



SPARC

Supporting Pastoralism
and Agriculture in Recurrent
and Protracted Crises

RAPID ASSESSMENT OF THE IMPACT OF THE COVID-19 PANDEMIC

Including the restricted Hajj 2020 on livestock
exports from Somalia and neighbouring countries,
and implications for FCDO in Somalia programming



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Acronyms and abbreviations

| | |
|----------|---|
| CAR | Central African Republic |
| CEMAC | Central African Economic and Monetary Community |
| CIRAD | French Agricultural Research Centre for International Development |
| EAC | East African Community |
| ECA | Economic Commission for Africa |
| ECOWAS | Economic Community of West African States |
| ENSO | El Niño–Southern Oscillation |
| FAO | Food and Agriculture Organisation of the United Nations |
| FCDO | Foreign, Commonwealth & Development Office (UK) |
| FGD | focus group discussion |
| FGS | Federal Government of Somalia |
| FEWS NET | Famine Early Warning Systems Network |
| GDP | gross domestic product |
| GITOC | Global Initiative against Transformational Organized Crime |
| ICPALD | IGAD Centre for Pastoral Areas and Livestock Development |
| IDP | internally displaced person |
| IGAD | Intergovernmental Authority on Development |
| IOM | International Organization for Migration |
| ITCZ | Inter-Tropical Convergence Zone |
| KII | key informant interview |
| KSA | Kingdom of Saudi Arabia |
| NDVI | Normalised Difference Vegetation Index |
| NGO | non-government organisation |
| OIE | World Organisation for Animal Health |
| RFI | Radio France Internationale |
| RVF | Rift Valley fever |
| SPARC | Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises |

KEY FINDINGS AND RECOMMENDATIONS

Background

In late 2020, the Somali landscape was experiencing multiple hazards: floods, the impact of the worst plague of locusts in 70 years, and the associated health and economic impacts of the Covid-19 pandemic. The economic effects of the pandemic include the loss of livestock export opportunities and a forecast 20% reduction in the global flow of remittances, as jobs are lost around the world. Factoring the cumulative impact of these different hazards, FEWS NET has forecast as many as a million children under the age of five in Somalia at risk of acute malnutrition through to December 2020. Longer-term forecasts suggest that as many as 850,000 children under the age of five will be acutely malnourished through to August 2021.

In 2017, the total livestock population of Somalia was estimated to be 50 million, including sheep, goats, camels and cattle. Live-animal exports from Somalia to the Middle East have flourished since the 1960s oil boom. In order of importance, the main country markets are Kingdom of Saudi Arabia (KSA), Yemen, Oman and the United Arab Emirates (UAE). Since the 1990s, live-animal exports from the Somali landscape have grown to become the largest 'on the hoof' live-animal export trade in the world, with millions of animals trekked annually from small and remote local markets across the Somali landscape, to terminal and export markets and then to the Middle East.

Somalia's livestock trade is largely unregulated, and its success completely dependent on informal systems, including for finance. The Somali live-animal export trade to the KSA feeds two separate value-chains: around 52% for the 'sacrificial' trade, with the balance of 48% for the year-round 'commercial' trade. The sacrificial trade has grown significantly, with an increase of foreign pilgrims from 1.3 million in 2000 to 1.86 million in 2019, and an increase in the total number of pilgrims in the same period from 1.7 million to 2.5 million. In 2019, the KSA imported more than 3 million sheep, goats, cattle and camels during the Hajj season alone.

In order to avoid the further spread of Covid-19, religious gatherings and ceremonies have been either cancelled or drastically reduced in size. In June 2020, the KSA took the decision to restrict the number of pilgrims for the 2020 Hajj from the planned 2.5 million travelling to Mecca and Medina in July 2020, to just 10,000 residents and fewer than 1,000 foreign nationals. This decided, it was no longer necessary for the KSA to import almost 3 million live animals to provide food for the pilgrims and to meet the ceremonial requirements.

This study is funded by the UK Foreign, Commonwealth & Development Office (FCDO) and commissioned by FCDO in Somalia. Its aim is to assess the impact of the restricted Hajj 2020 on livestock exports through and from Somalia and to inform future FCDO strategic planning and humanitarian and resilience-building programming in Somalia. The study uses two approaches: research on the Somalia livestock value-chain itself, including on past crises; and two case studies of blocked livestock exports from Sudan and from Mali/Chad.

The study was a rapid assessment of the situation, including interviews and focus group discussions with a limited number of participants. Despite this, we believe that the study makes a good representation of the situation.

Impacts of the restricted Hajj 2020 on different livelihood groups

Predictions from local NGOs and others suggested that the impact of the restricted Hajj 2020, and resulting cancellation of livestock exports, would be considerable. However, it appears, at least at the time of this study (mid-2020), that the worst fears have not been realised – with impacts spread across different actors, and livestock prices remaining relatively stable.

For pastoralists, often considered most vulnerable, the impact was cushioned by several factors. Although the cumulative number of livestock normally exported for the Hajj is large, most households provide only relatively small numbers of livestock from their overall herds for this particular event. Indeed, it may be that some poor households may have benefited, since many would-be pilgrims remained at home and shared alms with the poor. Aid agencies have also been purchasing animals to distribute in Eid to support the local markets, which could have increased local sale prices. Also, and very importantly, the anticipated negative impacts of increased numbers of (non-exported) livestock on the rangeland was mitigated by above-normal spring rains, allowing adequate pasture and water to support milk production. Therefore, there was enough alternative food and the financial cost was, in most cases, absorbed. Furthermore, pastoralists were able to sell some animals domestically at normal prices and in some areas into the alternative, informal export trade. Agro-pastoralists were able to supplement income from selling vegetables and crops.

On the other hand, brokers, traders and exporters, particularly those operating smaller businesses, have been more severely affected. They report that Hajj sales represent around 50% of their annual income, and that the loss of sales in 2020 has resulted in a loss of three-quarters of their seasonal income

Recommendations

Short-term programming

- **Do no harm** – with long experience of adaption and resilience, above-normal rainfall, and functioning alternative markets, pastoralists and traders are adapting to the restricted Hajj 2020. While it may be that development and humanitarian partners can further help pastoralists and traders to adapt, we strongly recommend that livestock markets are allowed to recover and develop without interference, which could do more harm than good.
- **La Niña alert** – it will be important to monitor short- and medium-term changes in rangeland production and productivity. Larger-than-normal livestock holdings, because of loss of the Hajj market, may result in increased pressure on pasture-water resources. With the risk of a severe La Niña and drought in early 2021, it would be helpful to develop a La Niña anticipatory action plan. Local monitoring of rangeland conditions and change can be part of this.

- **Monitoring livestock–cereal exchanges** – it will also be important to monitor livestock prices and cereal–livestock exchange rates central to food security in pastoral areas. Such prices and exchanges serve as an effective early warning indicator for impending drought and other crises. In the event of significant deterioration, governments and international partners may need to assist the private sector to accelerate imports to restore local household purchasing power.
- **Monitoring working capital needs of women and youth** – small-scale traders and ancillary workers in the most affected northern areas are finding it difficult to sustain their businesses or to find new forms of employment. Women traders may have higher demands to meet family needs than their male counterparts. Depending on the recovery trajectory in the medium term, and access to remittances and social safety nets, adapted lending practices may help to support women and young people.
- **Economic stimulus to increase purchasing power of urban populations** – growing towns and cities in Somalia, Kenya and Ethiopia are major consumers of pastoralist livestock products, in addition to markets in the Middle East. As economies continue to be affected by Covid-19 and these urban consumers lose income, cash transfers could increase spending in urban areas.
- **Investment in further research** – to support resilience-building in communities, it could be possible to incorporate within SPARC implementation more detailed research on:
 - pastoralist social and community dynamics, including gender and networking
 - tenure, governance and access to land and natural resources
 - status and roles of local groups and customary institutions, including in conflict
 - political economy and dynamics of livestock trading.

Medium-term programming

- **Strengthening animal health systems** – efforts should continue to ensure that livestock producers and traders have access to regular and effective vaccinations and animal health services, not least to reduce risk of future export bans. An integrated One Health¹ approach is recommended, to combine animal, human and environmental health.
- **Strengthening local institutions** – case studies from Chad, CAR and Somalia all highlight the importance of customary institutions for managing natural resources and local conflicts and stresses. However, in many cases, these institutions have been weakened, if not completely collapsed. Investing in strong community institutions is important to resolve problems locally and without escalation.
- **Land tenure and use** – land tenure security, good land-use planning and greater investments in rangeland management are all key for productive and sustainable pastoralism. Supporting tenure security seems likely to encourage investment in improving rangeland management.

Longer-term programming and development investment

- **Livestock sector development** – we recommend support for the government of Somalia, working with the private sector, universities and customary institutions, to operationalise the Somalia Livestock Sector Development Strategy, in particular to develop rangeland management, animal health and quarantine services, institutional capacity and research to strengthen the livestock sector, including through drought and market shocks.



Ethiopia. Photo: Michael Swan

SECTION 1
BACKGROUND



SOMALIA AND PASTORALISM

Somalia is part of a vast area of hyper-arid, arid and semi-arid rangelands extending across north-eastern Kenya, south-eastern Ethiopia, Djibouti and Somalia (Somaliland, Puntland and South West Somalia). This area is known as the Somali landscape. Smaller areas with higher rainfall resulting in semi-humid rangelands are found in the highlands of Somaliland and the Juba-Shebelle riverine areas in the South West. These however account for only around 5% of the total land mass of Somalia.²

Rainfall across the landscape is bi-modal, including the main *Guu* season (end of March to July) and the shorter *Dayr* season (October to early December). These are separated by two dry seasons, the shorter *Hagaa* (July to September) and the longer and harsher *Jilal* (January to March). Annual rainfall varies from between 400 mm and 600 mm in the southern areas to less than 200 mm in the central and more arid rangelands. The oscillating rains and dry seasons are driven by the Inter-Tropical Convergence Zone (ITCZ) and associated fronts (Faruk and Bearak, 2020). Seasonal weather systems are also driven by the El Niño–Southern Oscillation (ENSO) that appears in three phases: El Niño, La Niña and neutral (L’Heureux, 2014). Typically, El Niño episodes are associated with years of above-average rainfall and flooding across Somalia, while La Niña³ events are associated with below-average rainfall and drought. Neutral years are linked with more normal rainfall patterns that are themselves shifting and changing as a result of climate change that is driving more extreme weather events and patterns.

The Somali landscape is home to the Somali community which is culturally the most homogenous in Africa. The national population of Somalia is estimated to be around 15.5 million people and comprises 42% urban residents, 9% internally displaced persons (IDPs), mostly urban, with the remaining 49% living in rural areas – 26% pastoralists and agro-pastoralists and 23% farmers. Agro-pastoralists and farmers typically inhabit villages and small settlements, while pastoralists inhabit the more arid rangelands and continue to be mobile, although levels of mobility are changing with time (FGS, 2017).

The lives and livelihoods of agro-pastoralists and pastoralists revolve around mixed herds of camels, cattle, sheep and goats and donkeys, with the particular mix of animal types dependent on the quality of the rangelands. Cattle and sheep are grazers and require access to grassland, while camels and goats are browsers and can survive in harsher and drier rangelands. In contrast, the lives and livelihoods of sedentary farmers are dependent on seasonal rains or irrigation. As a consequence of damage caused by the civil war, however, only 10% of Somalia’s more fertile areas is currently managed under irrigation.⁴ As a result of this damage and the wider agro-ecological limitations, Somalia meets less than half of its cereal needs and the nation is dependent on food imports (FGS, 2017). Food shortages are exacerbated by delayed onset of seasonal rains (in particular when the harsh *Jilal* is extended), drought and other crises that affect primary production (Faruk and Bearak, 2020). Mention has already been made of the impacts of different ENSO phases and climate change trends resulting in more extreme weather events.

Studies carried out in Somalia by the World Bank between 2015 and 2018 suggest that 70% of all households live below the 2011 international poverty line of US\$1.9/day. Of these, 60% live in urban areas, 30% live in IDP camps and the balance live in rural areas (World Bank, 2016;

FGS, 2020). Other studies point to significant regional wealth disparities, with households in the northern areas of Puntland and Somaliland enjoying higher incomes than households in South West Somalia (UNDP and World Bank, 2003). This north–south bifurcation reflects political differences played out in employment, livelihood, economic growth, natural resources endowments and the flow of remittances from the Somali diaspora (FGS, 2017). In 2018 for example, remittances were estimated to be \$1.4 billion or around 25% of gross domestic product (GDP) (FGS, 2020).

Historically, poorer agro-pastoralists and pastoralists affected by drought, livestock disease or conflict and with few or no remaining livestock seek alternative livelihood strategies, exploiting local rangeland resources (frankincense, building materials, firewood and making charcoal) or moving to sedentary farming areas in search of employment and farming opportunities. Today, poorer rural households migrate to market centres and towns in search of employment and small business opportunities, or they go abroad.⁵ Despite rapid urbanisation however, livestock-keeping and ancillary livestock sector employment continue to play a central role in the lives and livelihoods of three households in four nationally, while livestock sales account for between 50% and 80% of household income for poorer households (Khalif, 2020). For these same poorer households, more than half of their income is spent on grain and other basic commodities that they are unable to produce themselves. Nationally, the livestock sector continues to employ more than half of Somalia’s total labour force (FGS, 2017).

