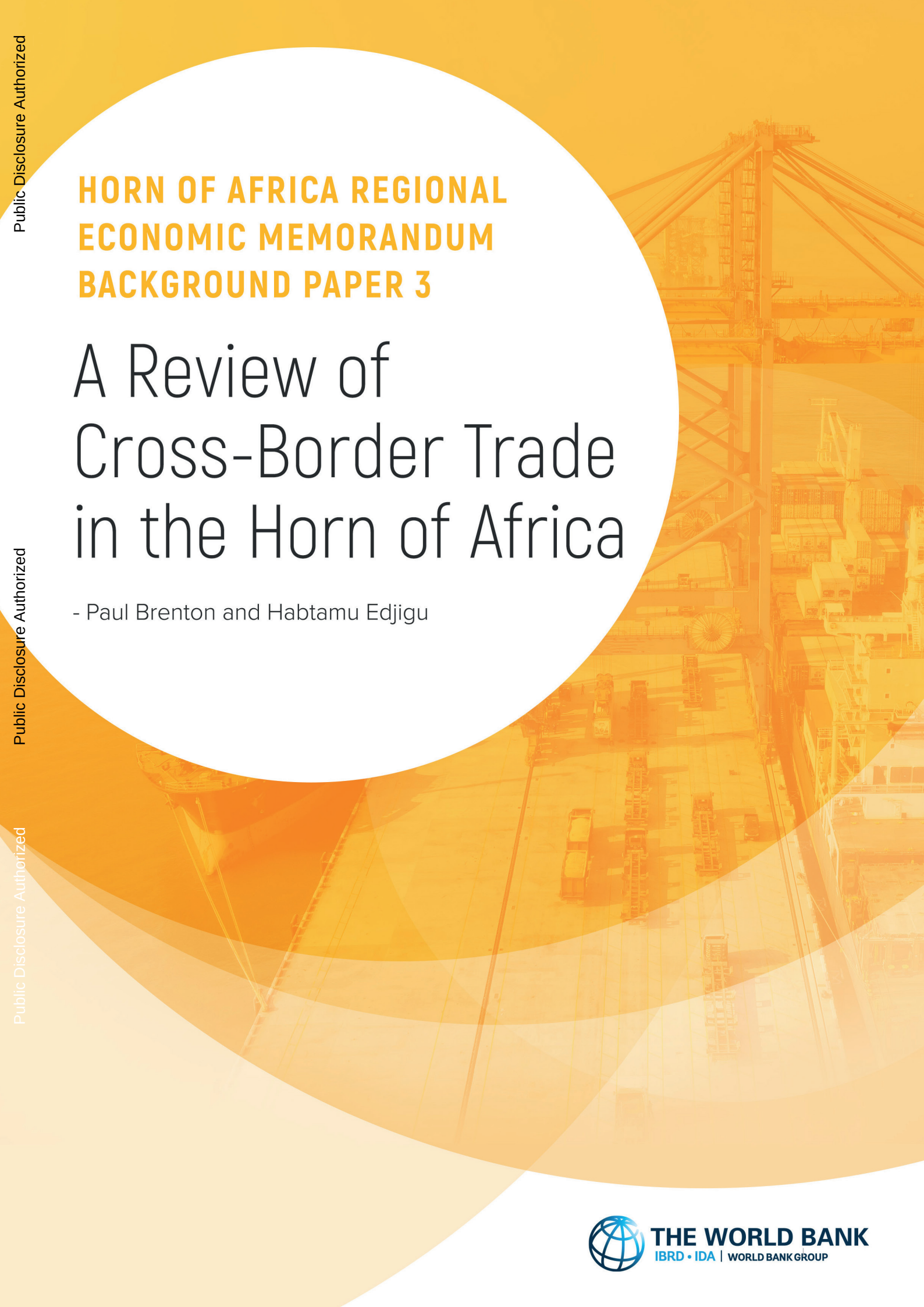
HORN OF AFRICA REGIONAL ECONOMIC MEMORANDUM BACKGROUND PAPER 3

A Review of Cross-Border Trade in the Horn of Africa

- Paul Brenton and Habtamu Edjigu



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A Review of Cross-Border Trade in the Horn of Africa[1]

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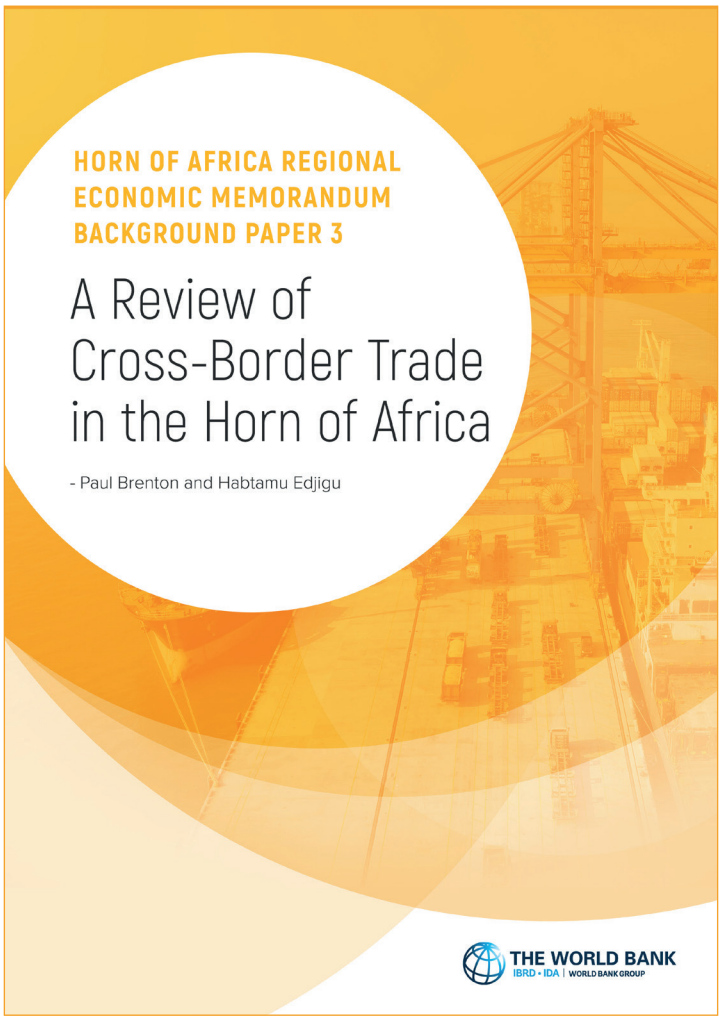


[1] For the purposes of this paper the Horn of Africa is deemed to comprise Djibouti, Eritrea, Ethiopia, Kenya and Somalia, sometimes referred to as the "little" Horn of Africa. This allows focus on those countries where actual and cross-border trade is strongest and is consistent with the emerging political economy of regional integration in the area following the recent agreement by these five countries to take forward discussions on fostering economic integration and regional cooperation, with the support of the European Union, African Development Bank, and the World Bank.

CONTENTS

SECTION 1

Introduction

Informal cross-border trade is an important feature of trade in the Horn of Africa. In many instances the value of informal cross-border trade exceeds the value of official trade. For example, official annual exports of cattle from Ethiopia, home to the largest cattle inventory in Africa, are less than 2,000 heads, when more than 25 times this amount are typically exported across borders (Little, 2005). For some commodities, like maize, dry bean, and sorghum, unrecorded exports of Ethiopia to neighboring countries exceed officially recorded trade by a factor of 30 or more (Little, 2015).

There is a need to understand more about the common challenges and opportunities for cross-border trade in the HoA. Because a large part of cross-border trade and movement of people is unrecorded, knowledge about market networks and integration in the Horn of Africa countries is limited. There is a need to identify key catchment areas, trade routes, markets and commodities handled; and investigate major challenges, particularly in cross-border areas. Such understanding will provide context for the extent of regional integration, analysis, and response planning.

This paper provides a review of existing literature on cross-border trade among the Horn of African countries Djibouti, Eritrea, Ethiopia, Kenya and Somalia.[2] It offers analysis on key traded products particularly food crops and livestock, a review on main trade routes and border marketing centers; the operation of cross-border value chains in the borderlands, including the economic impact on border communities and a summary of common challenges facing cross-border trade within the region. The review is augmented with analysis of available data on trade between these countries from UN COMETRADE, FEWS NET and FAO.[3] To put cross-border trade in context, the paper starts by reviewing the available information from officially recorded trade data.

[2] There appears to be no information on cross-border trade in services and so we concentrate on trade in goods. Limited information from other borders in Africa suggests that such trade could be important and should be an issue for data collection and analysis.

[3] The FEWS Net provide a survey of cross-border trade data collected by Food Security and Nutrition Working Group (FSNWG), through its Market Analysis Sub-group in East African countries. The survey covers 88 food commodities and livestock. However, it does not completely capture all cross-border trade in the region because collection is limited to selected borders. In addition, the data are not collected 24 hours per day, 7 days per week or for all traded commodities.

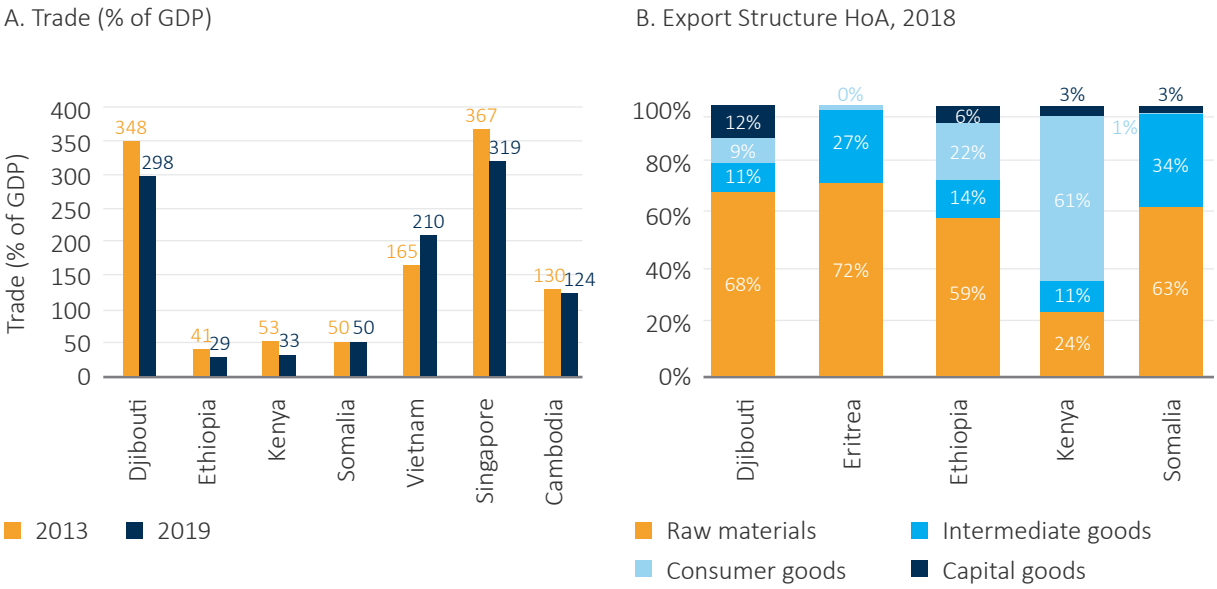
SECTION 2

The Structure of Trade in the Horn of Africa

2.1 Officially Recorded Trade

Officially recorded information suggests that trade is underperforming as a driver of growth, job creation and poverty reduction in the Horn of Africa. The degree of integration with the global economy, as measured by the ratio of exports and imports to GDP decreased between 2013 and 2019 in four out of the five HoA countries for which data are available.[4] The largest declines were in Djibouti (-50 percentage points of GDP). However, Djibouti still remained the country with the highest trade-to-GDP ratio, at 298% in 2019, due to the magnitude of port related services (Figure 1A). Low-value products are dominate the structure of trade in the region. Except for Kenya, exports from HoA countries have a relatively high proportion of raw materials (Figure 1B).

