Community-Based Approach, with reference to Southern Sudan," Paper presented at the Proceedings of the FAO Technical Consultation on the Global Rinderpest Eradication Programme, Rome.

<sup>li</sup> Gebreyes et al, *Impact of Conflict*, p.87.

- <sup>lii</sup> Palmer, Jennifer J., Surur, Elizeous I., Goch, Garang W., Mayen, Mangar A., Lindner, Andreas K., Pittet, Anne, Kasparian, Serena, Checchi, Francesco and Whitty, Christopher J. M. (2013), "Syndromic Algorithms for Detection of Gambiense Human African Trypanosomiasis in South Sudan", *PLOS, Neglected Tropical Diseases*.
- <sup>liii</sup> For a more detailed discussion see VISTAS, *Socio-Political Report*.
- <sup>liiv</sup> VISTAS, *Veterinary Report*, p.40.
- <sup>liv</sup> Leyland, T., Lotira, R., Abebe, D., Bekele, G., and Catley A. (2014). Community-based Animal Health Workers in the Horn of Africa: An Evaluation for the US Office for Foreign Disaster Assistance. Feinstein International Center, Tufts University Africa Regional Office, Addis Ababa and Vetwork UK, Great Holland; Gebreyes et al, *Impact of Conflict*, p.43.
- <sup>lvi</sup> VISTAS, *Socio-Political Report*, p.38.
- <sup>lvii</sup> VISTAS, *Socio-Political Report*.
- <sup>lviii</sup> Scepticism about the intentions of the state's elite had little traction in shaping policy . Discussions by Keen and Lee brought some insightful political analysis as early as 2006. Keen, David and Lee, Vivian (2006), *Conflict, Trade and the Medium-Term Future of Food Security in Sudan*, Export Opinion: Sudan Food Aid Forum.
- <sup>lix</sup> Winrock International Room to Learn (2014), 'South Sudan FY 2014, Annual and Quarter 4 Progress Report', <[http://pdf.usaid.gov/pdf\\_docs/PA00K921.pdf](http://pdf.usaid.gov/pdf_docs/PA00K921.pdf)> viewed July 2015, p.18. USAID, 'USAID Country Profile, Property Rights and Resource Governance: South Sudan', <[http://usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID\\_Land\\_Tenure\\_South\\_Sudan\\_Profile.pdf](http://usaidlandtenure.net/sites/default/files/country-profiles/full-reports/USAID_Land_Tenure_South_Sudan_Profile.pdf)> viewed May 2017, p.13. For example: Muller, Peter (2011), "The Violent Cattle Keepers of Southern Sudan's Pastoralist Tribes", *Time*, <<http://time.com/3777195/the-violent-cattle-keepers-of-southern-sudans-pastoralist-tribes/>> viewed May 2017.
- <sup>lx</sup> de Waal, Alex. 2014. When Kleptocracy Becomes Insolvent: Root Causes of the Civil War in South Sudan. *African Affairs* 113(452): 347-369.
- <sup>lxi</sup> Gebreyes et al, *Impact of Conflict*; VISTAS, *Socio-Political Report*.
- <sup>lxii</sup> Keen and Lee, *Conflict, Trade and the Medium-Term Future*, p.4.
- <sup>lxiii</sup> Pinaud, Clemence, "South Sudan: Civil War, Predation and the Making of Military Aristocracy", *African Affairs*, 113/451, pp.192 – 221.
- <sup>lxiv</sup> Hutchinson, etc.