Inhabiting some of the harshest rangelands in sub-Saharan Africa, Somali pastoralists have developed sophisticated responses to aridity and associated changes in rangeland productivity, disease profiles, and local-level conflicts and rivalries. These include mobility – the movement of herds from ‘wet’- to ‘dry’-season grazing areas; herd diversification – herding mixed animal species that include grazers (Somali black-headed sheep and Somali cattle) and browsers (Somali Galla goats and Somali camels) that utilise different rangeland resources; and at times herd-splitting – with cattle trekked in to areas that better suit their grazing needs, while goats and camels are moved to areas of browse that favour them. Typically, too, at the onset of a drought threat, pastoralists offload weaker and older animals in local markets and may even abort breeding females and slaughter young animals to avoid the demands of pregnancy and lactation during a time of livestock feed shortages.

Traditionally, rangelands have been managed under communal clan-ownership with assigned household usufructuary or user rights allocated for seasonal cereal cultivation, through Somali Xeer customary law that continues to hold significant local legitimacy (Essays UK, 2018). However, the 1975 Somalia Land Law, civil war and associated displacement and subsequent inter-clan conflicts have undermined customary rangeland management systems in many areas. Consequently, increasing numbers of formerly mobile pastoral households have enclosed land for rainfed farming, pasturing lactating animals and for dry–drought season grazing (Essays UK, 2018). The result of this rangeland fragmentation, together with the increase in the number and size of permanent settlements and associated year-round grazing of small flocks and herds, is that most pastoralists are less mobile today than they were in the 1990s. While generally less mobile, wealthier pastoralists continue to move livestock seasonally, with camel herders typically the most mobile and trekking vast distances, including across international borders in search of better seasonal rangeland. Poorer pastoralists in contrast are largely dependent on small ruminants and typically the least mobile, with many establishing semi-permanent homesteads (Leonard, 2007).

Locally specific droughts occur every two to three years in various locations across the area. Typically, these have limited impact. More serious or 'pastoral' droughts, the result of two or three consecutive poor/failed rains, occur on average around every eight to ten years, typically driven by deep La Niña episodes (Leonard, 2007). Severe pastoral droughts in different parts of the Somali landscape were recorded in 1964, 1973/74, 1988/89, 1999/2001, 2008, 2010/11,⁶ and most recently in 2016/17. Each of these droughts resulted in significant livestock mortality, severe food shortages, and the displacement of large numbers of people in search of food assistance. For example, the drought of 2016/17 reduced milk production by more than half for camels and up to two-thirds for goats and cows (Fava et al., n.d.). Drought severity typically varies from area to area, as evidenced by the drought of 2011 in which more than a quarter of a million people died from famine and conflict,⁷ while more than 4.7 million live animals were exported to the Middle East in the same year.

In addition to drought, Somalia experiences riverine and localised flash floods that are increasingly severe as a result of climate change. According to severity, floods may result in crop and livestock losses and damage to infrastructure: homes, roads, schools and irrigation schemes (headworks, canals and storage facilities) (FGS, 2017). Years of particularly heavy flooding along the Juba and Shebelle rivers were reported in 1961, 1977, 1981, 1997, 2005, 2006, 2019 and 2020.⁸ As a result of the severity of the 2019 floods, 350,000 people were displaced (Floodlist, 2019). Floods are also associated with outbreaks of malaria, cholera and Rift Valley fever (RVF).⁹

At the time of writing (mid-2020), the Somali landscape is experiencing multiple hazards: floods (UNOCHA, 2020a), the impact of the worst plague of locusts in 70 years (UNOCHA, 2020b),¹⁰ and the associated health and economic impacts of the Covid-19 pandemic, including the loss of livestock export opportunities and the forecast 20% reduction in the global flow of remittances, as jobs are lost around the world (World Bank, 2020). Factoring the cumulative impact of these different hazards, FEWS NET forecast that as many as a million children under the age of five are at risk of acute malnutrition by December 2020 (USAID, 2020). Longer-term forecasts suggest as many as 850,000 children under the age of five will be acutely malnourished through to August 2021 (FEWS NET, 2020).

HISTORY OF LIVESTOCK MARKETS AND TRADE FROM AND THROUGH SOMALIA

In 2015, the livestock population of Somalia was estimated to be 40 million, including 14 million Somali black-headed sheep, 13 million Somali Galla goats, 7 million Somali camels and 5 million Somali short-horned Zebu cattle. In 2017, however the government estimated the livestock population to be more than 50 million.¹¹ Reliability of the numbers aside, the majority of livestock continue to be herded and managed by pastoral and agro-pastoral households, and broadly under 'traditional' production systems.

Live-animal exports from Somalia to the Middle East flourished after the 1960s oil boom. In order of importance, the main country markets are the Kingdom of Saudi Arabia, followed by Yemen, Oman and the United Arab Emirates (Mahmoud, 2010; Musa et al., 2020). Since the 1990s, live-animal exports from the Somali landscape have grown to become the largest 'on the hoof' live-animal export trade in the world, with millions of animals trekked annually from small and remote local markets across the Somali landscape, to terminal and export markets and then to the Middle East (Little, 2009).¹² While Somalia's livestock trade has grown exponentially since the 1960s, the trade itself is not new and long-standing trade routes criss-cross international borders in the region, with livestock central to the trade as they can be trekked by hoof and in areas with few or no roads.

From start to finish, this trade is dominated by the small and medium-scale private businesses (ECA, 2017). Studies have identified 10–15 different sets of actors and as many as 30 different transactions from the original animal sale to trekking, feeding, watering, and loading (onto boats at the ports), that involve pastoralists, brokers, small-scale traders, herders, feed and water suppliers, medium-scale and large-scale traders, financiers, trekkers–transporters¹³ and exporters (ICPALD, 2012). At each stage too, animals are sold locally to butchers to meet local demand (Pavenello, 2010). In total, it is estimated that the livestock sector benefits 15–17 million people in Djibouti, Ethiopia, Somalia and northern Kenya (Eid, 2016). In contrast to local livestock trading, livestock exports are dominated by a few large, private sector companies typically registered in the Kingdom of Saudi Arabia (KSA), Egypt or Oman (Little, 2009).

Together with income from hides and skins and chilled carcass exports, livestock accounts for 80% of Somalia's exports, while the livestock sector contributes 40% of Somalia's GDP.¹⁴ Using a production-based approach however, a 2013 IGAD Centre for Pastoral Areas and Livestock Development (ICPALD) study, estimated livestock's contribution to be an additional \$8 billion, or 25% more than the official GDP figure. Significantly, domestically consumed milk was the most important livestock product, with an estimated value of \$6.5 billion or more than 80% of livestock's contribution to the economy (ICPALD, 2015). Livestock exports peaked in 2010/11 with an estimated 3–3.5 million heads, with the vast majority shipped from Berbera port in Somaliland (ICPALD, 2012). That year, the livestock trade accounted for 85% of export earnings and 30% of total GDP (Majid, 2010).



Camels being transported by truck in Mille woreda, Afar, Ethiopia. Photo: ILRI/Fiona Flintan

Somalia's livestock trade is largely unregulated, and its success completely dependent on informal systems, including for finance. While rather dated, a 1990s study (quoted in Little, 2009) estimated that less than 10% of money for primary livestock purchases was formally sourced from banks, with the vast bulk informally sourced from kinsfolk, friends and associates. For reasons of security, mobile traders seldom carry cash, in particular when visiting remote and insecure areas. Rather, finance flows through the system of *hawala* or *hawilaad* (literally 'transfer' in Arabic) that is mediated through local money-houses located in even the most remote areas (Little, 2009; ICPALD, 2012; Fava et al., n.d.). This same finance system is used by the Somali diaspora to return remittances to family and kinsfolk in Somalia.¹⁵

The Somali live-animal export trade to the KSA feeds two separate value-chains: around 52% for the 'sacrificial' trade, with the balance of 48% the year-round 'commercial' trade. The majority of animals in the sacrificial trade are transported by two Saudi companies, with animals sourced and exported within a 60-day period, ahead of the annual Hajj pilgrimage. This trade has grown significantly with an increase of foreign pilgrims from 1.3 million in 2000 to 1.86 million in 2019, and a corresponding increase in the total number of pilgrims in the same period from 1.7 million to 2.5 million. In 2019, the KSA imported more than 3 million sheep, goats, cattle and camels during the Hajj season alone, with the Somali black-headed sheep being the preferred choice of the working- and middle-class and pilgrim market, as they are smaller and more affordable than Sudanese sheep (Yusuf, 2020).

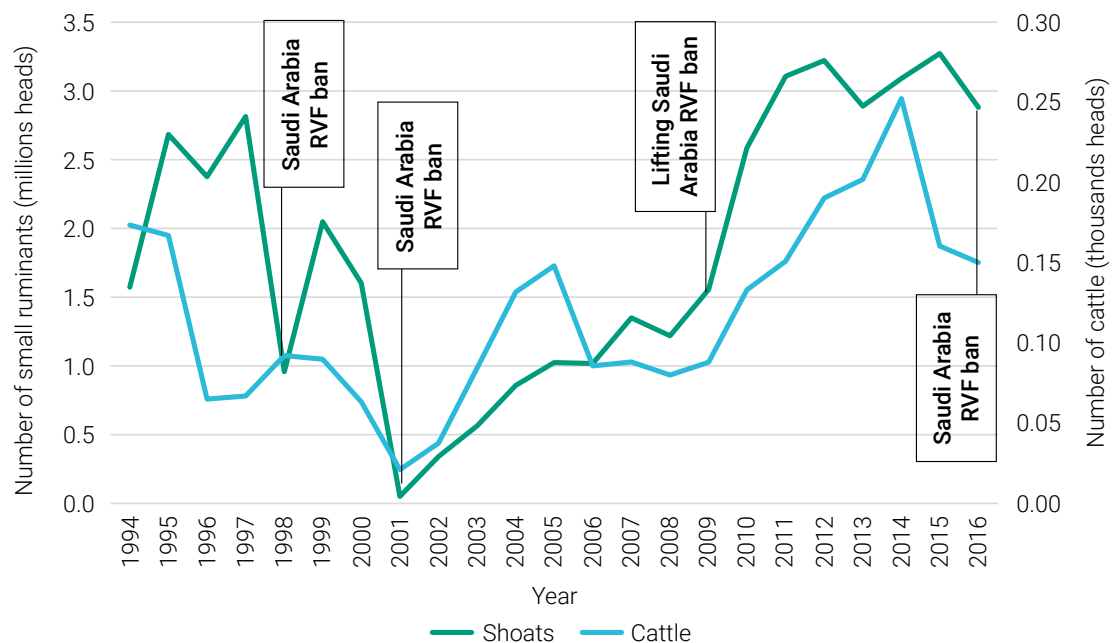
Besides the established markets in the KSA, markets in Yemen and other Middle Eastern countries are increasingly important for live-animal exports. In addition to the formal export routes from Berbera and Bossaso, there are multiple informal routes used to access Yemen (including Maydh, Las Qoray, Marero, Quandala and Alula to Bossaso and then on to Balhaf, Biir Ali, Mukalla and Ash Shihr in Yemen). These were developed and expanded in response to the KSA live-animal import ban from 2000 to 2009. Commonly regarded as illegal by local governments, these routes play an important role in supporting small-medium trader/exporter livelihoods, in particular during times of crises – such as those caused by market bans, conflict and even pandemics. Tragically, however, some are also used for people smuggling (GITOC, 2020).

RISKS FOR THE LIVESTOCK EXPORT TRADE

Despite the fact that Somalia's livestock economy is dominant, it faces risks including from loss of export markets as a result of livestock disease, droughts and other hazards. At times, such crises result in a complete loss of markets, while, at other times, it is possible for one or other of the ports to continue to trade. For example, in the early 1990s the port of Berbera was closed as a result of the civil war. Fortunately for livestock keepers, the trade was switched to Bosasso in Puntland. During this shift, livestock exports through Bosasso rose by more than 200% before slipping back in 1993, following the re-opening of the port of Berbera.

In 1998 and again in 2000, KSA implemented a ban on all livestock imports from the Horn/East of Africa due to an outbreak of Rift Valley fever (RVF) and the threat that the disease would spread to their own livestock and people, as there were no testing facilities in Somali ports. Contagious animals could therefore be loaded and arrive in KSA before they were tested and found to be carrying RVF. As a result of the 2000 ban, small ruminant exports through the port of Berbera fell by 98% from 2 million to around 50,000 (Eid, 2016). The impact of the different bans on livestock sales can be seen in Figure 1. Despite significant fluctuations in the number of exports, as the result of different import restrictions into the KSA, there has been an overall increase over the last two decades in the numbers of livestock being traded from Somalia to the KSA and other countries in the Middle East.

FIGURE 1: LIVE-ANIMAL EXPORTS FROM SOMALI PORTS



Note: Number of small ruminants and cattle exported through Berbera port. Source: own compilations from Food Security and Nutrition Analysis Unit (FSNAU) (1994–2016)

Source: Musa et al. (2020)

An ex-post study of the import ban identified a number of direct and indirect impacts. For example, in the short term, livestock prices collapsed, as did the number of traders and exporters. In response to the threat however, some trader–exporters continued to export livestock to KSA and other Middle East countries through Yemen, Oman and Djibouti (FEWS NET, 2010). Despite the increased costs associated with these more circuitous trade routes, the ban favoured the small number of trader–exporters who had established more expansive trading networks. Indeed, some were able to establish near monopolies, during the ban. In addition, the study found that there had been a substantial increase in the national herd and that to water their livestock, pastoralists had invested in *berkads* (rainwater-harvesting cisterns). The proliferation of *berkads*, associated overgrazing and increased charcoal-making¹⁶ to supplement household incomes resulted in environmental degradation from which Somalia has yet to recover. In addition, the length of the ban reduced incomes, eroded household purchasing power and fuelled poverty. In response, the government and development partners expanded food aid distributions and other forms of relief (Little, 2009).