Figure 1: Trade-to-GDP and trade Structure in HoA, 2018



Source: staff calculation using data from United Nations Comtrade Database.

The Middle-east and North Africa region is an important destination for goods exports for all five countries. For Djibouti and Somalia over half of their recorded exports to this region comprise animals, which as discussed below are likely to be the result of value chains that cross borders with other countries in the HoA (Figure 2). China is a major export destination for Eritrea's exports. The EU, although declining, is a key market for Ethiopia and Kenya, accounting for over a quarter of exports. For Ethiopia and Kenya, the US has become a more important destination in recent years reflecting the

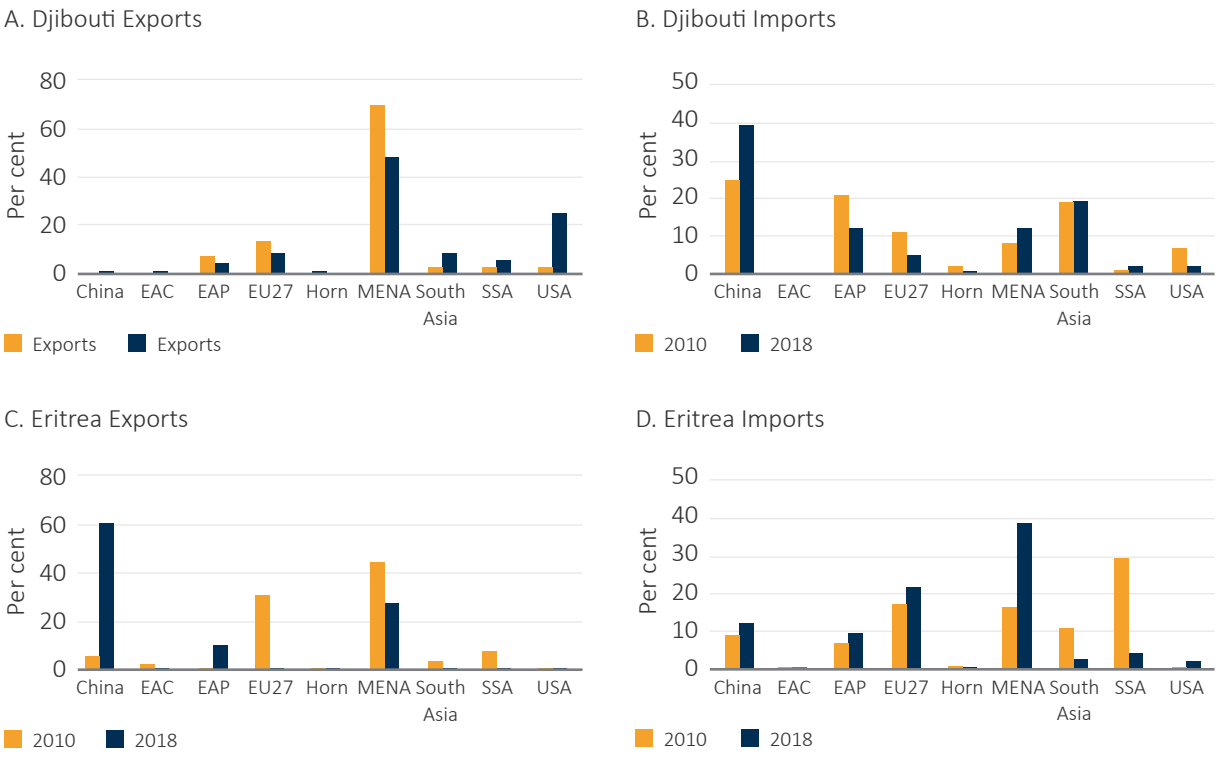
[4] Eritrea has not provided trade data to the UN statistical agencies since 2003.

rising importance of apparel exports. Exports to other African countries are small or negligible.

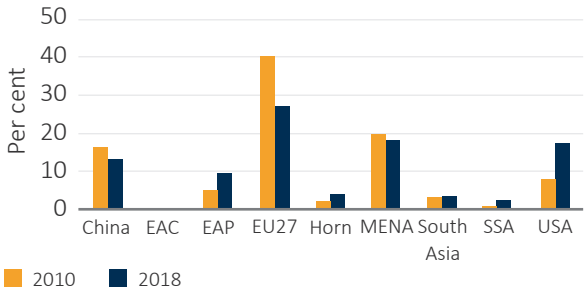
With regard to imports of goods, China is a major and increasingly important supplier. Between 2010 and 2018, China's share of the total imports of all 5 HoA countries increased from just under 20 percent to over 30 percent and is the dominant supplier of imports to the region. The EU is still a major supplier but has declined in importance, accounting now for around 15 percent of the imports of the Horn compared to 20 percent in 2010. However, this is not consistent across the countries and is driven mainly by Kenya. Eritrea, Ethiopia and Somalia have seen an increasing share of the EU in their imports. The Mena region is also an important source of imports, especially for Eritrea and Somalia.

Recorded intra-regional trade remains marginal and erratic. Figure 2 suggests that for most countries (the exception is Somalia's imports) the Horn of Africa countries are not significant trade partners for each other. To some extent this reflects that officially recorded data for trade between HoA countries is not consistently available. Ethiopia is the only country for which data are reported on a regular annual basis. Figure 3 shows the trend in Ethiopia's reported imports and exports with other HoA countries. Exports on the whole are tending to increase but are somewhat erratic at the country level, with exports to Somalia increasing substantially in 2018 while those to Kenya declined. Following this surge in exports to Somalia, Ethiopia's exports to the Horn countries exceeded USD 100 million in 2018. Ethiopia's imports from HOA countries are dominated by Kenya, amounting to around USD 40 million each year. Kenya has reported trade data only in 2010, 2013 and 2017 to 2018. Figure 4 shows the information for 2010 and 2018. Recorded imports from HoA countries are negligible. Exports are dominated by Somalia, amounting to over USD 120 million in 2018. Kenya's exports to Ethiopia amounted to about one quarter of total exports to HoA countries. Hence, Somalia is now the largest market for recorded intra-HoA exports, accounting for two-thirds of the total in 2018.

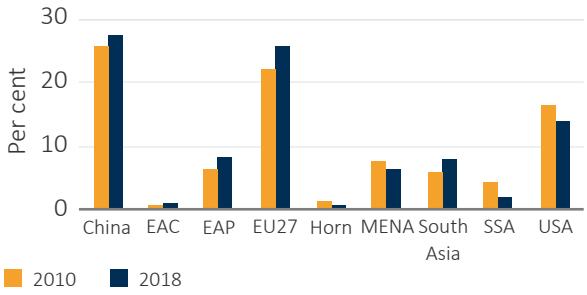
Figure 2: Horn of Africa Countries Recorded Global Trade: 2010 and 2018



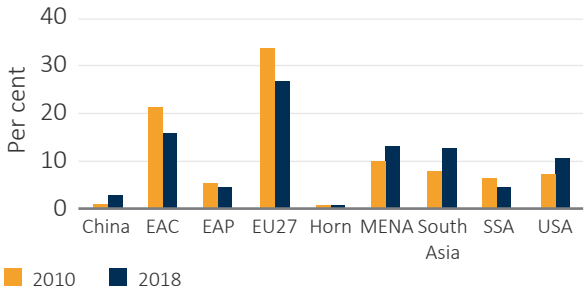
E. Ethiopia Exports



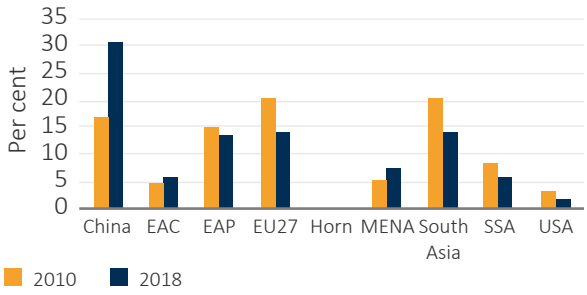
F. Ethiopia Imports



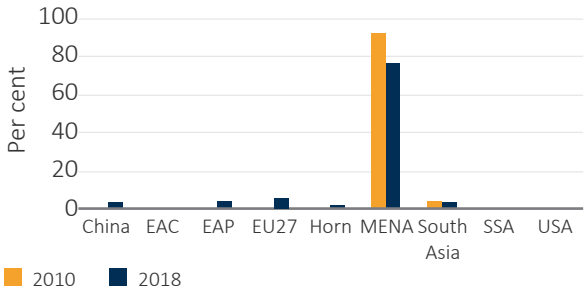
G. Kenya Exports



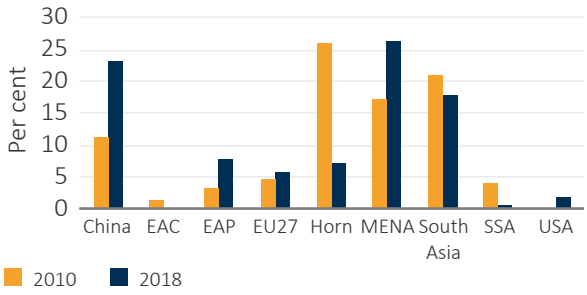
H. Kenya Imports



I. Somalia Exports



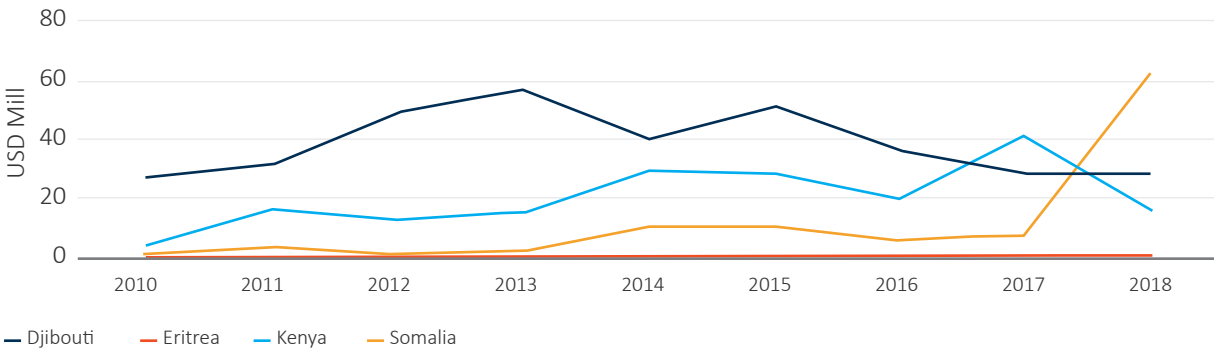
J. Somalia Imports



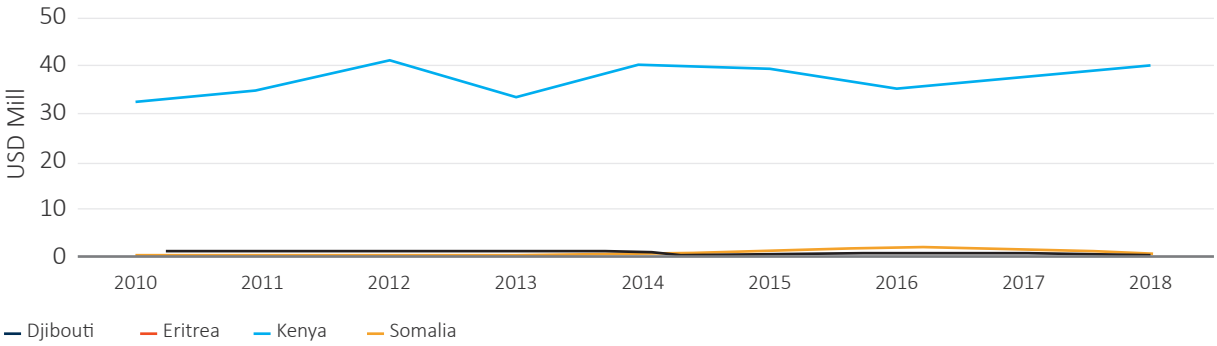
Notes: Data are mirror statistics (partner country reporting) from UN Comtrade via WITS
EAC = East Africa Community minus Kenya
EAP = East Asia and Pacific minus China
Horn = Djibouti, Eritrea, Ethiopia, Kenya, Somalia
Mena = Middle East and North Africa minus Djibouti
SSA = Sub-Saharan Africa minus Horn of Africa countries and EAC