The lifting of the ban by the KSA was assisted in part by successful negotiations between the two governments of KSA and Somaliland. This resulted in KSA private sector investment¹⁷ in animal health and quarantine facilities at Berbera port. Once these facilities were functional, it was possible to test animals routinely before they were shipped, and for the KSA to be confident that there was no longer a disease threat. Somaliland has continued to attract private sector investment and in 2016 signed a Euro 400 million investment with DP World to upgrade the port and turn it into a regional trade and logistics hub (Euronews, 2019).

Once the KSA ban was lifted, exports from Berbera grew exponentially and it rapidly overtook the port of Bosasso as the main source of live-animal exports from the Somali landscape. This is because Berbera is closer to KSA and its traders enjoy stronger clan-links¹⁸ with banks and communications systems operators in Djibouti (FEWS NET, 2010). Following the lifting of the ban, livestock prices in local markets supplying livestock to Berbera increased by more than 25%. Furthermore, because there was more money in the economy, there was a 40% increase in the imports of food and manufactured goods to the ports of Berbera and Bosasso (Little, 2009). The lifting of ban also had a positive impact across the region, as the livestock sector is the largest single source of household income and employment, in particular for the poor (FEWS NET, 2010).

An indirect and longer-term impact of the KSA ban has been the steady increase in investment in veterinary, quarantine and animal welfare services – loading ramps, improved holding facilities with watering points and shade areas. With assistance from the KSA's private sector, Somaliland has also introduced a livestock certification system to increase confidence that all exported livestock meet World Organisation of Animal Health¹⁹ disease and international sanitary and phytosanitary standards.²⁰ As confidence has increased, trader–exporters are offering increased prices to pastoralists (Eid, 2016). Finally, it is expected that additional investment will be required to meet growing animal welfare concerns affecting live-animal exports from Australia and New Zealand.

THIS STUDY

The 2020 Covid-19 pandemic has resulted in both a massive loss of life and huge economic losses as the result of measures to contain the virus. All regions of the globe have been affected and the Horn of Africa is no exception. In order to avoid the further spread of the virus, religious gatherings and ceremonies have been either cancelled or drastically reduced in size.

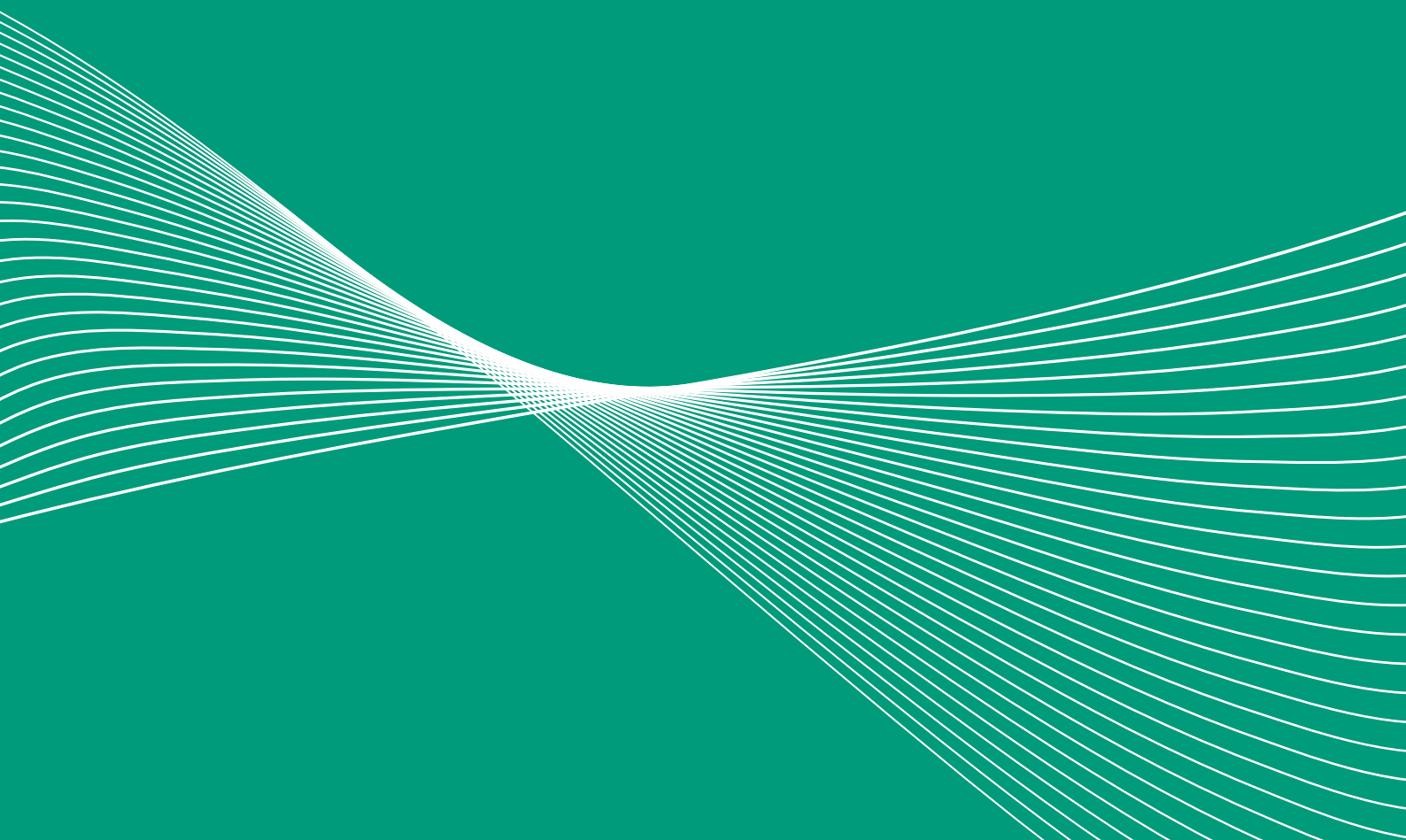
In June 2020, the KSA took the decision to restrict the number of pilgrims for the 2020 Hajj from the planned 2.5 million that would make the pilgrimage to Mecca and Medina in July 2020, to just 10,000 residents and fewer than 1,000 foreign nationals. This decided, it was no longer necessary for the KSA to import almost 3 million live animals to provide food for the pilgrims and to meet the ceremony's sacrificial requirements (Khalif, 2020).

The purpose of this study, funded by the UK Foreign, Commonwealth & Development Office (FCDO), is to assess the impact of the restricted Hajj 2020 on livestock exports through and from Somalia and to inform FCDO's strategic planning and humanitarian and resilience-building programming in Somalia. Based on a rapid assessment, the study took a two-pronged approach: undertaking research on the Somalia livestock value-chain itself (the impacts of past blockages on the livestock export trade and the current situation of the restricted Hajj); and exploring two case studies of blocked livestock exports from other parts of Africa, namely Sudan and Mali/Chad, from which useful lessons could be learned.

For the former, research was carried out in Somalia through focus group discussions (FGDs) and key informant interviews (KIIs), including with agro-pastoralists and pastoralists, brokers, traders (both men and women), butchers and exporters, together with ancillary workers involved in and benefiting from the livestock trade. In addition, the study team carried out a rapid literature review. Although the number of people interviewed was small (10 FGDs and 12 KIIs in the Bossaso Corridor, 12 FGDs and 28 KIIs in the Ethiopia–Berbara corridor, and 2 FGDs and 2 KIIs in the South Central Somalia–Garissa corridor), we feel that the information collected and issues raised provide a useful guide to wider impacts across the different stakeholder groups. It is advised however that, for a more robust and representative study, additional research is undertaken with a larger number of participants.

SECTION 2

**LIVESTOCK EXPORT
MARKETING AND
ECONOMIC SHOCKS**





A Lolkuniani livestock market, Kenya. Photo: ILRI/Emmy Dortant

THE HAJJ SACRIFICIAL LIVESTOCK MARKETING CHAIN IN ‘NORMAL’ YEARS

Major trade routes

Berbera trader-exporters confirmed the findings of the rapid literature review, that Berbera (Somaliland) is the most important livestock export port in the Horn and East Africa sub-region, followed by Bossaso (Puntland) and Djibouti. Of lesser importance are the South West Somalia ports of Mogadishu and Kismayo. The main trading routes that supply the two main ports of Berbera and Bosasso are presented in Figure 2. In addition to Somalia-sourced livestock, animals are also traded from Somali Region, Ethiopia to both ports. Case study information was collected from each of the main routes and is presented below, although the emphasis is on Berbera, which accounts for the vast bulk of livestock exports from the Somali landscape.

FIGURE 2: MAJOR LIVE-ANIMAL EXPORT TRADE CORRIDORS



Berbera port

As indicated in Figure 2, Berbera receives live animals from Babile through Tog Wajaale (white routes), as far south as Beledweyne (yellow routes) and south-east from Galakaayo (blue routes). Aggregated animals are trekked and transported to the cooler Somaliland mountains within a day's transport of Berbera, to minimise holding–feeding costs. When ready to be shipped, the animals are transported to the port's holding and quarantine facilities and only healthy animals are boarded onto adapted ships that transport the animals to KSA and other Middle East countries.

Ahead of the annual Hajj pilgrimage, the majority of pastoral households in Berbera's catchment area sell two to four male sheep through brokers to local traders in their local livestock market. Typically, young traders prioritise the more remote and difficult-to-access rural markets which produce quality livestock that, when trekked-transported to secondary and larger regional markets, attract good prices. In Ethiopia, traders compete with livestock cooperatives that similarly purchase, aggregate and transport animals to larger markets, as described by a representative of a Jijiga-based livestock cooperative:

We buy animals from the area around Degahbur (in Ethiopia's Somali region), from local cooperatives. We buy at a fair price and aggregate numbers required by exporters, either in Somaliland or Adama. Our task is to aggregate enough animals that we can sell truckload by truckload.

During a normal Hajj season, a small-scale trader may purchase between 500 and 800 sheep or goats, using mobile money. The Somali livestock marketing system is built on trust and credit is widely accepted, with small-scale and medium-level traders being paid up to several months later by exporters at the point of sale in the Middle East. When payment is made, the agreed money is returned to Somalia via the *hawala* system. The vast majority of animals that reach Berbera are traded through Burao market, the largest market in Somalia. Once purchased by exporters or their agents, animals are transported from Berbera. Each transported animal is taxed 0.3 Somali shillings (Broker/exporter, Burao personal communication, 2020). On reaching the port the animals are routed through quarantine facilities where they are inspected for physical defects and tested for Brucellosis and, during times of outbreaks, for RVF. Clean, healthy animals are boarded onto ships and more than 95% are shipped to KSA (Broker/exporter, Burao personal communication, 2020).

Bossaso port

As also indicated in Figure 2, Bossaso receives live animals from as far south-west as Beledweyne (yellow routes) and beyond to Bay Gaal, with additional animals collected en route through Somali Region, Ethiopia. Other animals are collected from Galakaayo (blue routes) and the pastoral rangelands of Sanag, Sool, Mudug and Galgudud regions of Puntland.

Typically, exporters aggregate animals through their agents or networks of known and trusted small- and medium-scale traders, with the majority preferring to purchase directly from pastoralists in local markets, as opposed to sourcing their animals from larger markets. Whether through agents or small- and medium-scale traders, exporters require an agreed number of animals of a specified quality. Once these are aggregated, they are transported to the port, with the exporter responsible for all transport charges. Prices fluctuate depending

on the number of animals, the body condition and health of the animals. As one trader, Beletweyne, remarked (in 2020):

I buy about 300–400 animals monthly and sell them mostly to large-scale traders and exporters in Bossaso. In areas where I am buying from pastoralists, I use a broker. At times I also use a broker when selling animals to large traders/exporters, with whom I am less familiar.

Traders reported that Bossaso port charges higher taxation, quarantine and certification charges than does the port of Berbera. Despite the extra charges, local traders prefer to sell their animals through Bossaso, as they are typically better connected through the clan system. In recent years too, the port has developed state-of-the-art animal holding and quarantine facilities, which ensure that the animals are rapidly processed.

Garissa to Berbera or Bossaso ports corridor

In addition to sourcing livestock in the Somali landscape, some traders buy animals, particularly goats, in the north of Kenya (including Marsbit), in central-south Ethiopia and in small numbers from commercial ranches in and around Mombasa. These animals are transported to Garissa and then on to either Berbera or Bossaso ports.

Meat exports

In addition to the export of live animals, some animals are killed locally and exported as chilled carcasses. Such carcasses are mainly sourced from Kenya where abattoirs and chilling facilities are of adequate standard. Chilled carcasses are then flown under contract to traders in Bahrain, Jeddah, Riyadh, Dubai, Sharjah and Oman. Bahrain is the preferred destination as higher prices are offered there. While opportunities exist to expand this market, there is competition from domestic markets. Furthermore, the failure of exporters to collaborate results in variable quality that in turn affects prices and market access (Meat exporter, Garissa, personal communication, 2020).

HISTORICAL SHOCKS THAT IMPACTED LIVESTOCK EXPORTS

Somali livestock are produced in some of the harshest rangelands in Africa. Not only are the rangelands among the most arid, but seasonally too pastoralists are faced with drought, livestock disease (and associated livestock export bans) and conflict. We used focus group discussions and key informant interviews to collect information on the impact of different shocks on livestock exports from the Somali landscape, shown in Table 1, by stakeholder group. Specifically, informants were invited to rank years by colour: orange for worst, yellow for very bad, dark blue for bad, light blue for bad but manageable, and green for manageable. All three stakeholder groups in three distinct areas – Berbera, Bosasso and Garissa – ranked the impact on livelihoods of the RVF ban of 1998/99 as the worst.