Figure 3: Ethiopia's Trade with HOA Countries: 2010 to 2018

A. Exports to HoA Countries

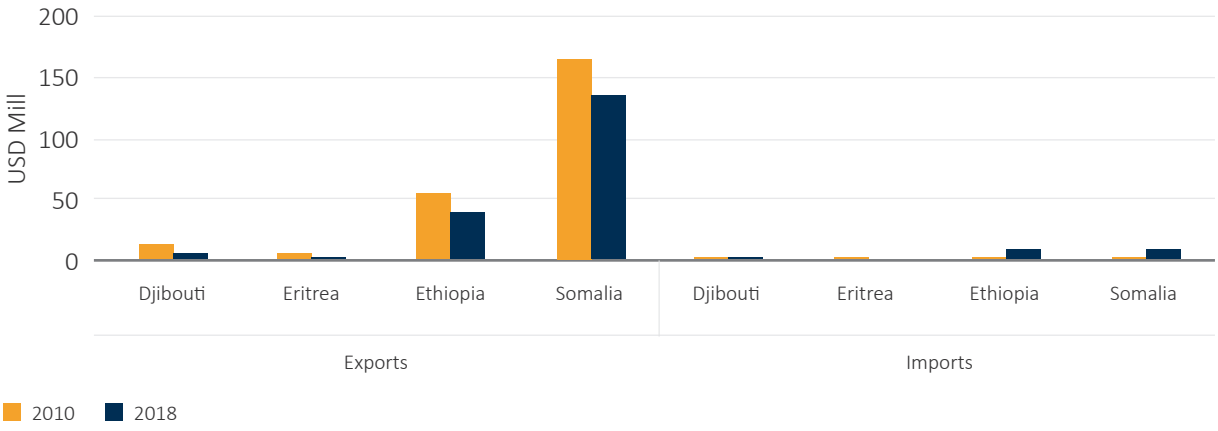


B. Imports to HoA Countries



Source: staff calculation using data from United Nations Comtrade Database.

Figure 4: Kenya's Exports and Imports with HoA Countries: 2010 and 2018



Source: staff calculation using data from United Nations Comtrade Database.

In general, HoA countries export agricultural products to the global economy and primarily import manufactures.[5] Table 1 shows the sector composition of officially recorded exports and imports with the global economy in 2018. Exports are concentrated on agricultural products for Ethiopia, Kenya and Somalia while imports are mainly industrial products. Eritrea's exports are currently dominated by mineral products. For Djibouti and Somalia exports of animals are important, many of which are destinated to the middle-east. Vegetable products comprise a high share of exports from Ethiopia and Kenya reflecting the importance of coffee, tea and sesame.

Table 1: Sector Composition of Global Export and Imports of HoA Countries in 2018

	Exports					Imports				
	Djibouti	Eritrea	Ethiopia	Kenya	Somalia	Djibouti	Eritrea	Ethiopia	Kenya	Somalia
Agriculture	41.92	0.51	72.92	62.03	59.96	20.33	36.35	6.96	14.89	46.89
Industrial	33.88	99.46	23.96	36.38	40.00	78.93	62.75	80.40	83.29	52.65
Animals	27.84	0.04	4.20	2.02	53.09	0.66	1.39	0.23	0.86	3.98
Vegetables	13.50	0.39	67.88	54.71	13.87	12.78	24.96	5.14	9.57	18.70
Food Products	0.54	0.26	0.78	6.04	0.19	6.90	9.99	1.54	5.04	24.55
Minerals	0.08	71.59	0.72	4.35	0.06	0.27	1.77	0.04	1.02	0.96
Textiles and Clothing	0.55	0.51	8.11	8.18	0.06	10.41	1.53	8.75	8.65	9.00
Footwear	0.13	0.00	2.11	0.53	0.01	2.18	0.02	0.53	1.64	3.34
Machinery and other manufactures	57.37	27.22	16.21	24.17	32.72	66.80	60.34	83.77	73.22	39.48

Source: Insert source here.

Table 2: Sector Composition of Exports and Imports of Ethiopia and Kenya to HoA Countries in 2018

	Exports					Imports				
	Djibouti	Eritrea	Ethiopia	Kenya	Somalia	Djibouti	Eritrea	Ethiopia	Kenya	Somalia
Agriculture	30.72	15.63	53.33	11.96	1.22	47.62	74.57	17.56	79.79	72.44
Industrial	69.28	84.37	46.09	86.64	98.71	27.63	25.43	82.44	20.20	27.54

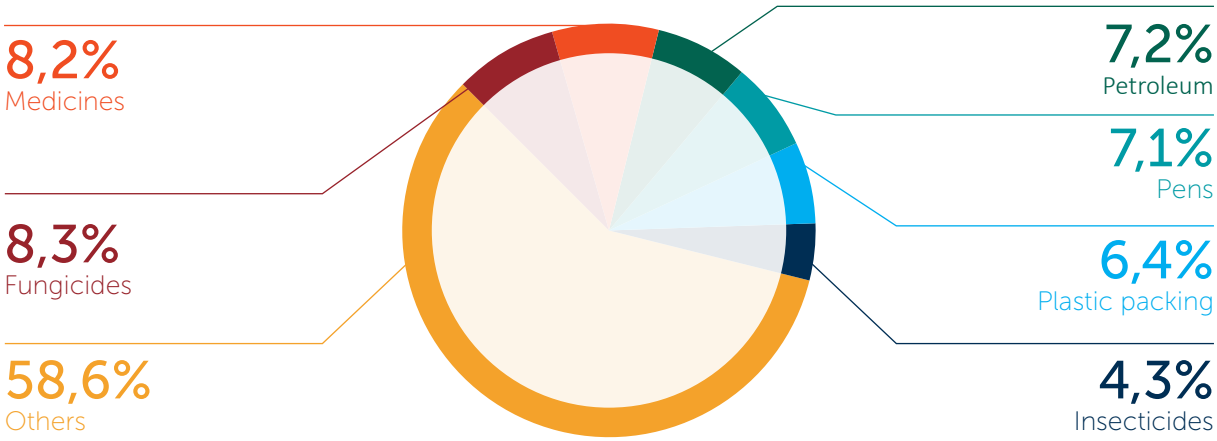
Source: Insert source here.

[5] Note again that this is based only on import and export data for Ethiopia and Kenya.

For recorded intra-HoA trade, manufactured exports are typically more important that agricultural exports. The share of manufactures in both Ethiopia's and Kenya's exports to HoA countries is almost double that in trade with the rest of the world. Almost all of Kenya's exports to the region are industrial products. At the same time, with the exception of Ethiopia, most countries are also primarily importing agricultural products from other HoA countries. Given the limited data, this shows that Ethiopia is the major market in the region for HoA countries exports of manufactures and the main exporter of agricultural products to the region. Somalia, the main import market for intra-HoA trade, primarily purchases vegetable products and processed food from the region.

The product composition of Ethiopia's recorded exports to Kenya is highly variable over time. In 2018 the leading exports of Ethiopia to Kenya consisted of beans (26.75%), cotton fabrics (11.2%), vegetables (11%), and Rye (5.2%). In 2017, Ethiopia's second largest export was maize accounting for 28% of total exports to Kenya. Prior to 2017, however, Ethiopia's official exports of maize to Kenya were negligible and the main exports were beans, footwear, cement, fruits and vegetables (Appendix 2). The surge in maize exports in 2017 was due to a huge maize shortage in Kenya following the drought crisis in that year (USAID, 2018). However, it may also be that in 'normal' times maize exports are not captured in official statistics. The officially recorded value of Ethiopia's live animal and meat exports to Kenya is almost zero. Ethiopia has an enormous supply of livestock and is major cross border livestock exporter to countries like Kenya. However, this is not being captured in official statistics. We will discuss below the available evidence on the magnitude and structure of trade flows across the Kenya-Ethiopia border that does not rely on official data. The leading exports of Kenya to Ethiopia are manufactured goods. Kenya's exports consisted of medicines (7.5 million or 11.3% exports to Ethiopia), pens (7.4 million or 11 %), petroleum (7.24 million or 10.9%), fungicides (3.4 million or 5%) and surfactant (3.42 million or 5%) (Figure 5).

Figure 5: Kenya Export to Ethiopia, 2018



Source: staff calculation using data from United Nations Comtrade Database.

Vegetables dominate Ethiopia's recorded exports to Somalia and Djibouti. The four leading exports of Ethiopia to Somalia in 2018 were vegetables (79%), cements (5.4 %), potatoes (4.5%) and bovine (3%). The small recorded imports of Ethiopia from Somalia show that the main traded product is soap, which accounts for 82 percent of the total in 2018. Fish and chemical products are also recorded in Ethiopia's imports. It is noteworthy, that trade in livestock between these two countries appears to

be negligible in the official statistics. Vegetables and fruits are also the main recorded export from Ethiopia to Djibouti, accounting for 20% of the total in 2018. Other products that appear in recorded exports are salt and cement (20%), road vehicle (8%) and sesame seed (3%). The very small recorded imports of Ethiopia from Djibouti include moto vehicles (40%) and sauce and preparations (31 and carboard packing containers (7%).

Kenya's main export to Somalia in 2018 was tobacco. Tobacco and tobacco products accounted for 28% of the total bilateral flow from Kenya to Somalia followed by vegetables (10%), edible preparations (8%) and pharmaceutical products (7%). as shown in Table 13. Kenya's recorded imports from Somalia in that year were negligible.[6]

[5] Note again that this is based only on import and export data for Ethiopia and Kenya.

[6] There was a recorded import flow of USD 8.5 million related to tanks and other armoured vehicles which is likely to be a non-market transaction.


Pampers
baby-dry
canbebe
JUMBO
Anchor
NIDO
Tasty
Chocolate

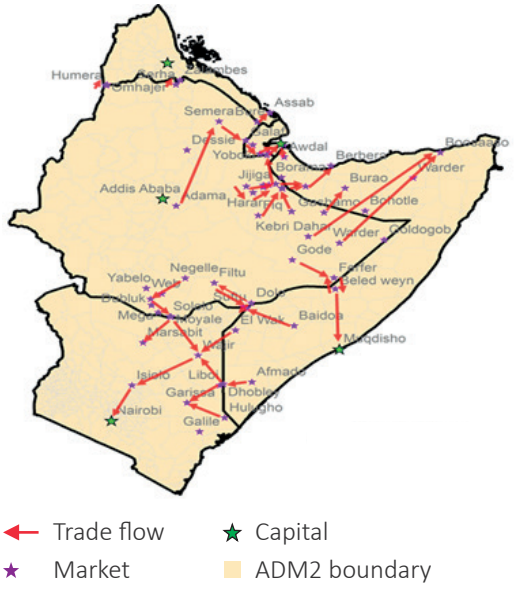
SECTION 3

Unrecorded Cross Border Trade

3.1 Overview of the Region

Unrecorded cross-border trade (UCBT) is an important phenomenon in the Horn of Africa.[7] Studies suggest it supports about 17 million people along the different value chains, including crop farmers, brokers, crop traders, livestock-keepers, fodder suppliers, ranch owners, itinerant traders, large livestock traders and transporters (Tesfaye and Amaha, 2018). It is estimated that this cross-border trade accounts for more than 95 per cent of total (officially recorded and unrecorded) intra-regional trade in the Horn (Little, 2007 and 2009). During 1993-2000, for example, the total value of Ethiopia's unofficial cross-border trade in livestock in the region is estimated to have averaged $105 million, 100 times greater than the average annual official livestock export trade (Halderman, 2005). Similarly, a more recent study by Habtamu et al., 2016 shows that the annual value of Ethiopia's cross-border trade in livestock with Somalia, Kenya and Puntland during 1998-2014 was estimated approximately to be at $25, $9 and $10.5 million respectively, considerably higher than the officially recorded livestock trade. Map 1 provides a snapshot of the main border crossings and documented trade routes, particularly for livestock.

Map 1: **Commodities and livestock trade routes in the HOA**

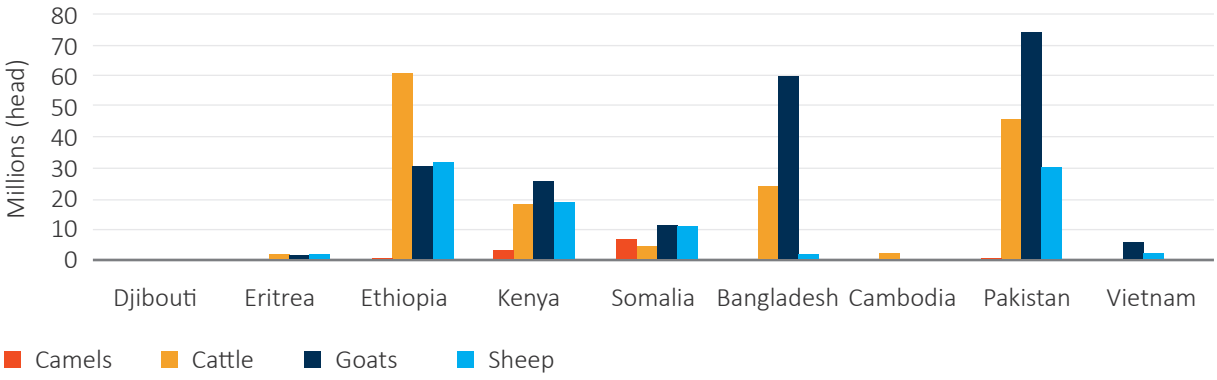


Source: staff calculation using data from United Nations Comtrade Database.

Horn of African countries have a large potential to increase trade in livestock, both within the region and with third countries. Figure 6 illustrates the magnitude of livestock production in Djibouti, Eritrea, Ethiopia, Kenya and Somalia. The region's highest concentrations of cattle, sheep, goats and camels are found in Ethiopia. In fact, Ethiopia has the largest cattle inventory in Africa and the 5th largest globally, behind Brazil, India, China and the United States. Kenya and Somalia have also considerable herds of cattle with 20 million and 4.7 million respectively. Somalia is home to the world's largest camel population of around 7 million. Hence, there is a huge trade potential in livestock between HoA countries.

[7] In the existing literature, many sources refer to the phenomenon described in this paper as "informal cross-border trade (ICBT)". However, this often carries a negative and unwarranted connotation as "informal" can be easily confused with "illegal". It also inaccurately reflects the reality of trade flows on the ground, as traders may indistinctly use both formal and informal crossing channels depending on a variety of factors, such as the nature of the goods, the value of their consignment, the length of the queue at the border, or the mood of the individual official on duty. The preferred terminology for this paper is "unrecorded trade" as this commerce is either missed or under-represented in official (customs) collected data at the border.

Figure 6: Livestock population of HoA versus peer countries, number of heads, 2018

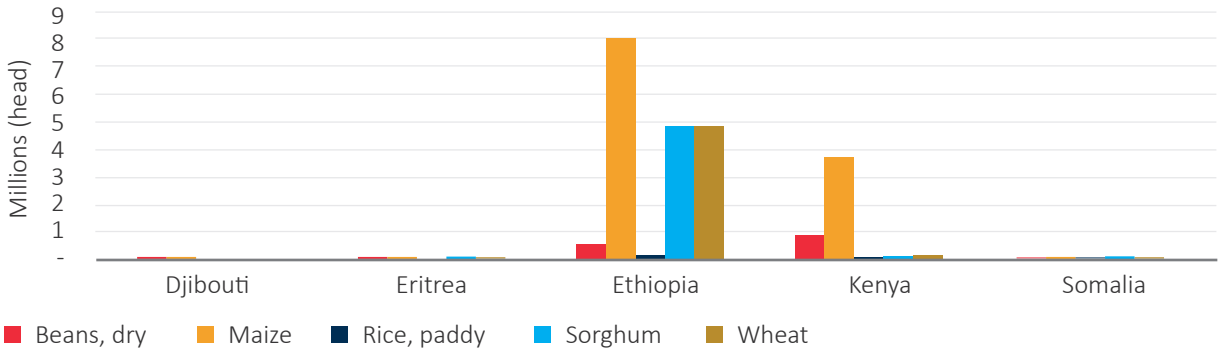


Source: FAOStat, 2020

There is substantial potential for intra-regional trade to bring agricultural commodities to rapidly urbanizing towns and cities. The Horn of Africa exhibits a complex structure of agriculture, within and across countries. Figure 4 shows the production of key food grains including maize, wheat, sorghum, beans and rice across the Horn counties in 2018. The region's highest concentrations of maize, wheat and sorghum are found in Ethiopia. Around 8 million tonnes of maize were produced in Ethiopia, which ranks third largest in Africa next to South Africa and Nigeria and the 14th largest globally. Ethiopia was also the second largest sorghum producer in Africa and the third in the world next to the United States and Nigeria with a production of 4.8 million tonnes. Looking at wheat, Ethiopia was the second largest producer in Africa and the 18th in the world, producing 4.8 million metric tonnes in 2018. In Kenya, maize is the principal stable food and the country produced around 3.6 million metric tonnes in 2018, makes the 6th largest maize producer in Africa. Nevertheless, Kenya faces an increasing structural deficit in maize as domestic production is unable to satisfy local demand. This is typically met by imports from regional neighbours such as Tanzania and Uganda but also by Ethiopia. Dry bean is the most important legume and second to maize as a food crop in Kenya. In 2018, the country's total dry bean production was beans (0.86 million metric tonnes) the largest in the Horn of Africa.

Official export and import statistics do not capture the magnitude and importance of trade in livestock and food crops between the Horn countries. Figure 7 indicates the total value of import and export in live animals and cereals within the region in 2017. Ethiopia's official live animal export in the Horn was only to Djibouti ($2.3 million) and Somalia ($1.4 million). Though there is a huge cross-border trade in live animal between Ethiopia and Kenya, there is no official bilateral trade between the two countries in 2018 (latest available data). Looking at cereals, the only official trade was Ethiopia's maize exports to Kenya amounting $13 million.

Figure 7: Food crop Production in HoA, 2018



Source: FAOStat, 2020

The paper now proceeds to provide an overview of unofficial bilateral trade between the Horn of African countries. We discuss the available information on catchment areas, main trade routes and border markets of the region. The paper then focuses on the livestock and food crop value chains in the borderlands of the region and seeks to draw attention to the economic implications of cross-border trade in the region and then finally the current state of knowledge on the major challenges that traders in the region face.

3.2 Ethiopia-Kenya Cross-Borders Trade

Informal cross-border trade between Ethiopia and Kenya is substantial and vital for both countries. A 2011 survey by the Kenyan National Bureau of Statistics (KNBS) shows that informal cross border trade with Ethiopia represents more than 25 percent of total trade between the two countries.[8] Table 3 shows the key products that are traded in the borderlands of Ethiopia and Kenya. Ethiopia's main exports include livestock, livestock products and cereals. On the other hand, Kenya's exports to Ethiopia are manufactured products including processed food.

[8] The KNBS survey covered 15 of the 24 official border stations in the country

Table 3: Goods Traded in the Ethiopia-Kenya Borderlands

Ethiopia to Kenya	Kenya to Ethiopia
Livestock Cattle Goats Camel Sheep	Construction materials Veterinary drugs
Livestock products Milk Hides and skins	Foods Rice Biscuits Flour Edible oil Sugar
Agriculture commodities Maize Beans Sorghum Chat	

Source: FEWS NET, 2018

A. Livestock

Most cross-border trade in livestock in the borderlands of Ethiopia and Kenya is unrecorded. The pastoral communities in southern Ethiopia are closely linked with northern Kenya's markets. The incomes from livestock sales are usually used to buy finished goods and food commodities. Cattle, camels, small ruminants and recently donkeys are the main live animals traded in Ethiopia-Kenya borders.

Ethiopia is a key source of cattle for Kenya. Ethiopia has a strong advantage in the rearing of livestock and this is reflected in cattle prices that are up to 40% lower than cattle price in Kenya, particularly in Nairobi (Little, 2002). Hence, there is substantial scope for cross-border trade. Mohammed (2010) documents that there has been a huge annual flow of cattle from Ethiopia to Kenya through informal cross-border channels since 1970s. The trade through the Moyale trade route is substantial. For example, in 2001 more than 58,000 head of cattle were traded to Nairobi with a market value of about $11 million. More than 70% of livestock trade in Moyale markets originate in Ethiopia. A similar study analyzing livestock marketing in the Ethiopia/Kenya border area by Pavenello (2010) shows that a substantial number of castrated bulls from Ethiopia reach Kenya via the Moyale markets. On average, more than 300 castrated bulls were transiting from Moyale Ethiopia to Moyale Kenya daily during 2004 to 2009 (Table 4). Tesfaye and Amaha (2018) estimated that 70 % of castrated bulls from Borana Zone, one of the largest cattle producing zones of Ethiopia, are trekked to Moyale to be sold in Kenya markets.