Camels along the road to Garissa, Kenya. Photo: Flore de Preneuf/World Bank

TABLE 1: PASTORALISTS', EXPORTERS' AND TRADERS' PERCEPTIONS OF PREVIOUS MARKET SHOCKS AND DROUGHT CRISES

| Berbera port | | | |
|-------------------------------|---|--|---|
| Year/s | Pastoralists | Exporters | Traders |
| 1998–99 (RVF ban) | Very few markets were open | Sales though Hargeisa and Burao fell by 70% | Huge impact as people avoided eating meat |
| 2016–17 (drought and RVF ban) | As many as 60% of livestock died from the drought | As livestock lost body condition, prices fell by as much as 40–50%. | Wild animals also died and there was hardly any trade |
| 2000–09 (RVF and FMD ban) | Animals tested positive were returned to Berbera and livestock sales collapsed | | Livestock were re-routed through Djibouti and other informal routes |
| Bossaso port | | | |
| 1998–99 (RVF ban) | The RVF ban and civil war resulted in a collapse in livestock sales and prices | Greatly reduced live-animal exports resulted in huge losses and a lot of exporters went out of business | Inflation in the price of basic food commodities and civil war led to complete loss of income for small- and medium-scale livestock traders |
| 2000–09 (RVF and FMD ban) | Livestock prices fell by 60%. Some informal exports continued to neighbouring countries | Household income fell by 50%, though some animals continued to be exported to Oman and Yemen | Prices of imported goods doubled, and livestock prices fell drastically |
| 2011 (drought) | Drought followed by fear of RVF from 2009 disrupted livestock trade | Income declined by 30% due to additional costs of disease management, although alternative markets to Yemen and Oman opened up | Livestock prices decreased by 45% causing economic losses especially for small traders |
| 2016–17 (drought and RVF ban) | Though export markets like Oman and Yemen were accessible, severe droughts led to livestock deaths and impacted exports | Very small numbers of livestock were exported, as most either died or were emaciated | Affected all livestock holders as 60% of livestock died or were emaciated and therefore not fit for sale |
| Garissa corridor | | | |
| 1998–99 (RVF ban) | Markets were closed and people afraid to slaughter animals because of fear of disease spreading | No markets for slaughtered animals and also other livestock products such as milk | Market being closed for six months continuously led to loss of incomes and closure of business |
| 2006–07 (FMD outbreak) | Markets were operating but with reduced capacity because of the outbreak | | Many small traders and businesses were affected by reduced demand for animals to the terminal markets |

Note: There was also a temporary ban from 2016 (mentioned by Musa et al., 2020), but it was not consistent and for example was lifted to allow livestock into RSA for the Hajj; therefore, it is not included here.

As noted above, stakeholders in this study are necessarily resilient and have tried-and-tested ways of adapting to and coping with different crises. For example, pastoralists are mobile and able to split their herds to move different animal types to different rangelands. In contrast, successful and established traders may divest themselves of all livestock interests temporarily, returning to the livestock sector only after the shock has eased. Adapting is typically more problematic for poorer households, whether agro-pastoral, pastoral, trading or ancillary workers, as poorer households have reduced capacity to adapt and diversify.

During times of crisis, pastoralists and agro-pastoralists report that they change their diets and eat more sorghum, rather than the most expensive rice, and may even be forced to reduce the number of meals that they eat daily (reported by pastoralists in Armo). In times of more severe crises, they may also seek assistance from relatives abroad through remittances, or take loans from neighbours, shopkeepers and wealthy relatives. However, pastoralists in all focus groups reported that they were cautious of taking loans as these required repayments the following year, which might be equally stressful. Some families too have sent younger children to better-off relatives in urban areas to reduce financial and food security pressures on households. Notably, agro-pastoralists in one focus group discussion at Gabiley suggested that pastoralists are the group most vulnerable to crises that affect livestock as they are entirely dependent on livestock for their livelihoods.

The same group at Gabiley also reported that some international development organisations have provided support during times of export bans and other shocks, that include incentivised livelihood and skills training, the purchase of animals (for subsequent distribution to very poor households during the Eid ceremony) and food aid. Pastoralists are clear, however, that they do not enjoy being overly dependent on humanitarian assistance, as this has limited long-term positive impact.

When traders divest their livestock business interests during times of crisis, they switch to other business interests, including trading in other goods and tea shops. One or two brokers in Burao also stated that they had invested in camels and had started small camel dairies. Other traders who had already purchased animals for the Hajj had *daabax* or sold locally to restaurants, butchers and others. Traders in Galkayo also reported that they had temporarily engaged in fishing, cropping, and the import of food products and oil from the Arabian countries, to sell in local markets.

It was, however, widely recognised by all traders that diversification was more difficult for smaller-scale traders and brokers who had more limited capacity and fewer resources. Such households were typically forced to change and simplify their diets and reduce the numbers of meals consumed daily. Several brokers responded that they were particularly vulnerable to livestock-sector shocks, as their entire livelihoods were dependent on the sale of livestock. For this reason, in times of shocks they reported that they sought to broker new and different markets both domestic and associated with more informal export routes.

THE IMPACTS OF THE RESTRICTED HAJJ 2020

Perceptions of different livelihood groups

The study team used a combination of focus group discussions and key informant interviews with different stakeholders to collect information and insights on the impact of the restricted Hajj 2020. The responses are presented in Table 2 using a severity colouring similar to that used in Section 2.2: orange for worst, yellow for very bad, dark blue for bad, light blue for bad but manageable, and green for manageable.

TABLE 2: PERCEPTIONS OF EXPORTERS, TRADERS AND PASTORALISTS CONCERNING THE RESTRICTED HAJJ 2020

| Berbera port | | | |
|--------------------------------|---|---|--|
| Year | Pastoralists | Exporters | Traders |
| 2020 (restricted Hajj) | Despite the ban, it was possible to sell some animals domestically | While domestic prices have been good, the export trade is reduced by more than 80% | Although volume of trade is affected, markets have not been closed and sales have continued |
| Bossaso corridor | | | |
| 2020 (restricted Hajj) | Local markets have remained functioning. The loss has been the export markets | Profits dropped by 20% compared to the previous year, as livestock prices have fallen | Livestock prices fell by 20% and food prices have increased, as have the prices of other essential commodities |
| South–Central–Garissa corridor | | | |
| 2020 (restricted Hajj) | Markets continue to operate, although at reduced capacity | Chilled meat export has been affected by travel restrictions, rather than by the restricted Hajj directly | Restriction of movement has affected transport of animals into terminal markets |

Different stakeholders ranked the impact of the restricted Hajj as yellow and two different colours of blue (or bad and bad but manageable). This finding appears to be at variance with other local perceptions. For example, a leading international charity has suggested that ‘The *Hajj* cancellation will have massive implications on the lives and livelihoods of the Somali population.’²¹ Despite this and many other similar forecasts, it appears, at least at the time of this study, that the impact was mitigated by above-normal *Guu* spring rains that provided adequate pasture and water and therefore supported normal and above-normal milk production. In brief therefore, there was adequate alternative food. Furthermore, as indicated in Table 2, pastoralists were able to sell some animals domestically at normal prices and in some areas into the alternative, informal export trade.

In addition to the discussions on the impact of the restricted Hajj 2020, different stakeholder groups were asked additional questions on the importance of the Hajj seasonal livestock trade. The responses of different stakeholder groups are presented here.

Views of pastoralists and agro-pastoralists

Pastoralists and agro-pastoralists interviewed in the Berbera port catchment recognised the importance of the seasonal Hajj trade and, as presented in Table 3, scored the income from these seasonal sales at around 40% of their annual income. They also reported that this year's income from seasonal Hajj livestock sales had fallen by a staggering 80%.

TABLE 3: IMPORTANCE OF HAJJ SALES TO PASTORALISTS AND AGRO-PASTORALISTS INTERVIEWED

| Annual income sources | Scores | Percentage of annual income | Average household Hajj sales declines in 2020 |
|---|--------------|-----------------------------|---|
| Sale of live animals – non-Hajj sales (domestic and other export routes) | 308 | 30.8 | |
| Sale of milk | 75 | 7.5 | |
| Sale of crops | 172 | 17.2 | |
| Sale of livestock fodder | 8 | 0.8 | |
| Hajj sales | 400 | 40 | -80% |
| Sale of breeding animals | 7 | 0.7 | |
| Remittances and loans | 15 | 1.5 | |
| Humanitarian assistance | 10 | 1 | |
| Small businesses | 5 | 0.5 | |
| Total | 1,000 | 100 | |

Despite these losses, respondents in Galkayo reported that prices had remained stable and that therefore, although they were unable to sell as many animals as they typically did, the animals they were able to sell were sold at normal prices. They also reported that they were confident they could continue to sell animals domestically and through non-Hajj-related commercial sales to the KSA and other countries in the Middle East. Respondents from the Gabiley pastoral group added the view that a great many people were involved in the Hajj export trade – pastoralists, brokers, vehicle hire operators (transporting livestock between markets), small- and medium-scale traders, and exporters – and that restriction would affect household incomes adversely, both immediately and in the medium–long term as well, if sales did not resume.

Agro-pastoralists from Galooley shared the view that, while the restricted Hajj 2020 was bad for livestock sales, they have been able to sell vegetables and crops as an alternate way to sustain their income. They were of the opinion that the current situation was not as bad as the 2000 or 2016 droughts, both of which had affected the whole country. With above-normal rains, they recognised that they were able to continue to herd their livestock and to wait to sell the animals at a later date, although at the time they mentioned that few traders were purchasing animals in large numbers.

Views of brokers, traders and exporters

Brokers, traders and exporters in Somaliland involved in the Hajj export trade reported that Hajj sales represented around 50% of their annual income (Table 4). They also reported that this year's loss of sales as a result of the restricted Hajj 2020, had caused a loss of three-quarters of their seasonal income. Perhaps not surprisingly, some traders from Burao expressed the view that the impact of the restricted Hajj 2020 was worse than those of previous import bans.

TABLE 4: INCOME SOURCES OF BROKERS, TRADERS AND EXPORTERS, SOMALILAND

| Income sources in a normal year | Scores | Percentage of annual income | Average restricted Hajj 2020 falls in business income |
|---|--------------|-----------------------------|---|
| Non-Hajj livestock export/ domestic sales | 495 | 33 | |
| Hajj sales | 750 | 50 | -75% |
| Remittances | 85 | 5.7 | |
| Other businesses – jobs, small tea shops, money exchange | 170 | 11.3 | |
| Total | 1,500 | 100 | |

In an effort to compensate for lost sales, some traders reported that they had purchased animals from Ethiopia to fatten them but, again, sales were mixed, and they had not as hoped been able to export them to other Middle East countries. Other traders reported, as also reported in the news media in July 2020, that three ships had been returned from Saudi Arabia leading to the loss of 1,000 sheep en route. They also stated that they are now re-exporting some of the same animals to Egypt, Oman, Bahrain and Yemen.

Traders and exporters at Bossaso port expressed the view that the restricted Hajj 2020 had not had such a severe impact on them, as livestock were typically exported to Oman, Yemen and UAE and that these exports had continued. Other livestock had also been sold domestically. Nevertheless, the same traders and exporters acknowledged that Hajj 2020 seasonal livestock prices were lower than in previous years.

CONCLUSIONS: IMPACTS OF THE RESTRICTED HAJJ 2020 ON DIFFERENT LIVELIHOOD GROUPS

Based on the information collected through this study, the impact of the restricted Hajj 2020 on different livelihood groups can be summarised as follows.

- **Poor and very poor households** – seemingly little or no impact from collapse of livestock sales on poor and very poor as households, as they have very few if any livestock. Indeed, it may be that some poor households may have benefited, while would-be pilgrims remain at home and may more likely share *zakat* or alms with the poor. Some aid agencies also purchased and distributed animals during Eid to support the local livestock markets and assist poorer households.
- **Agro-pastoralists** – there have been sequential above-normal rains in the region,²² with the result that recent harvests have been above normal, and household food security and resilience have increased. On the whole, livestock prices across Somalia have remained stable, and agro-pastoralists have been able to sell some animals at least domestically and through the commercial trade to the Middle East and with reduced competition from livestock typically sourced from Ethiopia (as this trade has collapsed as there are no onward exports).
- **Pastoralists** – in Somaliland in particular, this is potentially the most affected livelihood group, being dependent on livestock (and remittances). However, the above-average recent seasonal rains have resulted in adequate pasture and water for unsold animals, albeit with inevitable increased costs for herding and livestock medicines. Furthermore, prices are stable as animals are being sold domestically, through new and emerging trade routes and to the KSA through the non-Hajj commercial trade. In Ethiopia, some animals are being transported and sold in urban areas in the highlands.
- **Traders** – it appears that larger traders and exporters are cushioned by alternative income sources and some are already reporting new and alternative domestic and export markets – in particular as there are increasing restrictions on exports to the Middle East from Australasia. Exporters are also continuing to source live animals for the non-Hajj commercial trade in KSA. In contrast, small-scale traders are more seriously affected and, with more limited capacity and fewer resources, are one of the most affected stakeholder groups.