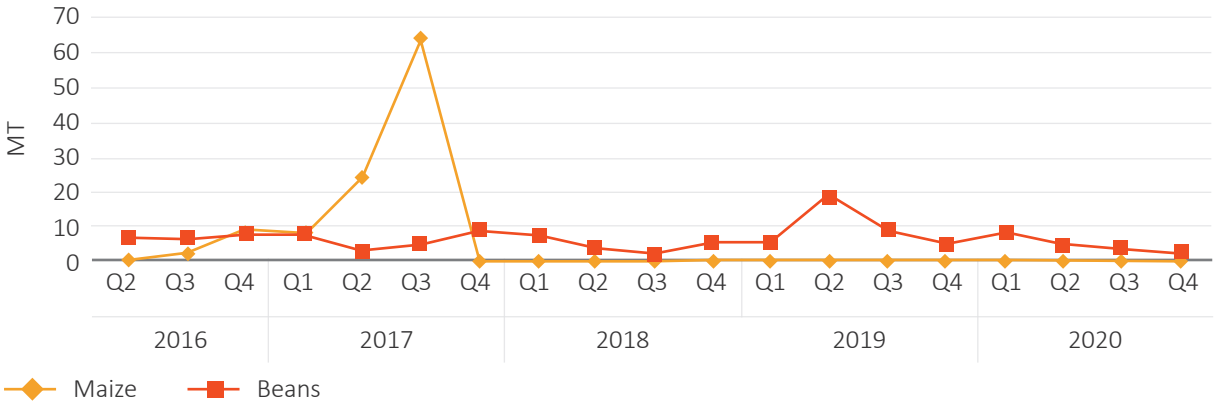
For other animals, such as camels and sheep and goats, there are extensive regional value chains linking producers to overseas markets. Little et al. (2015), for example, finds that a large number of goats and sheep that are processed at Ethiopia's abattoirs and then exported to the Middle East are sourced from northern Kenya via unrecorded trade channels. Sheep and goats are moved from northern Kenya into Ethiopia through Moyale and then to Elwaye and Mega in southern Ethiopia. Some of theses animals are trucked to Addis Ababa for final consumption while others are transported to Djibouti for export though series of further transactions (Tesfaye and Amaha, 2018). There is often entails two-way trade in animals across HoA borders. Camels cross from Ethiopia to Kenya while at the same time Kenya is a key source of camels to Southern Ethiopia through Moyale (Tesfaye and Amaha, 2018). The main source markets in Kenya includes Mandera, Wajir, Garisa, Bangale, Isiolo, Marsabit and Moyale. The animals are trucked to destinations in Ethiopia such as Nazaret, for further fattening and then later trucked to Djibouti to be exported.

Increasing international demand has led to a rise in cross-border trade of donkeys from Ethiopia to Kenya. Ethiopia's 7.4 million donkeys have increasingly been the focus of attention to fulfil a growing demand for donkey products, especially in China . However, Ethiopia has banned trade in donkey skin and meat since 2017. While Ethiopia and most other African countries have banned donkey slaughter, Kenya, in contrast has licensed donkey slaughterhouses and the export is growing each year. During 2016-2018, Kenya exported a total of 16,544 tonnes of donkey meat valued at KES. 1.72 billion (KNBS, 2019). Studies shows that the donkey population of Kenya has declined since following donkey exports in 2016. As a result, donkey traders are importing from neighboring countries to meet the increasing demand.

B. Agricultural commodities

Ethiopia is a major source of food in the borderlands of Kenya, especially during periods of adverse weather. The main agricultural products traded in the borderlands of the two countries include maize, sorghum and dry beans. Ethiopia can be a particularly important source of maize for Kenya during adverse weather periods. This leads to somewhat erratic trade patterns. For example, in 2017, maize exports from Ethiopia to Kenya reached about 95,000MT, considerably higher than in years before resulting from the drought conditions in Kenya in that year. Ethiopia is also a key source of dry beans. During the period from 2016 to 2020, nearly 122,031MT of beans were exported from Ethiopia to Kenya (Figure 8).

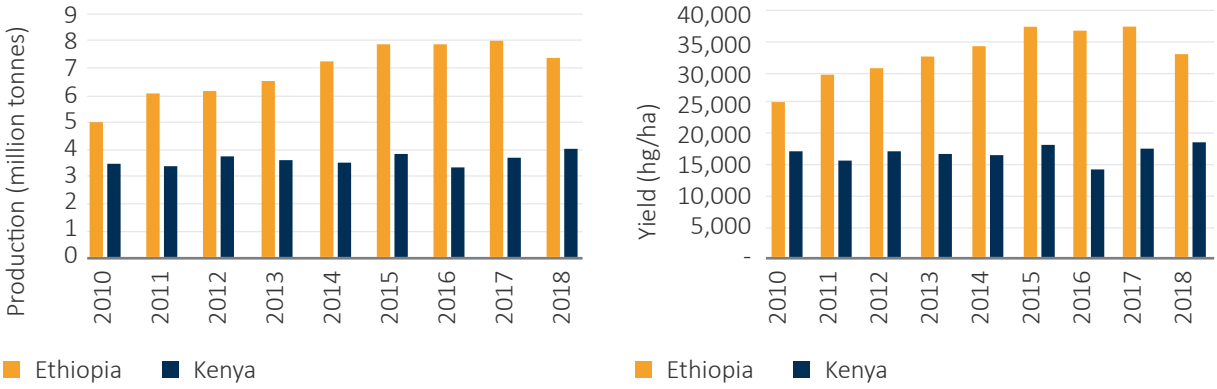
Figure 8: Cross-border maize and bean export from Ethiopia to Kenya: 2016-20



Source: staff calculation from FEWS NET, 2020

As climate change brings the risk of more frequent extreme weather events, the importance of cross-border trade in maize and other agricultural products is likely to rise. The scope for cross-border trade between Ethiopia and Kenya reflects the differences in production and consumption of the two countries with Kenya being maize deficient in most years. Figure 9 shows that Ethiopia produces almost twice as much maize as Kenya reflecting a larger area under cultivation but also significantly higher yields. But, measured in consumption of grams per person per day, the available evidence suggests Kenya (171) has much higher consumption per person than Ethiopia (94) (FAO, 2009). Map 2 shows the geographic structure of maize production in the Horn of Africa and the areas with the highest yields.

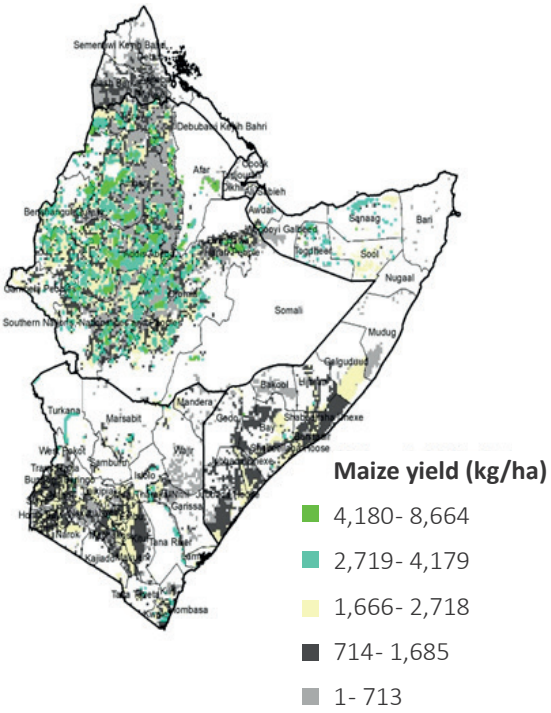
Figure 9: Maize production and yields



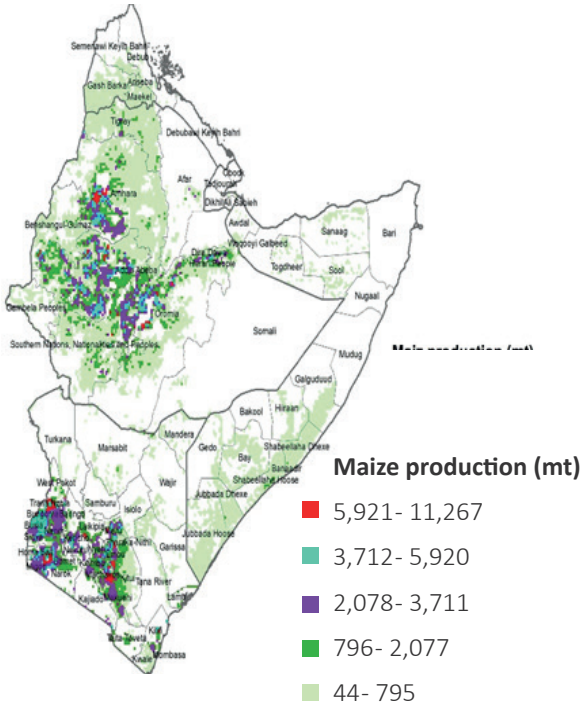
Source: FAO, 2019

Map 2: The geography of maize production and yields in the Horn of Africa

A. Yield



B. Value of production



Source: Global Agro Ecological Zones (GAEZ), 2010

C. Main Trading routes

There are two key cross-border trading routes between Ethiopia and Kenya (Tesfaye and Amaha, 2018).

A. Filtu-Dolo-Suftu- Mandera, Kenya : This trade route links the southern part of Ethiopia's Somali region to Kenyan livestock markets such as Mandera, Wajir and Garissa.

B.Negelle-Dubluk-Moyale, Ethiopia-Moyale, Kenya: This route, on the other hand, links Oromia's region of Ethiopia to Moyale Kenya. The great majority of cattle sold in Moyale Kenya originate from markets mainly in Borana zone in Ethiopia. Among others, Dubluk, Harobake, Arero, Dhas, , Taltale, and Hiddilola are the main cattle marketing centers in Borana zone. Dubluk, located 635km south of Addis Ababa along the main route to Moyale is the largest market in Oromia region, with approximately 1,000 animals offered for sale per market day (Pavallona, 2010).

Table 5: Catchment areas and markets

	Catchment areas	Markets	Terminals	Net flow
Cattle	*Oromia:* • Arero • Dhas • Harobake • Taltale • Dubluk and • Hiddilola *Somalia:* • Web • Dolo	*Oromia* • Sololo • Moyale • Somalia • Moyale *Kenya* • Moyale • Mandera • Garissa	• Nairobi • Isiolo • Mombasa	Ethiopia-Kenya
Camel	*Kenya:* • Mandera • Wajir • Garisa, • Bangale • Isiolo • Marsabit	• Moyale	*Oromia* • Adama	Kenya-Ethiopia
Goat and sheep	• North Kenya • Southern Ethiopia	*Borana* • Elwaye • Mega	Addis Ababa Nairobi	Kenya-Ethiopia

Source: Pavallona, (2010) and Tesfaye and Amaha (2018)

Moyale and Mendera are the two main livestock trading hubs across the border between Kenya and Ethiopia.[9] They connect prime livestock-producing areas of southeastern Ethiopia and southern Somalia to Kenya's largest livestock markets, including Garissa, Nairobi and Mombasa. The Moyale trading hub is located in the administrative center for two woredas in Ethiopia;

[9] Moyale is located about 595 km from Nairobi and 675 km from Addis Ababa. It is split between the two countries: the larger portion being in Ethiopia (in the Oromia Region) and the smaller in Kenya (i.e. the capital of the Moyale district).

Moyale of Somali region and Moyale of Oromia and Moyale District of Kenya. Moyala Somalia is a main market for camel while Moyale Oromia is for cattle. Other cross border markets near Moyale are Sessi, Arbale, Somare and Lammi (Tesfaye and Amaha, 2018).

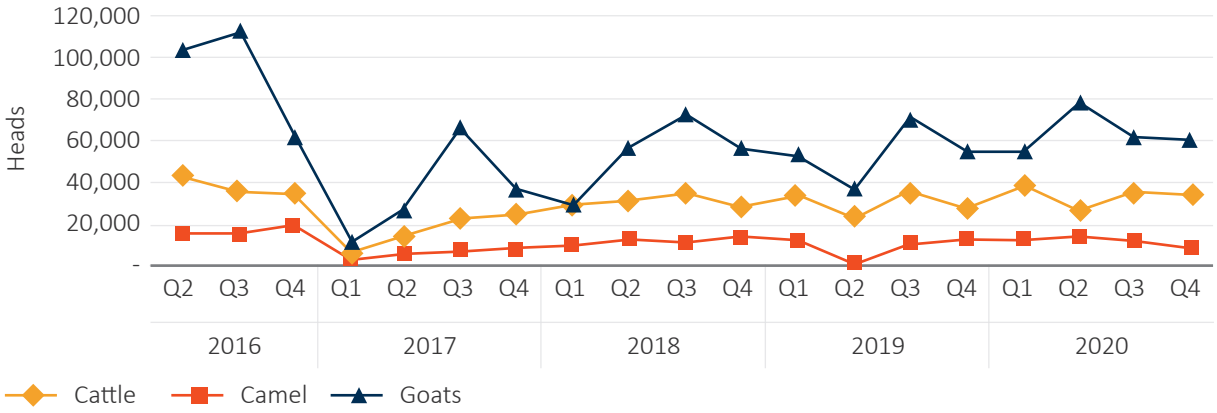
3.3 Ethiopia-Somalia Cross-Borders Trade

The main products traded along the Ethiopia-Somalia border are livestock such as cattle, sheep, goats and camels and commodities such as maize, sorghum, rice, pasta and sugar. Several studies have documented that the movement of livestock trade in the Somalia corridor is the largest in the world, although the information is dated, the estimated annual trade was $200 million in 2008 (Majid, 2010). Looking at the direction of flows, livestock and food crops flow from eastern Ethiopia to Somaliland. Whereas rice, pasta, wheat flour, sugar and other imported consumer goods flow from Somaliland to eastern Ethiopia (Little, 2002 and FEWS NET, 2020). The main livestock catchment areas in Ethiopia are from Somalia regional pastoralists such as Gode, Liban and Afder. Several reports indicate that besides domestic consumption, cattle crossing eastern Ethiopia to Somalia are then exported to middle eastern markets. Little (2002) and Tesfaye and Amaha (2010) find that approximately 50 percent of livestock exports from the Port of Berbera originated in Ethiopia. In 2011, more than 3 million live animals were exported from Somaliland to Middle Easter countries, a large percentage was originated from Ethiopia (Little 2015). For cross-border trade between central Somalia and eastern Ethiopia, Ethiopia's main export is coffee, goats, sheep, camel and Khat while imports from central Somalia include pasta, wheat flour and food crops (Little, 2002 and FEWS NET 2020).

The volume of cross-border livestock trade between Ethiopia and Somalia is substantial, with most of the animals being further exported to the Gulf countries. Figure 10 presents the volume of unofficial cross-border exports of livestock from Ethiopia to Somalia during 2016-20.[10] Livestock trade in the border increases seasonally in the third-quarter mainly due to extended high demand both regional and in Middle Eastern Gulf States during the Haj festivities in August. Cattle trade has increased substantially in recent years, from 66,000 in 2017 to 131,129 heads in 2020, an increase of almost 100%. Ethiopia is the main source of goats exported to the middle eastern countries via Somalia much of which is unrecorded in official statistics. Exports over the last five years (2016-2020) have averaged above 200,000 head. Somalia is home to the world's largest camel population. Nevertheless, there are still substantial imports of camels from Ethiopia.

[10] These data are based on FEWSNET data from five border crossings, Togwajale (Wajale), Bohotle, Goldogob, Beled weyn and Bula Hawo.

Figure 10: Cross-border livestock exports from Ethiopia to Somali, 2016-20

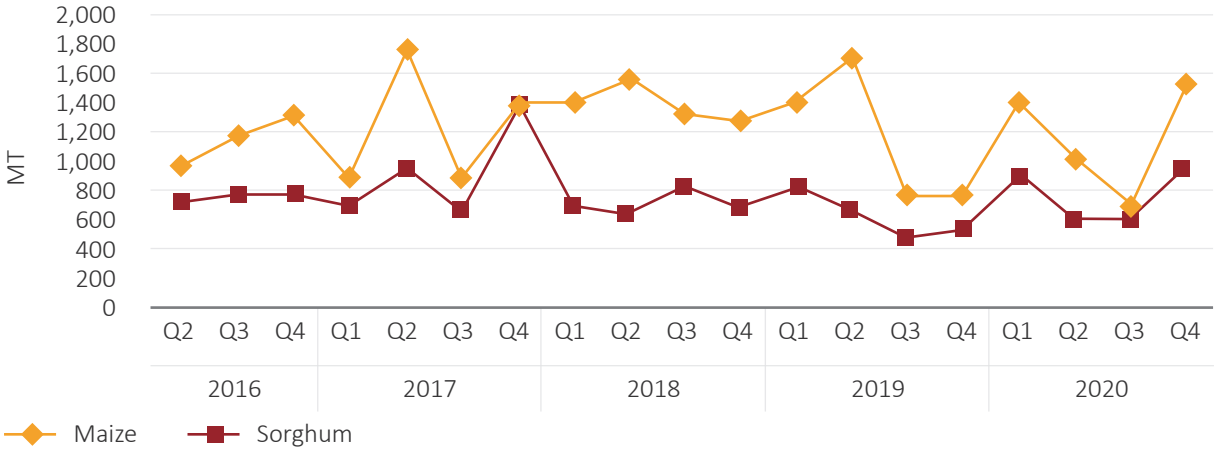


Source: FEWS NET, 2020.

Maize

Between 2016 and 2020, a total of more than 23, 000 MT of maize was informally imported from Ethiopia to Somalia (Figure 11). The highest import was recorder in 2018 partly due to the fall in domestic production of maize in Somalia in this year. The April-to-June three year average (1,700) MT) was 25 percent higher than the first quarter and 40 percent higher than the third quarter average (Figure 11). In addition to maize, Somalia import sorghum from Ethiopia. Its import was totaled 9131 MT during 2016 and 2020.

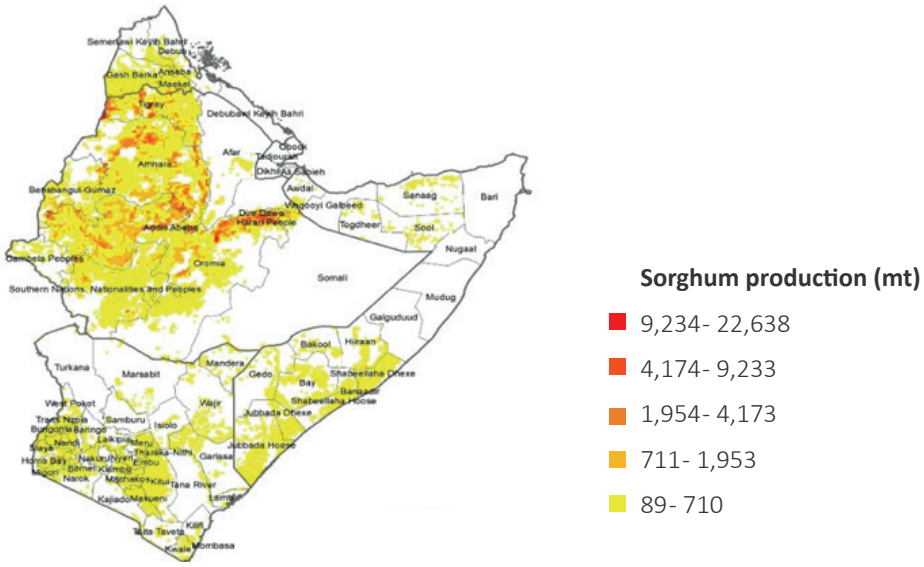
Figure 11: Cross-border maize and sorghum exports from Ethiopia to Somali,2016-20



Source: staff calculation from FEWS NET, 2020

Map 3: The location of sorghum production in the Horn of Africa

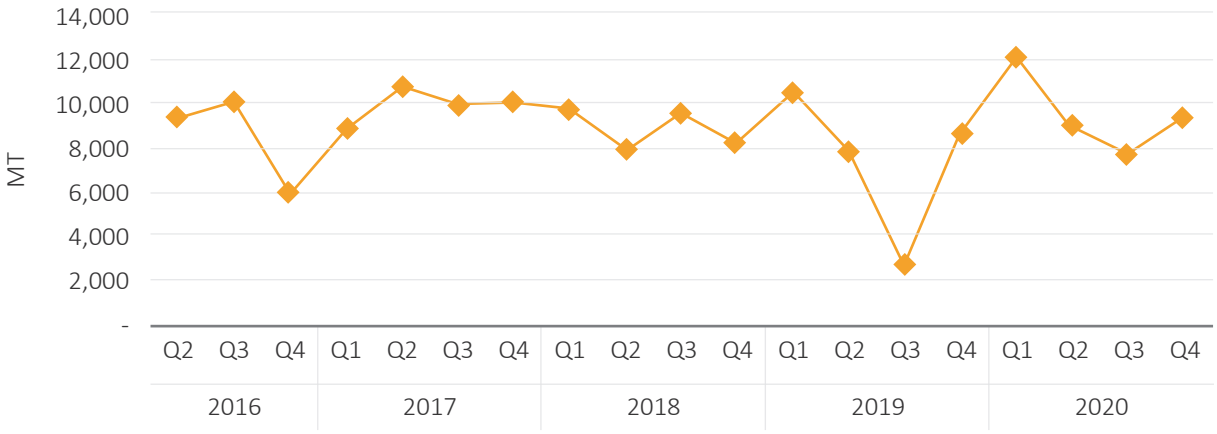
Sorghum production



Source: Global Agro Ecological Zones (GAEZ), 2010

Ethiopia imports a large amount of rice from Somalia. The available evidence suggests that this is re-exported rice previously imported from outside of the region (FEWS Net, 2017). Figure 12 shows that between 30 and 40 thousand tons of rice has been imported from Somalia in each of the last three years. However, with the increase in domestic production of rice in Ethiopia, the import has declined by 35 percent between 2017 and 2019 (Figure 12).

Figure 12: Cross-border rice export from Somalia to Ethiopia, 2016-20



Source: FEWS NET, 2020

Main Trade Routes

Unlike Ethiopia-Kenya trade, the Ethiopia-Somalia cross border trade routes are clan based. A large proportion of livestock especially goats and sheep, come from areas populated by members of the Ogaden clan. The Ogaden clan inhabits much of the interior of Ethiopia Somalia region, while clans such as the Isse, Gadabursi, Isaaq, Dhulbahante and Marehan straddle the borders of Ethiopia and Somalia. The majority of trade in the borders involves the movement of animals across clan and national boundaries.