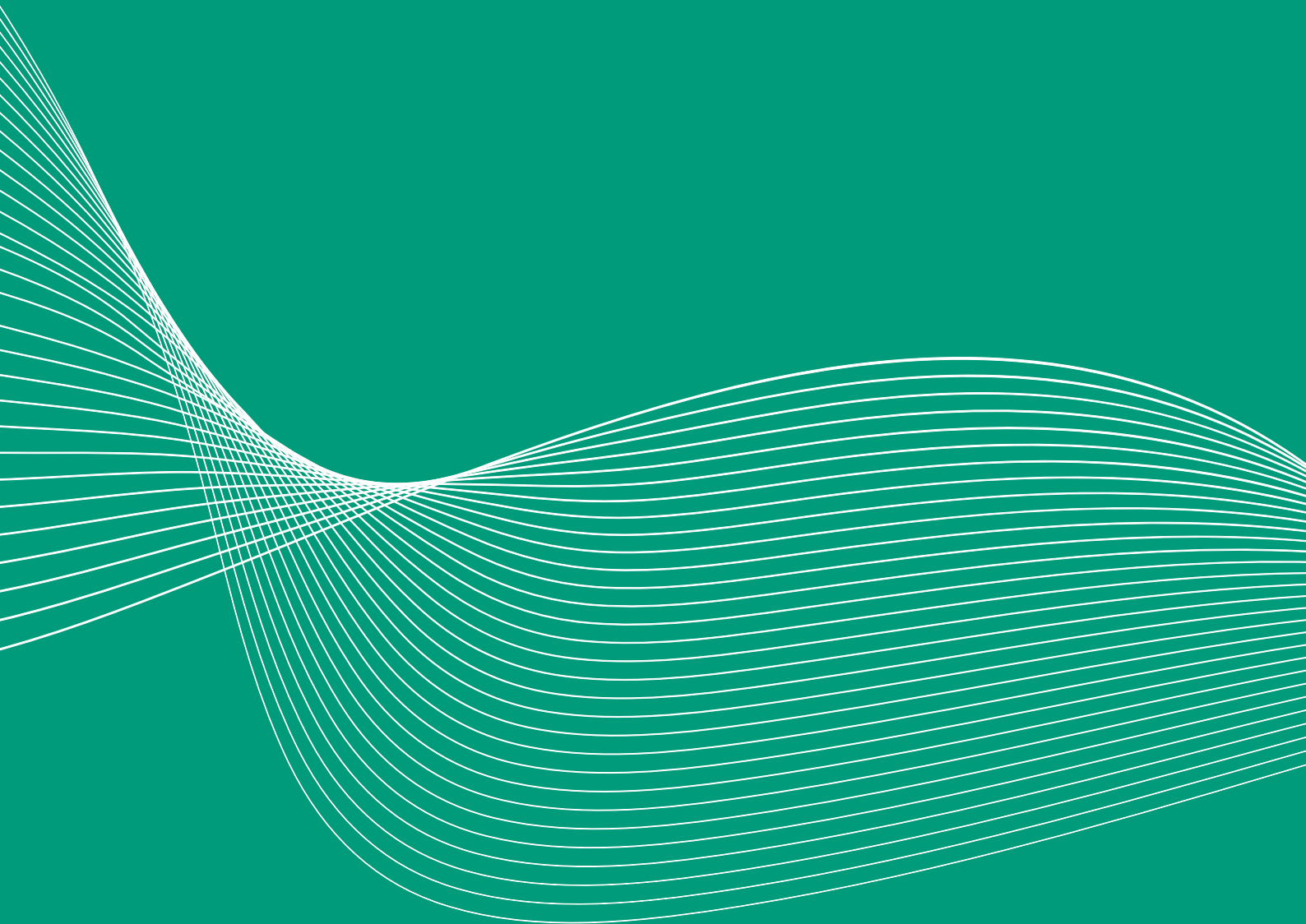
- **Livestock trade ancillary workers**²³ – typically young men and women drawn from poor households, these ancillary workers are probably the most seriously affected livelihood group. Interestingly, older ancillary workers expressed the view that the restricted Hajj 2020 did not have the same dire impacts as the RVF ban of 1998–99, when all livestock markets were closed. Some also expect that the KSA commercial trade will pick up and that exporters will identify other export routes and markets and that, as this happens, there will be work again for ancillary workers. This said, all fully recognise that the Hajj 2020 market is now lost.



Ethiopian ox-fattening livestock fair. Photo: ILRI

SECTION 3

**LESSONS LEARNED
FROM EXPERIENCES
ELSEWHERE**



LESSONS FROM CLOSURE OF THE BORDER BETWEEN CHAD AND CAR, 2014

Background

A landlocked country in Central Africa, Chad covers an area of 1,284,000 km² with an estimated population of 15.8 million in 2019, of which a majority, more than 65%, are under 25 years old. Livestock represents Chad's second most important export sector after oil and other extractive industries (Trading Economics, 2020). Cattle and camels are the main species exported (CEMAC, 2013), and the sector as a whole is estimated to contribute some 27% to GDP (Saleh, 2019). Most livestock (around 80%) is managed by mobile pastoral systems (nomadic, transhumant or semi-transhumant) which co-exist with sedentary livestock production everywhere except in the northernmost Sahara Desert regions.

Development of regional trade is seen to offer good opportunities for the growth of the livestock sector in Chad, through improvements in productivity and development of market systems (FAO, 2012). Chad falls within the most easterly of the three main livestock trade basins in the West Africa Sahel (OECD, 2008) which extends across Niger, Chad, Benin, Nigeria and Cameroon. Nigeria is the main pole of attraction for livestock products in the basin. It accounts for 50% of beef consumption in the Economic Community of West African States (ECOWAS), and imports 25% of this.²⁴ The Central African Republic (CAR) and Cameroon are attached to this basin because, while most trade is with Nigeria, there are some less important flows from Cameroon to Gabon and CAR to Congo. There are less frequent flows (mainly camels) to North African countries (Libya, Egypt).

A process of regional integration in Central Africa has been underway since the mid-1960s, leading to the establishment of the Central African Economic and Monetary Community (CEMAC, or *Communauté Economique et Monétaire de l'Afrique Centrale*) in 2018 (FAO, 2012).²⁵ Legislation to enable the free movement of livestock and animal products within the region, including livestock passports and international transhumance certificates, was introduced from 1991 onwards. Legislation governing cross-border and internal movements of livestock is outdated in most CEMAC countries including in Chad and CAR. A strong and influential network of civil society organisations, from Mauritania to Chad, champions the strategic importance of mobility for pastoral production systems in the Sahel. Chad has been included in ECOWAS initiatives despite being outside the West African economic community.

Chad, like many countries in the Sahel, is affected by chronic food and nutritional insecurity and remains among the least developed, despite an abundance of natural resources: 76% of the population of Chad lives in or is vulnerable to severe multi-dimensional poverty (OECD, 2008). Some 80% of the population lives in rural areas, and agro-pastoral production remains a major livelihood component for most households. Climate change puts agro-pastoralists under pressure to seek pastures further south and at the same time to increase the area of land used for crops. For pastoralists, the movement of livestock across Chad and its borders is further

constrained by government policies relating to protected areas (livestock ban), agriculture (mechanisation), private investment and mineral exploitation (land/resource expropriation) (UNDP, 2019).

The security situation in Chad was already poor before the 2013 crisis (when the government of President Michel Djotodia officially took over), marked by violence, destruction of crops, theft or wounding of livestock and kidnapping of children. The 2013 crisis led to a total upheaval of the geography of pastoralism. Three-quarters of herders found themselves within the rebel zone. Thousands were killed, wounded, disappeared or displaced. Some young men joined the local militia groups as attacks and armed roadblocks made transhumance and trade more dangerous and more expensive.²⁶

At the same time, the security situation was deteriorating on alternative trade and transhumance routes. Armed thefts of livestock and kidnapping were reported along the Chad–Cameroon border. Livestock worth several billion Central African francs (FCFA) was estimated to have been stolen by Boko Haram in 2014. There was an escalation of violent incidents between resident communities and herders in Nigeria linked to the availability of small arms (Babaloa and Onapajo, 2018).

Impacts of closure of the border between Chad and CAR

On 12 May 2014, the Chief of State, Idriss Deby announced that the border between Chad and CAR was closed to all movement of people except Chadians wishing to leave CAR for good. He announced the decision ‘for security reasons’ during a visit to the south of the country (RFI, 2014).²⁷ However, closure of the Chad–CAR border did not completely stop cross-border movements of livestock, as Dr Hussein Ahmet Malmal, Minister of Livestock in CAR admitted in an interview with RFI in December 2019 (RFI, 2019a). Rather, the minister observed, ‘it has become an armed transhumance’, and even more difficult.

Border closures also tend to create conditions for smuggling to flourish, according to conflict specialists at the French research agency CNRS (Jeune Afrique, 2019), referring to the closure of Chad’s northern border with Libya in May 2019. Reasons include the importance of trade to local economies and ethnic ties between traders and border personnel. A 2002 study of the impact of regional integration policies on livestock trade in Chad found that, in response to increased transaction costs, long unpredictable negotiations and incoherent practices at official border crossings, traders had organised themselves into more powerful groupings, often along ethnic lines, able to broker deals with border officials to under-report livestock numbers and minimise tax payments in return for bribes (Duteurtre and Koussou, 2002).

Amnesty international expressed concern about the impact on refugees fleeing violence in CAR: ‘The Chadian government’s decision to close the long border that borders the south of the country will have dramatic consequences for the men, women and children fleeing the violence in the Central African Republic which has worsened for months’ (Amnesty International, 2014), and ‘More than 360,000 people have already fled the Central African Republic to seek refuge in neighbouring countries, many of them from December 2013, when the current crisis worsened and began to give rise to war crimes and crimes against humanity, in a climate of ethnic cleansing. Closing the border will cut off a vital line of communication for civilians seeking refuge in Chad. Central African Muslims have fled in droves the atrocities

in the direction of Chad, which has received, according to the latest United Nations data, more than 70,000 refugees.’ However, this does not seem to have happened, at least not as much as was feared.²⁸

The main effect of restrictions on movement that almost all respondents mentioned is the increased concentration of people and livestock in certain areas. These concentrations of people and livestock put increased pressure on pastoral ecosystems, adding to pre-existing stresses from climate shocks, agricultural expansion, animal disease and government policy banning livestock from protected areas. Normally, access to and management of natural resources and rangelands would be managed through customary institutions but, particularly in areas that have experienced conflict, unrest and stress, these can have broken down or weakened, creating a situation of ‘open access’ without rules or regulations of use. This can lead to over-exploitation of the resource, and eventually degradation or loss.

The outcome of this additional pressure has been increased conflict involving all groups, including pastoralists and agro-pastoralists. Conflicts between pastoralists are typically triggered by incidents related to accessing water. Between pastoralists and agro-pastoralists, sources of conflict include: livestock theft, damage to crops, agricultural occupation of pastoral space and refusal to allow access to crop residues or natural pastures. These increasingly frequent conflicts are mostly settled informally, either directly between the parties concerned or via the mediation of traditional authorities. Settlement may involve payment of a fine or compensation for damage caused. When one party takes the dispute to the authorities (administration and justice), it becomes more challenging to reach a lasting settlement. Some respondents suspected that administrative rulings tend to favour pastoralists (through the influence of wealthy or powerful livestock owners) in which case the field owners refuse to accept them. Others were of the opinion that pastoralists in general refuse to follow state-issued directives (e.g. using non-authorized corridors) or technical advice.

Reduction in trade also reduces employment opportunities, especially for seasonal work (such as for livestock carriers and handlers). In a context of already high youth unemployment, this may encourage more distant and risky migrations (e.g. to Libya or to the artisanal gold mines).

Local responses to the closure and its impacts

Civil society responded to shortages of grazing and conflicts caused by concentration of people and livestock. It was not possible to conduct individual interviews with herders to see how they personally had managed, though it was mentioned that some people continued to cross the border and armed themselves more heavily. Several sources mentioned young men choosing to join armed groups. Civil society organisations have been involved in resolving a small number of local conflicts over access to resources.

Herders have been demanding that the border with CAR be re-opened and, furthermore, that they be left alone to manage their own problems. ‘We are asking for the border to be reopened and for livestock corridors to be secured on the Chad side as well as in Central Africa’, declared Ahmet Adoum Abdelfati, General Secretary of the Chadian Livestock Confederation interviewed by RFI in December 2019, ‘in particular we call for the immediate end to interference by politicians and men in khaki. The herders and farmers on this axis have always acknowledged each other. They have their own strategies to resolve any issues’ (RFI, 2019b).

Government action and response

Closing the border with CAR was a response by the government of Chad to the risks of growing insecurity. This followed accusations of Chad meddling in the Central African crisis. At the same time, Chad withdrew its troops from the UN mission MISCA. Respondents did not mention any specific government actions to address the subsequent effects of this policy on pastoralists and cross-border traders. In 2019, Chad also closed its border with Libya (affecting the camel trade to North Africa) and shortly afterwards Nigeria closed its border with Chad and other neighbouring countries.

In December 2019, there was a meeting of the Joint Commission Chad–CAR, with CAR asking for borders to be opened. Agreement was reached on joint management and protection of border areas. Chad said that it would need to see progress in the security situation before re-opening the border. In a side meeting, the Central African Minister of Foreign Affairs met Chadian President, Idriss Deby, to discuss the request for extradition of the Central African rebel leader, Abdoulaye Miskine, detained in Chad for several weeks. The rebel leader has dual nationality and committed acts in Chad and CAR, so the situation required a solution acceptable to both governments.²⁹

Response of other actors including international aid agencies

Funded by the United Nations Peacebuilding Fund, FAO and the International Organization for Migration (IOM) have been working to strengthen the dialogue between Chad and CAR with a view to improving transhumance management (Reliefweb, 2020). Actions include training dialogue committees, mapping transhumance corridors and rehabilitating pastoral infrastructure. They have been supporting stakeholders, on both sides of the border to air their grievances but consider that any chance of real progress remains blocked until the two states reopen institutional dialogue on this topic. This was a regular occurrence in the past but has been halted for several years, according to Dr Bakary Cissé, coordinator of the Chad–CAR transhumance project (FAO–IOM) (RFI, 2019c).