There are three main cross-border livestock and crops corridors between Ethiopia and Somalia (Umer, 2007; Majid, 2010):

A. Berbera corridor: The cross-border trade between the two countries goes through the Berbera corridor, coming from different trade routes. Currently, the main trade routes feeding the Berbera corridor are:

1. Tog wajale-Hargesia-Berbera: this is a route that assembles livestock coming as far as Adama (Nazaret) and the northern parts of Somali region. Tog wajale is a town located in northwest Somalia on the border with Ethiopia, 230 KM from Berbera port. It is a vibrant market that handle both formal and informal trade between the two countries. It has been one of the largest livestock as well as commodities markets center at the border. As such a modern livestock market center was built in 2006, a fenced enclosure for holding animals and a rump for loading livestock onto trucks.

2. Hart Sheikh–Hargeisa: In this route livestock from markets in Somalia region such as Fiq, Kebri Dehar and Degeh Bur are assembled and trekked or trucked to Hart Sheikh and then to Hargeisa, Somaliland. This trading route is also used in reverse direction to bring livestock from Somaliland and sell them in Harta Shiekh market, Somali Region.

3. Dire Dawa/Harar–Jijiga–Hargeisa–Berbera: This route connect traders from Harar and Dire Dawa to Jigjiga which is the largest center of the Somalia region in Ethiopia. It is an important livestock market centers serving as an assembly point for livestock coming from Fiq town and surrounding areas of Jigjiga for export prior to 2010.[11] Another catchment area near to Jijiga is Lefe Isa, an important livestock trading centre, especially for fattened cattle from areas like Adama (Nazret).

4. Gode-Gashamo-Burco-Berbera: This route serves mostly livestock coming from Gode, Afdher and Degeh Bur zones of Somali Region. The livestock that goes through this route passes through Burco town, in eastern Somali before it reaches the port city of Berbera.

B. Bosasso corridor : This route connects livestock traders from Ogadeni, Marehan, Dhulbahante and other clans of the eastern Somali Region of Ethiopi with Bessaso, Somalia. The main marketing borderlands are:

- Warder routes - Bosasso
- Kebri Dahar–Bosasso

C. Mogadisho corridor: The route is centered on Belet Weyne, an important agropastoral area of Shebelli Valley, central Somalia. It connects Somalia region of Ethiopia and Mogadisho. It has a relatively low cattle price.

[11] Recently, federal authorities in Ethiopia sought to exert greater control over transactions at the Jijiga market and hence the cross-border trade has significantly reduced. The trade has shifted to Kabri-bayah and Harta Shiekh (EID, 2014).

Table 9: The flow of livestock and crops between Ethiopia and Somalia

Markets in Ethiopia	Markets in Somalia	Ports
Tog wajale	Hiran	Berbera
Jijiga	Galgadud	Bosaso
Lafa Isa	Mudug	Mogadisho
Gode	Borama	Kismayo
Liben	Belete Weyne	
Afder	Wajale	
Harar	Buholde	
Hargeisa	Goldogob	
Burco	Bula Hawo	
Kebri Dahar		
Teferi Ber		
Fiq, Qoraxay and Degeh Bur		

Source: Majid, 2020; Little, 2002

3.4 Ethiopia - Djibouti Cross-Borders Trade

Ethiopia is the main source of livestock for Djibouti's re-exports of animals and livestock products (hide and skins) to the Middle east countries. While officially recorded trade has been declining, the actual amounts of exports, dominated by livestock, has been increasing (Tesfaye and Amaha, 2018). The main catchment areas in Ethiopia that supply cattle, goats and sheep are Afar and Somali regions. The direction of flow of animals is entirely from Ethiopia to Djibouti. In addition to trade in livestock there are small flows of vegetables and fruits, spices, grained bean and pepper, animal products such as milk, butter and honey (Taka and Azeza, 2002; 20Majid, 2010; Habtamu et al, 2016, Tesfaye and Amaha, 2018).

Table 10: Ethiopia-Djibouti cross-border trade

Ethiopia to Djibouti	Djibouti to Ethiopia	Catchment area (livestock)	Trade routes
Khat Cattle and Camel Hide and Skins Vegetables and Fruits	Cigarette Cooking oil Pasta, Macaroni, Wheat flour Rice	Dessie, Mille, Semera, Gewane Diredawa , Dewele	Galafi, Yoboki and Dikhil Galile, Ali Sabih, Balbala, Dibouti

Source: Teka and Azez, 2002, FEWS NET, 2017

Khat (chat): Ethiopia's nearly half a million hectares of land are believed to be allocated to Khat production (Feyisa & Aune, 2003). Currently Khat production is estimated to be three times more than it was grown in early 2000s. Many farmers switched to cultivate khat from coffee and other crops, due to its higher and more stable returns. Khat is now among the top export products of Ethiopia. The main trading partners are Djibouti and Somalia. According to the study by Belawi (2014), the daily demand of Chat for Djibouti is more than 20 tonnes. However, the demand fulfilled through informal exporters from Ethiopia (Habtamu et al, 2016). The main collection centers are Awday and Haraghe highlands (Bedessa,, Chelenko, Felana, Karamille, Kobo Kulubi) (Taka and Azeze, 2002). Sorghum is the main stable food exported from Ethiopia to Djibouti amounting to 4000 tons in the first quarter of 2020.

Main Trade Routes

There are two main trade routes from Ethiopia to Djibouti ((Habtamu et al, 2016).)

I) Galafi---Yoboki---Dikhil---Balbala: This route connects the northwestern Ethiopia to Djibout. Galafi is an important livestock market centers serving as an assembly point for livestock coming from Northwestern Ethiopia markets such as Adama, Dessie, and Semera. It is connected to Djibouti's main territory market of Balbala in the capital city of Djibouti by road and rail with Yoboki and Dikhil markets lining this transport corridor.

II) Galali----Ali Sabih----Balbala: In addition to Galafi, the cross-border trade between Ethiopia and Djibouti takes place through Galile. This market linked with Balbala (main market) through Ali Sabieh by railway. Dire Dawa and Dewele are among the main assemble point in this trade route.

3.5 Ethiopia - Eritrea Cross-Borders Trade

Teff and sorghum were the main staple food traded between Ethiopia and Eritrea before the war and border closure. Following the end of the war, there has been some small-scale cross-border trade, especially the more important informal cross-border exports of teff from villages around Tsorona, Ethiopia to Eritrea (Loura, 2003). The trade takes place through third countries. Majid (2010) documents that teff was being brought from Ethiopia through Djibouti and Dubai to Massawa. Following the Ethiopia-Eritrean peace deal in 2018, both countries reopened border crossings and cross-border trade flourished with no issue of currency exchange. Teff, edible oil, fuel, red pepper, cement, and charcoal were the main products Eritrea imported from Ethiopia (Ethiopia Ministry of Revenue, 2020). Ethiopia was importing sheep, garments and electronics from Eritrea. However, this was short lived as Eritrea closed border crossings in 2019.

Main Trade Route

The main trading routes between Ethiopia and Eritrea are:

- Djibouti – Massawa
- Dubai- Massawa
- Bure – Assab
- Zalambesa-Serha
- Humera -Omhajer

3.6 Somalia - Kenya Cross-Borders Trade

There is a significant cross-border trade in livestock (cattle, camel, goats and sheep) and agricultural commodities between Somalia and Kenya (Table 14). Though the volume of cattle traded varies depending on the availability of pasture and water, Awuor (2007) estimated that around 65,000 cattle per year enters Kenya markets from Somalia. Rice, pasta, sorghum and food aid maize are the main primary agriculture commodities traded between Kenya and Somalia (Table 14). Northeastern province of Kenya is pastoralist and hence their agriculture production is very small. Sorghum, imported rice and pasta moves from Somalia to northeastern Kenya.

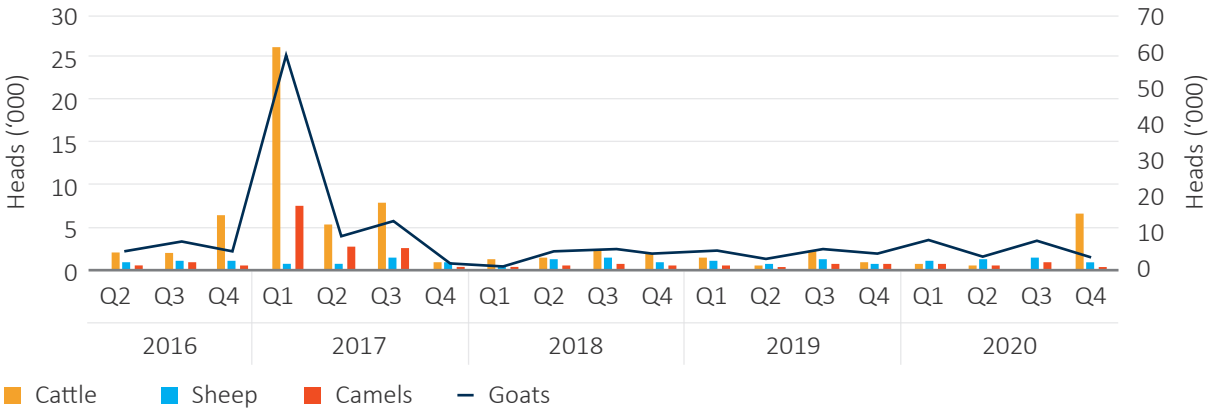
The main trading border routes between Kenya and Somalia are Bula Hawo-Mandera and Afmadow-Liboi-Garissa. The Bula Hawo and Mandera trade routes connect Northeastern Kenya and Southwestern Somalia. It is a key route for exporting to Kenyan markets such as Nairobi. Liboi, a town in Southeastern Kenya at the border with Somalia is another major town where cross border trade is important. It connects Afmadow, a prime area for cattle pastoralism in Somalia with Garissa, Kenya's second largest market that hosts animals from Somalia. Little (2012) finds that Afmadow accounted for about 25% of cattle supplied to traders in Kenya during the period between 1996 and 1998. Figure 14 presents the volume of livestock (cattle, camels, goats and sheep traded unofficially across two selected borders, Bula Hawo and Doble, in Somalia and Kenya. Currently cross border trade appears to be suppressed compared to 2016/17. Rice is a key product flowing from Somalia to Kenya but is likely mainly re-exports.