In 2014, the UNHCR supported an emergency response for 18,000 new refugees from CAR; and profiled and documented 25,584 out of 60,000 Chadians who had returned from the CAR. Some 6,000 emergency shelters were built for Chadian returnees who did not have any remaining family ties. Efforts continued to support the growing urban refugee population in Chad, which expanded from 450 to 4,000, due mainly to arrivals from the CAR.³⁰ As of 31 December 2019, Chad was host to nearly 739,400 people of concern, including some 442,700 refugees (75% from Sudan, 21% from CAR and 3% from Nigeria). There were an estimated 170,300 IDPs in Chad by December 2019.

Regional projects have continued to promote pastoralism in the Sahel. For example, *Projet Régional d'Appui au Pastoralisme au Sahel pour la République du Tchad (PRAPS-TD)* is funded by the World Bank and coordinated at regional level by the Permanent Interstate Committee for Drought Control in the Sahel (CILSS). There is also continued support for the integration of regional trade. For example, in 2019, the ADB Strategy for Regional Integration in Central Africa (2019–2025) was launched, based on two main axes: 'the first strengthens regional infrastructure (focus on electricity networks, transport and ICT), while the second provides support for reforms of the development of intra-regional trade and cross-border investments'.³¹

Key lessons from this case

Respondents were asked to share the lessons they have drawn from the border closure and other restrictions on movement and to suggest actions to address the effects this has had on pastoral and agro-pastoral livelihoods. This has been supplemented by our own recommendations based on lessons learned.

- Pastoralism and transhumance are socioeconomic, cultural and ecological realities in Chad; climate change and political crises have had a severe impact on the sector. It is essential to secure livestock production systems and strengthen their resilience to shocks because of the important role they play in the economy of Chad, and in securing the livelihoods of a large proportion of its population.
- Progress in securing pastoral systems in Chad is very fragile. Legislation is out of date and needs to be adapted to the current climate and security agendas. Strong mobilisation of actors will be needed to seize the political opportunities offered by regional integration, supported by the United Nations.
- For livestock owners, herders and traders, it is essential to restore internal and cross-border mobility – to ease pressure on pastoral resources, reduce conflict and improve livelihoods. Security in border areas requires special attention.
- Conflict over access to pastoral resources is best managed through traditional leaders and local mechanisms. Civil society organisations can support this process, for example by delivering training to local mediators and running communication campaigns in favour of peaceful co-existence, but they need skills training and resources to do this effectively.
- Conflict prevention is the entry point, through securing access to pastoral resources. In particular, the number and quality of water points needs to be improved in areas where pastoralists camp and graze.
- Improvements in basic services for livestock and people (such as rural advisory services, human and animal health services) must accompany investments in pastoral infrastructure.
- For civil society organisations, economic development support should focus on helping all types of producers (crop/livestock; transhumant/sedentary) to develop small agro-businesses (e.g. agro-vet services, livestock fattening, milk production, crop processing) and to develop the related market systems. One organisation is considering establishing a community initiative fund, adapted to the needs of rural producers and targeting young people in particular, to help address the issue of youth migration to artisanal gold mines and neighbouring countries.
- Government economic policy is also private-sector focused, and ongoing and planned initiatives include: support to improve the productivity and competitiveness of meat and milk supply chains (including industrial abattoirs and also business development support for small- and medium-sized enterprises), production of veterinary medicines and animal feed, quarantine centres to deliver healthy animals of a good weight to industrial abattoirs, and construction of market infrastructure (refrigerated storage and transport).

- There are experiences and good practice from across the drylands that can be shared and strengthened. These include networks of producer organisations across the Sahel, the Pastoral Platform in Chad, the inter-ministerial transhumance committee in Cameroun, meetings between donors and the livestock sector, national and regional livestock development strategies, higher education curricula (e.g. the Master's degree in pastoralism), regional and national information systems (e.g. SIPSA (CIRAD, 2014), REPIMAT (PRAPS, 2020)) and social agreements and local conventions.

We suggest three key considerations for policy-makers.

1. The fundamental area of policy debate in Chad relates to cross-border transhumance and trade in livestock. The government favours moving to a situation where only meat and meat products are exported. For pastoralists and livestock traders, this is impossible for a whole range of socioeconomic, cultural and ecological reasons, and it is imperative to protect and restore livestock mobility, despite the risks involved.
2. The government priority in Chad is to diversify and develop the economy through the agricultural sector (crops and livestock), which provides an opportunity. Research into the actual or likely outcomes of different strategies and policies can inform and guide key decisions. Is it better to invest in meat-processing facilities near the production area or near the market? How effective are border closures as a policy to improve security? What is the best way to protect agricultural livelihoods when mobility and market systems are disrupted, for whatever reason?
3. For the results of research to be used, it is essential to develop the capacity and willingness of all stakeholders to engage in policy debate. Spaces (platforms) for learning and discussion are needed at all levels: from regional level, to facilitate inter-state dialogue, down to local level, to allow communities to identify consensual solutions to issues of resource governance and conflict management.

LESSONS FROM DISRUPTION OF LIVESTOCK MARKETING IN SUDAN SINCE 2000

Background

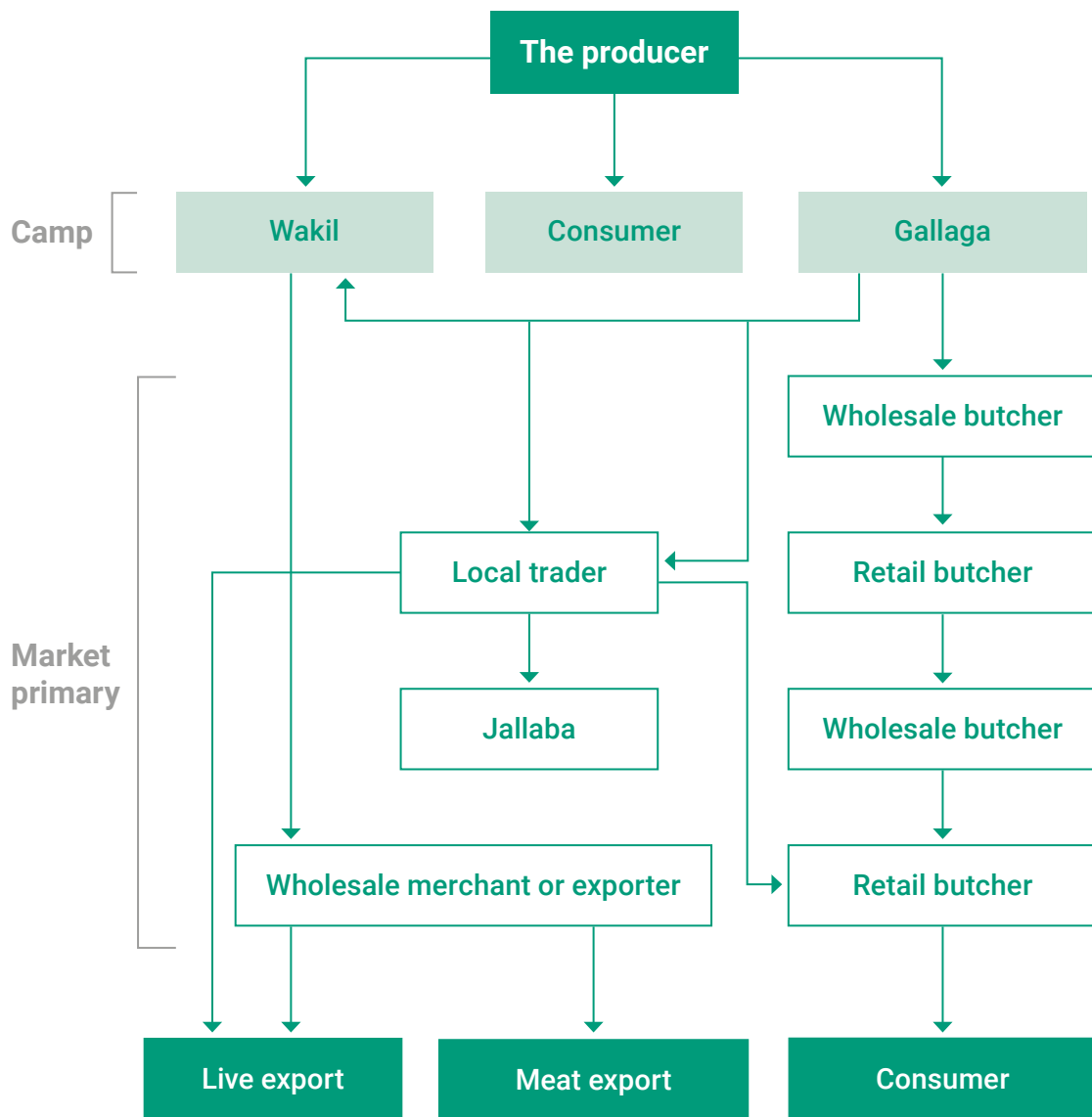
Livestock is raised across much of Sudan, and represents the bulk of agricultural output by value. Estimates of numbers are, at best, informed guesses: since 1974 no census has been undertaken. FAOSTAT records the following numbers for 2016/18: camels 4.8 million, cattle 31 million, goats 32 million, sheep 41 million and donkeys 7.6 million. For a country with a total human population of 42 million in 2018, and a rural population of 27 million, the numbers of livestock are large and likely to be even larger than these estimates.

Sudan exports significant amounts of its livestock, with 80% or more heading for Saudi Arabia and bringing in around \$400 million per year. Saudi Arabia takes in around 14% of Sudan's export, almost all being livestock. Exports increased five-fold between the early 2000s and 2010, although the price per animal has been relatively stable – around \$100 per sheep. Other animals are also exported and in recent years there has been an increase in camels in particular, many of which are trekked or trucked to Egypt. Some sheep meat is also exported. In the 2010s, the value of sheep meat recorded was around \$30 million, while the value of live sheep exported was more than \$200 million.

The trade in exported sheep has become ever larger and more valuable. Evidence of its value can be seen in the sheep prices reported as normal in recent years: a herder selling ten large sheep today might expect to be paid \$2,500 or more. The livestock supply chains are well documented in Babiker (2007) and summarised in Figure 3.

Studies suggest that the chain is effective and relatively efficient – in the sense that no one in the chain seems to make more than normal profits on trading. Most transactions in the chain depend on the trust of personal relations at all steps from the local agents who buy from herders through to the port agents in Sawakin. Livestock marketing has been improved through time, although by incremental changes rather than radical steps. For example, roads have been asphalted, and quarantine and vaccination facilities have been created. Some evidence suggests that increasingly some of the lean animals bought from herders are then fed on pastures and feed to fatten them up before slaughter or live export.

FIGURE 3 LIVESTOCK SUPPLY CHAINS



Disruptions to trade due to the 2007 outbreak of Rift Valley fever

Rift Valley fever (RVF) is a viral disease first identified in 1931. The virus is transmitted by mosquitoes and infects livestock. For livestock, its main effect is to cause abortions in pregnant animals. RVF is a notifiable disease for the World Organisation for Animal Health (OIE). It can also spread to humans, manifesting itself in symptoms similar to influenza, with death rates as high as 20%. Human cases tend to show up before it becomes apparent that local livestock are already infected. It is endemic to East Africa, from where it has spread into the Horn of Africa and Arabia. Outbreaks very frequently lead to a ban on imports of live animals from the affected country.



Camel traders, Ethiopia. Photo: USAID/Kelley Lynch

In September 2007, cases of human RVF were seen in central Sudan. A few weeks later, RVF was detected in livestock in White Nile State. By October 2007, the livestock ministry had informed the OIE of the outbreak. To control it, the government restricted livestock movements, kept animals under surveillance in the most affected states, vaccinated stock in parts of Upper Nile and White Nile, sprayed insecticides against mosquitoes, and put restrictions and controls on abattoirs. By early 2008, the outbreak was under control. Almost 700 human cases were identified and almost one third of these, 222, were fatal. Losses of livestock were not recorded, although it is thought that many sheep and goats died or suffered abortions. A ban on imports of livestock from Sudan was introduced in November 2007 by Saudi Arabia and was lifted only by August 2008. More details of the outbreak can be found in Hassan et al. (2014). The government of Sudan, in concert with OIE, also took measures to control the outbreaks. This included restrictions on movement, tighter controls on abattoirs, and monitoring and vaccinating stock.

There was a significant impact of the outbreak and subsequent ban on imports from Sudan by Saudi Arabia on the livestock trade, and as a result on the livelihoods that depend upon it. Since most of the animals came from the rural areas of Sudan, one would expect the ban to have the most severe impact on rural households. Interviews with eight traders and eight herders undertaken during August 2020 corroborated this expectation. Many saw the ban as the worst disruption they had faced in their lifetime (compared to the ban due to RVF in 2007/08 and the current restrictions due to Covid-19/restriction of Hajj), in large part because the ban by Saudi Arabia importing live animals lasted so long – almost a year. One informant reported that slaughtering for local sale was also suspended but this was not corroborated.

Some traders lost their capital, especially those who had shipments of sheep turned back, and some dropped out of business altogether (YO, OM, personal communication, 2020). They turned to either raising livestock, farming or trading other goods (KON, MH, personal communication, 2020). Some were able to return to trading, although building up capital took

years in some cases. Others left the sector and were never seen again (MH, AH, personal communication, 2020), with some migrating to Saudi Arabia and other countries in the Gulf looking for work (EA, personal communication, 2020). Some intermediaries who could not pay suppliers were sent to prison (AH, personal communication, 2020).

As two traders recalled:

The 2007 ban was catastrophic for us because it lasted such a long time. Due to the long-time of the ban I lost a big part of my capital and after a while I used the remaining of my capital to trade in crops. Others lost all of their capital and, facing money claims from local traders or from producers, many of them disappeared. (MA, personal communication, 2020)

This was most difficult time we had in our work ever. I was one of the most negatively affected traders in East Darfur. I lost my capital because my shipment of 2,000 sheep was sent back to Sudan by Saudi Arabia. My plan was to pay the 50% to the supplier after exporting the sheep. Therefore, after paying all expenses I lost all of my capital and dropped out of business. I left the market for seven years... and remained jobless for some time. I sat in my house jobless, where I was thinking and planning about what to do next. With the support of my colleagues and my social network, I returned to work as an agent with a big firm... After about seven years I gradually returned to the market as a small trader and now I am back to my early situation as one of the main traders in Eddein. (SM, personal communication, 2020)

For herders, the main impact was a fall in prices of livestock (by around 50%), with herders forced to sell despite this in order to feed their families. In real terms, between early 2007 and late 2008, sheep prices in Omdurman market for example, fell by 29% (Bushara and Abdelmahmod, 2016). At the time, most herders relied solely on livestock for their livelihoods, but since then many have diversified to spread the risks of the volatile market and now grow crops as well (EM, OM, SA, personal communication, 2020).³² Some who were transhumant at the time have since settled (MS, personal communication, 2020).

Other herders, however, were less affected: notably, those who were not trading to Saudi Arabia at the time and used their livestock for home consumption and/or for sale more locally. They said that they saw little impact of the ban, including no resulting conflicts or tensions (EM, OM, personal communication, 2020). Another herder reported:

We heard about [the RVF outbreak] from the news. It didn't affect our animals. Maybe in other parts of the country. I remember there were high restrictions on slaughtering in the slaughterhouse. However, people continued to consume meat. There was a huge reduction in prices. It took about one year to lift the ban. I can remember that sheep prices were reduced by 60%. (ME, personal communication, 2020)

In sum, the ban resulting from the 2007 outbreak was costly. For most working with livestock, there was no relief from the ensuing disruption. Traders lost capital and went out of business, at least temporarily. Herders saw prices of livestock fall to as little as one third of the previous prices. Some herders reported that they could shelter in semi-subsistence pastoralism; but others complained that they had few alternative sources of income then, and so were badly affected by the near collapse of the livestock market.

Disruptions to trade due to the 2019 outbreak of Rift Valley fever

In September 2019, RVF was detected among goats in Red Sea State (and reported to OIE by veterinary authorities in Sudan). In October, human cases were reported as well. Cases of both human and livestock disease were also seen in River Nile State. Although the number of cases was low – 74 tested positive in labs – in mid-October, the government of Saudi Arabia banned imports of livestock from Sudan. The ban lasted until late January 2020. Some felt that the government acted too quickly to announce the disease and without sufficient investigations (AbH, personal communication, 2020).

Some traders considered this interruption to be the worst that they had experienced (OA, SS, MH, AH, personal communication, 2020). Not only did they have to cope with the ban on imports, but they also experienced large rises in the prices of inputs, transport and services due to inflation and other factors. Moreover, the recent protests against the Bashir regime – beginning in late 2018 and leading to its fall with subsequent turbulence over a transition lasting until at least late 2019 – further disrupted trade. The transitional government was not well placed to respond to the ban.

As in 2007, traders had little defence against the trade blockage and had to suffer the losses. Some had received deposits for the animals but did not receive the full payment when the sheep were returned from Saudi. This meant that those further down the value-chain (smaller traders and producers) did not get the money owed to them either and were worried about being arrested (AH, personal communication, 2020). Intermediaries and agents shifted to crop or other marketing, working as brokers. Some traders dropped out of trading, resuming when conditions allowed (SS, AO, MA, personal communication, 2020). Others stayed in Khartoum or went to Libya looking for work (ME, personal communication, 2020). This lost them the status they received as traders.

As traders described:

The ban was announced in a difficult time when there was a huge rise in prices, which means we invest a lot of money in feeding and fattening of cattle. My trade in cattle is mainly with some companies working in slaughtered beef in Khartoum and I also sell in the local markets for butchers and middlemen. During the ban the work with them was stopped and there was no alternative. Due to a stop in trade and the cost of feeding the cattle in my hand I lost a lot of money. We are... sitting... and waiting to hear about the lifting of the ban.
(EA, personal communication, 2020)

This is catastrophic year for me. My shipment was sent back from Saudi Arabia. Other traders were also affected and about eight ships were sent back to Sudan. When the ships arrived back to Sawakin, the port had no facilities to accommodate such a big number and therefore a big proportion of the sheep died. *(SS, personal communication, 2020)*

Just before the ban, I bought 3,500 heads of sheep and brought them to Khartoum for fattening and prepared them for export. All of a sudden, I heard about the ban. I normally keep the sheep for 30–45 days for fattening. During the ban I kept them for more than 60 days before taking the decision to sell in the local market with low prices. I estimate that my loss was about 40%. This caused huge damage to my activities. Now I am working at a minimum and I had to fire 70% of my skilled labourers to reduce the cost of managing the business. *(MH, personnel communication, 2020)*



Biernuok Cattle Camp, outside Bentiu town in northern South Sudan. Photo: UNMISS/Nektarios Markogiannis

For herders, the disruption resulted in fewer sales of livestock and at lower prices. Those who had sheep returned alive were the lucky ones – others whose sheep were not returned and/or had died had to suffer the loss. Herders also reported that they were hit by large rises in the prices of inputs, transport and services, resulting in higher costs for producers to get their livestock to and through markets (as above) (EM, OM, SA personal communication, 2020). Herders responded by selling more livestock at lower prices to feed the remaining herds (SA, MS, personal communication). Indeed, as soon as word arrived of ships being turned back from Saudi Arabia, the prices started falling throughout the country to as much as 50% (AbH personal communication, 2020).

Where they were able to, herders held back their livestock and took up other jobs such as artisan gold-mining (OM, AbH personal communication, 2020) or trading in non-timber forest products such as gums and resins (SA personal communication, 2020).

Statements from herders include:

This is relatively short, about four months... we have alternatives and it is mainly cultivation. The most negative impact was on traders. Producers practising farming besides animal raising are less affected because they have alternatives. Some traders also change the specialisation and work on crop trading.

(EM personal communication, 2020)

During the 2019 ban, I can estimate the loss of my sheep as about 20%. This is because of radical increase in the price of different inputs we need and at the same time we have to sell our sheep at low prices. Transporting one head of sheep from local markets to Elkhawi increased from 10 to 100 SDGs. Also, the transportation increase [of people] from 150 to 1500 SDGs per person. This happened because of a lack of fuel in the area... Animal drugs also increase by six times. In 2019 and 2020, I have to deal with it by reducing the trading and being more herding-oriented. *(MS personal communication, 2020)*

In recent years there is trend of more numbers of herders starting to be engaged... in cultivation. I think that this is due to the huge increase of the cost associated with animal raising. *(ME personal communication 2020)*

In order to withstand the situation and survive, we have to be flexible. During bans I used to trade in cash crops such as groundnut and gum arabic between Elkhawi and Khartoum. *(SA personal communication, 2020)*

Some of the herders reported that their community and local safety nets still offered some compensation to those losing their livestock (AbH, personal communication, 2020).

For middlemen and herders affected by bans, they can get some kind of support from their network or from their relatives and kinship. For example, in our community in Elkoma village, we try to compensate those negatively affected by bans by sharing across the community and asking people to contribute by providing a small number of heads [of livestock] or even one head from each. The collected heads will be given to the traders or middleman who lost his herd or capital. This practice is common among relatives and kinships in our area. (ME, personal communication, 2020)

In some communities, however, such social solidarity had been lost, particularly where there are mixed ethnic backgrounds and/or new migrants into the community, or more traders than herders (OM, personal communication, 2020) or in a market situation where people come from different backgrounds. Social support may still be practised on a limited scale among close friends and networks (MS, personal communication, 2020).

In sum, herders experienced lower prices for their livestock in 2019, which, combined with reports of much higher prices for drugs, fuel and transport, meant reduced earnings from livestock. Few herders had any protection from these effects, although several were less affected than they were in 2007 because they had other sources of income, mainly from crop-farming.

Lessons learned

The livestock marketing chain from rural areas of Sudan to Saudi Arabia has proved resilient despite the temporary bans of imports to the Kingdom due to RVF. Some key trends seen include diversification of livelihoods of those involved in the chain, including herders turning to crop-farming. The implications of this for the environment, land-use trends and pastoral access to land and resources is not known and would be an interesting area of investigation.

- Exporting sheep from Sudan to Saudi Arabia is a growing and valuable trade. An effective marketing chain has been created by traders that recruits sheep from places as remote as Darfur and takes them 2,000 km to the Red Sea ports.
- The trade, however, is vulnerable to significant disruptions. Since 2000, at least three major shocks have been experienced: Rift Valley fever outbreaks in 2007 and 2019 that led to Saudi Arabia banning imports of live animals from Sudan, and the 2020 collapse in demand for live sheep resulting from the restricted Umrah and Hajj.
- When such disruptions occur, traders incur heavy losses that often bankrupt them. Herders see prices for their stock fall by 30% or more. Neither traders nor herders have protection from these effects, other than their own savings and assets. To a limited extent, in close-knit rural communities, some support may be offered by kith and kin to those worst-affected by such shocks.
- The sheep marketing chain is, however, resilient. Once the disruption ends, trade not only revives to former levels but has grown over time.

Three considerations for policy-makers stand out.

- 1.** Given how damaging epizootic disease can be, public measures to prevent outbreaks may have a high value compared to their cost. Government does try to prevent outbreaks, and herders and traders understand the need for quarantining and vaccinating stock animals entering the export marketing chain. It may be, however, that increased measures would be worthwhile.
- 2.** Herders and traders have little protection from the consequences of disrupted trading and suffer significant losses to the point that traders often go out of business. Hence there may be scope for creating either a mutual fund or taking out formal insurance that would pay compensation to those contributing in the event of such shocks. For example, in return for contributions to a mutual fund, or premia for insurance, pay-outs might be triggered by falls in the price of livestock on the main domestic terminal market in Omdurman.
- 3.** In the longer run, there may be scope to diversify exports of livestock from Sudan, perhaps by local slaughter and air-freighting chilled meat to markets in the Near East. Some private initiatives to do this have been reported, but the scale so far is small.

All of these three suggestions would require additional study to confirm their feasibility.

SECTION 4

**CONCLUSIONS AND
RECOMMENDATIONS**





Travelling the arid landscape of Ethiopia. Photo: Morgana Wingard/USAID.

CONCLUSIONS

Live animals have been exported from the Horn of Africa to the Middle East for many years, through well-established trade routes. As a result of the oil boom in the 1960s, and increased demand, the trade has grown significantly over the last 50 years to become one of the world's largest, live-animal export trades. Despite its impressive scale, the live-animal export trade is vulnerable to shocks – conflict, epizootic diseases and drought – with the result that seasonal flows of live animals through specific Somali ports may be reduced to a trickle. Not surprisingly, severe market shocks have a disproportionately negative impact on poorer agro-pastoralists and pastoralists who are more dependent on seasonal livestock sales. Similarly affected are poorer brokers, trekkers, loaders, transporters, feed and water providers and petty traders, café and tea-shop owners and other ancillary workers who engage with and are dependent on the livestock sector for the bulk of their livelihoods. In contrast, large-scale and wealthier traders and exporters are typically the least affected, as they have greater capacities and resources and are better able to diversify their business interests.

There is broad consensus across the different stakeholder groups we interviewed that the 1998–99 RVF ban was the worst market shock in history. Furthermore, there was general consensus that the 1998–99 ban had a greater impact on livelihoods than the impact of the restricted Hajj 2020, at least at the time of the study. This is because the 1998–99 ban resulted in closure of all markets – both domestic and export, and for an extended period. This was not the case with the restricted Hajj 2020, as domestic and alternative export markets continued to function, albeit with a significantly reduced volume. Importantly too, prices remained reasonably buoyant during the restricted Hajj 2020 sales season. Functioning alternative markets and stable prices, coupled with above-normal rains that have benefited both pastoralists and agro-pastoralists, have all helped to mitigate the impact of the restricted Hajj 2020 market shock.

RECOMMENDATIONS

Short-term programming

- **Do no harm** – with a long history of adaption and resilience, above-normal rainfall, and functioning domestic, alternative markets and the anticipated return of the non-Hajj commercial KSA trade, pastoralists and traders are adapting to the restricted Hajj 2020. While it may be that development and humanitarian partners can further help pastoralists and traders to adapt, it is strongly recommended that livestock markets are allowed to recover and develop without interference. Intervention could do more harm than good in the longer term.
- **La Niña alert** – in view of the recent La Niña alert and the known implications for increased rainfall variability and pastoral drought, it will be important to monitor short- and medium-term changes in rangeland production and productivity. Above-normal livestock holdings – the result of the loss of the Hajj market – may result in increased levels of risk to livestock pasture-water shortages if the rangeland conditions deteriorate and become droughted. Such monitoring can be done nationally through use of satellite imagery and the Normalised Difference Vegetation Index (NDVI). With the risk of a severe La Niña and drought in early 2021, it would be helpful to develop a La Niña anticipatory action plan with pastoralists and livestock sector specialists that will include support for accelerated off-take and destocking if signs/indicators of La Niña start arising. Local-level monitoring of rangeland conditions and change can be part of this.
- **Monitoring terms of livestock–cereal exchanges** – in view of the same alert and the possibility of a second restricted Hajj 2021, if an efficacious vaccine against Covid-19 is not then widely available, it will also be important to monitor livestock prices and cereal–livestock exchange rates that are central to food security in cereal-deficient pastoral areas. Such prices and exchanges serve as an effective early warning systems indicator for impending drought and other crises. In the event of a significant deterioration, governments and international partners may need to assist the private sector to accelerate imports to restore local household purchasing power.
- **Monitor working capital needs of women and youth** – while many traders have sustained businesses through this period, small-scale traders and ancillary workers – both young men and women – in the most affected northern areas, are finding it difficult to sustain their businesses or to find new forms of employment. Women traders too may have higher demands to meet family needs than their male counterparts. Depending on the recovery trajectory in the medium term, and access to remittances and social safety nets, adapted lending practices from village savings and loans associations and micro-finance institutions may enable youth and women to continue to participate in the market as traders and ancillary workers, and therefore support them through the restricted Hajj 2020 shock.
- **Economic stimulus to increase purchasing power of urban populations** – in addition to international export, growing towns and cities in Somalia and across borders in Kenya and Ethiopia are the major consumers of pastoralist livestock products. As economies continue

to be affected by Covid-19, and these urban consumers lose income, there will be reduced demand for meat. Cash transfers could increase spending in urban areas and may help stimulate continued demand for meat, though equally could be used for cereals, water, education, health or other needs.

- **Investment in further research to fill gaps identified through this study** – this rapid impact assessment has highlighted a number of areas that would benefit from further and more in-depth research to ensure a more detailed understanding of the context, dynamics, challenges and opportunities for building resilience within communities to shocks and stresses. A list of key areas identified during this study is provided in Section 5 below. There is the opportunity to consider incorporating and addressing some of these during the implementation of SPARC.

Medium-term programming

- **Strengthening animal health systems** – efforts should continue to strengthen animal health systems to ensure that livestock producers and traders have access to regular and effective vaccinations and animal health services. Not only will effective animal health services keep animals healthy and ensure higher prices but controlling diseases such as RVF and foot-and-mouth disease (FMD) will reduce risk of future livestock export bans that can reduce household income and result in larger numbers of livestock on the rangelands. However, it has been shown that addressing animal health is best done through an integrated One Health³³ approach that brings together animal, human and environmental health (including the health of the land and natural resources, as well as 'external' influencing factors such as climate change or air pollution).
- **Strengthening local institutions** – the case studies from Chad, CAR and Somalia have all highlighted the importance of customary institutions for managing natural resources, land access and use, together with local-level conflicts and stresses/crises. However, in many cases these have been weakened, if not completely collapsed. Even where such institutions exist, it is clear that new pressures are arising, for which new skills and resources are required. Investing in building strong community institutions is important for increasing the opportunity for problems to be resolved at the local level and without escalation.
- **Land tenure, land-use planning and rangeland management** – land tenure security, good land-use planning and greater investments in rangeland management to raise rangeland productivity are all key for a productive and sustainable pastoralism/livestock sector. Currently, it is not clear how access to land and resources is negotiated at the local level, and what, if any, institutions, rules and regulations exist in different parts of the country, including the role of the Somali Xeer customary law. With greater tenure security, it is likely that there will be more incentive to invest in improving rangeland management, while also strengthening governance more generally and carrying out local rangeland monitoring.

Longer-term programming and development investment

- **Livestock sector development** – we recommended supporting the government of Somalia and livestock-sector actors including the private sector, universities and customary institutions to operationalise the Somalia Livestock Sector Development Strategy. Issues to address in particular include rangeland management, animal health and quarantine services, institutional capacity and research issues that can strengthen the livestock sector, including through drought and market shocks. This may require a new approach across the livestock and development sector(s), with pastoralism development more strongly at its core. Important lessons on how to influence and develop this approach can be learnt from other countries in the region that have seen this shift in recent years.

SECTION 5
**EMERGING
TOPICS FOR
FUTURE
RESEARCH**



1. Pastoralist 'households' and livestock dynamics

More detail is required on pastoralist 'households' (recognising that the term 'household' may have limited relevance in a pastoralist context). There is little information available on their nature and interactions, including social networking, wealth/income status and livestock ownership (possible concentration of herds), access and use (for trade or own sustenance). It would be useful to focus on households' resilience or ability to cope with and 'bounce back' from shocks and stresses. To what extent is livelihood diversification and migration taking place (for different households and different members in the household), and how successful is this in building the resilience of pastoralist livelihoods? Also, what about urban livelihoods related to livestock and/or livelihoods indirectly linked? This situational analysis should then provide a strong foundation for considering the impacts of shocks and stresses on different household groupings and different members of households, and how best to build resilience. In particular, this should pay attention to women and youth.

2. Land and natural resource tenure, governance and access, land-use and rangeland management

Currently, it is not clear how access to land and resources is negotiated at the local level, and what if any institutions, rules and regulations exist in different parts of the country, including the role of the Somali *Xeer* customary law in land and natural resources governance and management. It is also not clear what land-use changes are taking place. What is the status of rangelands and rangeland resources, including impacts on movement, rangeland fragmentation due to enclosures, and access rights? Additionally, what is the impact of climate change, if any? Research on this would provide a good foundation for any interventions in pastoralist areas, and particularly those that focus on improving local livestock-based livelihoods.

3. The status and roles of local institutions including customary institutions

There are questions about whether conflicts, including inter-clan conflicts, are increasing or not, and about the associated challenges, problems and opportunities. For example, is the legitimacy of *Xeer* still strong/dominant? Are there differences in how different clans interact with the livestock trade – does one dominate, are relationships good or bad, and what are the key issues?

4. Livestock trade

There are several aspects of the livestock trade that need further investigation, particularly in order to understand the future viability of the livestock sector and the role of the livestock export trade as part of this. These could include the following.

- In the political economy of the livestock trade, what is the importance of trade corridors, including for the economy and for peace and security in the region, and how might this be built upon? Is there any relationship/interaction with illicit trading, given evidence suggesting connections between smuggling and the livestock trade with Yemen? What is the impact

of insecurity on the livestock trade, and how can trade function in a situation of insecurity? When restrictions, regulations and bans are put in place, how are these implemented at the local level and who gains and who loses?

- How can benefits from the livestock trade be expanded for different stakeholders through business development, livelihood diversification or other means? Is there a way to identify or categorise different traders and exporters, to derive a working definition of the different types? Which among them are most resilient and why? What, if any, value-addition to livestock products is being implemented?
- What are the incentives for exporting livestock if there is a strong internal market, and why are pastoralists selling for export when this is risky? How does this export trade fit with the overall pastoralist livelihood system (and that of other actors)? How significant is the informal trade today, and what challenges and opportunities are found here?
- What are the longer-term changes that have taken place due to past bans or shifts in the livestock trade? Are the same people selling and trading, and have we seen more diversification in related livelihoods, for example? Can we anticipate where the livestock trade is heading – expanding in which direction? How important will these markets become over the next 10 years? What interventions can be developed to pre-empt any likely or suggested changes? Does it make sense to continue to build export markets and/or focus on improving infrastructure of, and supply to domestic markets, especially when prices seem to be higher for lower-quality animals? Which vision for livestock/meat trade would promote poverty reduction and in turn improve resilience, especially during times of shocks or unfavourable events? What are the ways to ensure reliability in supply while also adopting some of the technologies for raising animals for export and yet benefit pastoralists and/or pastoralist regions? What are the parameters for intervening in livestock trade and markets – when is it appropriate to do so and when not?
- We need more detailed information on livestock, collected on a regular basis to assess change over time, including on prices, markets and routes. How can digital platforms be used to collect, monitor and share such data across the different actors and stakeholders?
- What role could insurance play in buffering the impacts of shocks to the livestock trade? Could this be similar to the role of insurance in times of drought through index-based livestock insurance?

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ENDNOTES

- 1 For more information on One Health in a rangelands context for Ethiopia, see: www.oh4heal.org.
- 2 Rainfed farming can occur in areas receiving annual precipitation of between 100 mm and 600 mm but typically in areas where rainwater runoff collects in depressions and along the banks of seasonal streamflow and hence where higher levels of soil moisture are available.
- 3 The Climate Prediction Centre has recently issued a La Niña alert for the coming winter and early spring of 2021 (http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.shtml).
- 4 Before the collapse of central government in 1991, it is estimated that Somalia had around 112,00 ha of crop land that was irrigated and 110,000 ha under flood-recession cultivation (World Bank, 2019).
- 5 This is a common phenomenon across the drylands of the Horn of Africa (Catley and Aklilu, 2013).
- 6 Despite the severity of the drought (FAO, 2013).
- 7 More than half those who died were children under five. In the same year, one million Somalis also sought refuge as refugees in neighbouring countries (UNOCHA, 2019).
- 8 Southern Somalia recorded three times the normal *Deyr* rains in 2019.
- 9 Rift Valley Fever is a viral zoonosis that primarily affects animals but has the capacity to infect humans. The disease results in significant economic losses due to death, abortion among RVF-infected livestock and international market bans. A member of the Phlebovirus genus, the virus was first identified in the 1930s in an epidemic among sheep on a farm in Kenya's Rift Valley (OIE, 2018). Market bans caused by Rift Valley fever occurred in 1997–98, 2000–09 and 2016–18.
- 10 When swarming locusts can travel more than 100 km a day and a small swarm of less than 1 km² that comprises around 80 million individuals can consume the same amount of food as 35,000 people in a day. Much larger swarms have been spotted in neighbouring Kenya that cover more than 2,000 km².
- 11 The Ministry of Livestock, Forestry and Range estimates for 2019 were 53 million.
- 12 The estimated total value of cross-border livestock trade in the Horn and East Africa in 2009 was more than US\$60 million. This does not include exports to the Middle East (Little, 2009).
- 13 The vast majority are younger men as the work is arduous.
- 14 Excluding cash remittances from Somalis in the diaspora.
- 15 Remittances in 2015 were estimated to total US\$1.4 billion in Somalia, equivalent to 23% of GDP (World Bank, 2016).
- 16 Environmental degradation is also exacerbated by increasing numbers of pastoralists turning to charcoal production and sale to supplement their incomes, following the loss of livestock sales outlets. Huge numbers of acacia trees have been felled for charcoal production.
- 17 Not recognised as a country, Somaliland is unable to attract investment from global institutions.
- 18 Specifically the Issa clan.
- 19 Formerly the Office International des Epizooties (OIE).
- 20 Listed diseases include Rift Valley fever, foot-and-mouth disease (FMD), contagious pleuro-pneumonia (CBPP), brucellosis and sheep and goat pox.
- 21 See: <https://www.msn.com/en-xl/africa/top-stories/restricted-hajj-hits-somalias-livestock-economy/ar-BB17r4bA>.
- 22 Recent National Oceanic Atmospheric Administration forecasts suggest a moderate La Niña for the winter–spring (2020–2021). This could have implications for rainfall, as strong La Niña episodes typically result in increased rainfall variability and drought in the Somali ecosystems (see https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.pdf).

- 23 These are mainly households or individuals with very small livestock holdings or none at all – so livestock trading does not directly affect them. They include vendors who sell their wares, such as food products, at the ports, and the Hajj restrictions did not seem to affect their business. However, it would be useful to investigate this further, including the link between livestock export trade and such small businesses.
- 24 Nigeria's cattle market has significant inflow from Niger, Mali and Chad. The sector adds 5% to GDP in its own right, and is included under 'Agriculture', which contributed 35% of GDP in total in 2013 (Babalola and Onapajo, 2018)
- 25 CEMAC members are Angola, Cameroon, CAR, Chad, Congo, DRC, Equatorial Guinea, Gabon, Rwanda and Sao Tome and Principe.
- 26 Armed roadblocks on trade routes are estimated to have netted rebel groups 6 million euros par year in Central Africa (<https://ipisresearch.be/2017/12/roadblock-rebels-ipis-maps-important-mechanism-conflict-funding-central-africa/>)
- 27 A key point to note is that it was difficult to separate the responses of those interviewed for this study on impacts from the 2014 closure of the Chad–CAR border and the impacts of Covid-19. Although this was done as much as possible, some responses were mixed. In August 2019, for example, authorities in Nigeria closed land borders and prohibited all import or export of goods by road from Chad, Cameroon, Benin and Niger. This situation was compounded in 2020 by the introduction of additional restrictions on national and internal movements, in response to the Covid-19 pandemic.
- 28 See June 2016: <https://reporting.unhcr.org/node/2533?y=2016#year>. During the first half of 2018, some 22,000 refugees fled from the CAR to the south of Chad. UNHCR led the emergency response in the south of Chad (<https://reporting.unhcr.org/node/2533?y=2018#year>).
- 29 See: www.rfi.fr/fr/afrique/20191222-tchad-ouvert-idee-une-reouverture-frontieres-centrafrique, 2020.
- 30 See: <https://reporting.unhcr.org/node/2533?y=2014#year>.
- 31 See: www.aa.com.tr/fr/%C3%A9conomie/la-bad-ent%C3%A9rine-un-plan-strat%C3%A9gique-de-d%C3%A9veloppement-pour-l-afrique-centrale-/1457098.
- 32 Increasing crop cultivation has been especially noticeable in Darfur since 2000 (Suliman and Young, 2019; Young and Ismail, 2019).
- 33 For more information on One Health in a rangelands context for Ethiopia, see: www.oh4heal.org.

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Cover: Pastoralists come to Harshim town from neighbouring woredas and Somalia looking for water. Fafan Zone Somali region © UNICEF Ethiopia/2017/ Michael Tsegaye



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