Table 14: Somalia-Kenya cross-border trade

Somalia to Kenya	Kenya to Somalia	Trading routes
Cattle camel Goats and sheep Rice Pasta Sorghum Food aid maize	Mirrah[12] Maize Tea Sugar	Bula Hawo-Mendra Afmado-Liboi-Garissa Doble- Garissa

Source: Little, 2015

Figure 14: Cross-border rice export from Somalia to Ethiopia, 2016-20



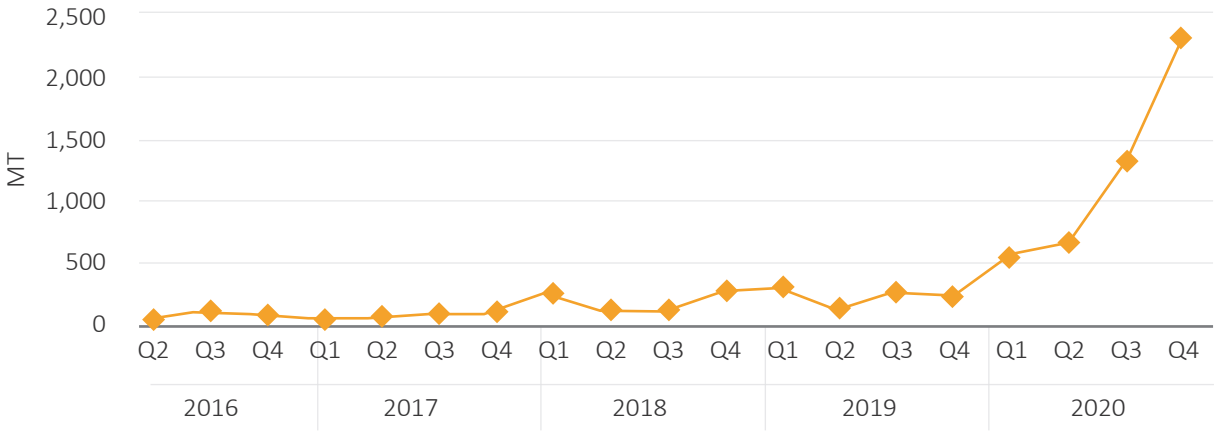
Source: FEWS NET, 2020

12 Mirrah is a mildly narcotic leave (Little, 2015).

3.7 Somalia-Djibouti Cross Border Trade

Sorghum is the main food crop traded between the two countries. There is no official trade between Djibouti and Somalia. However, there is a large amount of informal cross-border trade between the two countries. For example, about 10 percent of food crops consumed in Djibouti come from Somalia.[13] Sorghum is the main food crop traded in the border areas of the two countries Figure 15 shows that the amount of Sorghum traded between the two countries increased substantially in the period between 2016 and 2020. There are also other food commodities such as lentils, beans, pasta and maize and fruits and vegetables such as mango, watermelon and onions exported from Somalia to Djibouti but the amount is insignificant. Looking at livestock cross-border trade, significant number of cattle, camel and goats were crossing from Somalia to Djibouti for eventual export to Saudi Arabia. However, livestock cross-border trade from Somalia to Djibouti has significantly reduced following Saudi Arabia's lifting of the Somali livestock ban in 2016.

Figure 15: **Cross-border Sorghum export from Somalia to Djibouti, 2016-20**



Source: FEWS NET, 2020

Main Trade Route

Loyada – Balbala: Loyada is the main entry point for staple goods into Djibouti from Somalia. It is located on the border between Djibouti and Somalia, 13 km from Djibouti city. The main commodities traded through this routes include food commodities cereals and legumes (sorghum, lentils, beans, maize) and fruits and vegetables (watermelon, onions). Loyada market plays an important role in enhancing food security in Djibouti.

[13] About 90 % of the food commodities traded come from Ethiopia (FEWS NET, 2010).

SECTION 4

Value chain in livestock and food crops

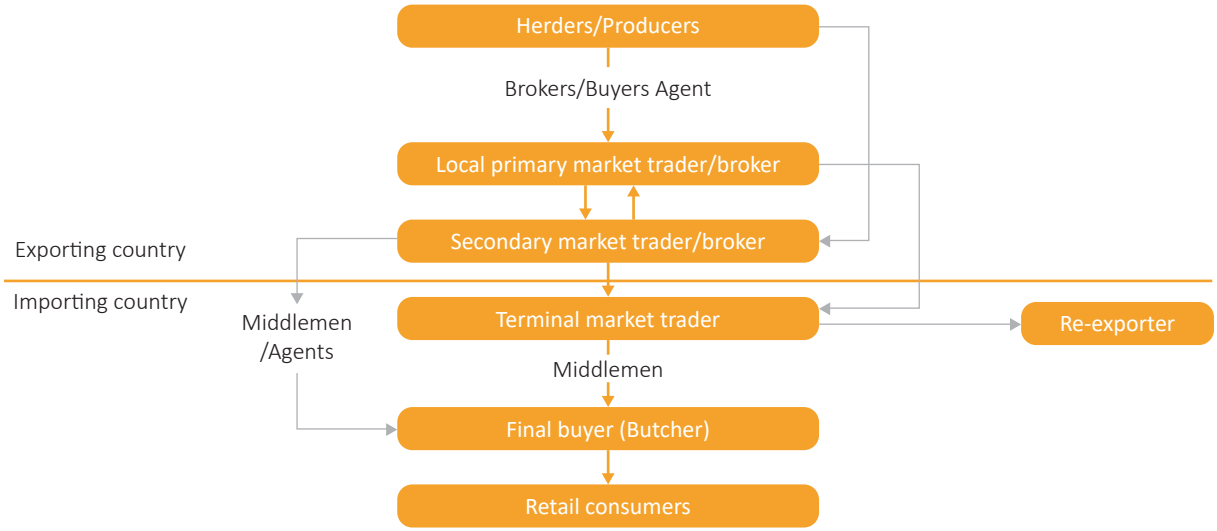
Livestock value-chain

The Horn of Africa livestock value chain has developed over the years into a complex structure involving a wide range of stakeholders including producers (herders), brokers, feed and water suppliers, traders, transporters/trekkers, processors, exporters and consumers. Figure 16 depicts the general value chain for livestock that starts with the collection of animals from farm gates moving on to local primary markets (collection markets), and then to secondary markets (regrouping markets) where livestock are regrouped and sorted into different classes based on appearance, size, color and conditions and then on to terminal markets and final buyers. If a primary market is near a border, cross-border traders purchase animals from farmers

for onward sale in a terminal market, which may be in an overseas country. Secondary markets are relatively larger than primary markets, usually they are the main trading center in a district. The main actors in these markets include pastoralists, local butchers, middlemen and export traders. Pastoralists may directly sell their animals at secondary markets or purchase breeding stock. Brokers purchase animals for reselling to the butchers. Exporters purchase animals and further fatten to export to overseas markets. However, while this summarises the broad structure of the value chain processes and interactions between actors in the value chain are casual and change to suit the nature of the border.

Pastoralists and agro-pastoralists are the main supplier of livestock in the Horn of Africa. Smallholder farmers in arid and semiarid areas of the Horn are dependent on trade in livestock and livestock products. They are main supplier of animals at primary or collection markets. Farmers (herders) also sell directly to secondary market traders at secondary or regrouping markets. Pastoralists are often located in remote areas, at times in inaccessible terrain, far from town centers. When primary or secondary markets are far away from the farm gates, farmers hire trekkers to move their animals over several kilometers to reach to these markets. Long distance trekking is common particularly in Kenya-Somalia borders (Little, 2015).

Figure 16: Livestock value chain in the Horn of Africa

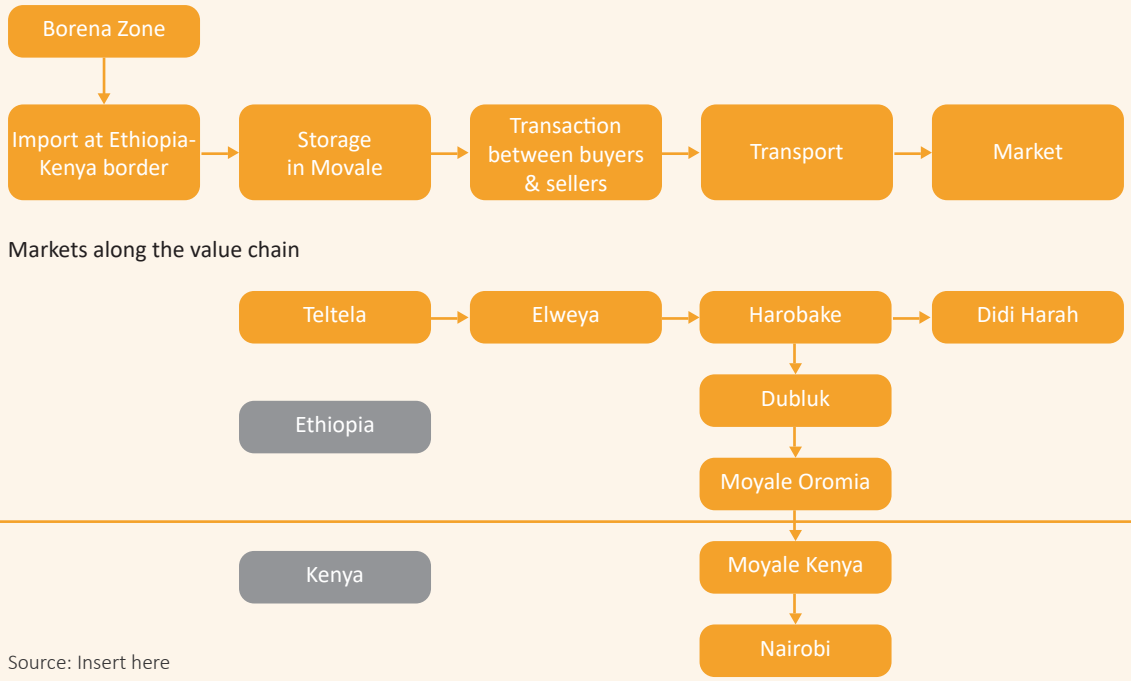


Source: FEWS NET

Box 1: Cattle value chain from the Borana Zone (Ethiopia) to Nairobi (Kenya)

Figure B1 presents the value chain for cattle along the Moyale corridor. The largest share of cattle sold in Moyale, Kenya are supplied from lowland pastoralists in Borana zone, Ethiopia. As shown in the figure, there are at least three primary local markets including Teltele and Elweya markets on the west of Harobake and Didi Hara east of Harobake. Pastoralist or small traders who collect cattle from these markets trek to sell on to medium traders at Harobake livestock market. From there, they are trekked Dubluk for sale to large and cross-border exporters. Large traders then move the cattle again to Moyale Oromia for cross-border trade to Moyale Kenya. From Moyale Kenya, cattle are then trucked to Nairobi, 730km away, where they are finally slaughtered (Pavanello, 2010).

Figure B1: Cattle value chain along the Moyale corridor

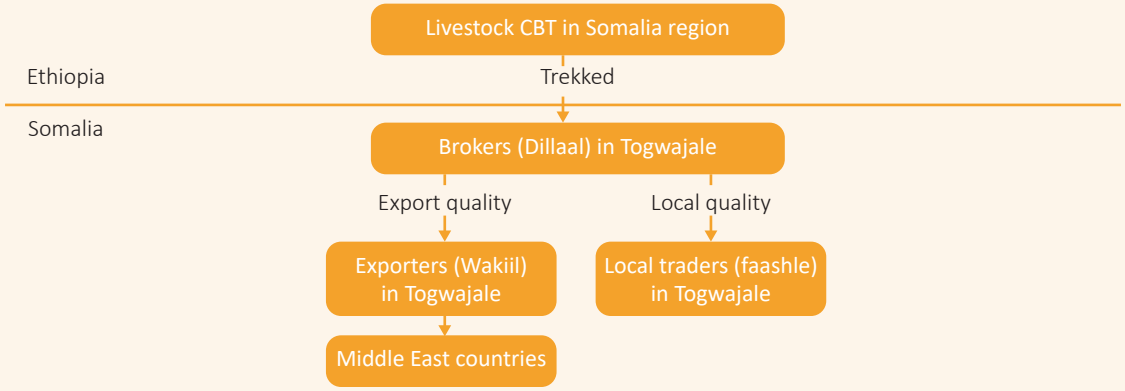


Source: Insert here

Box 2: Livestock value chain in Togwajale

Figure B2 present a summary of the value chain for livestock trade along the Togowajale. As shown in the figure, livestock is trekked mainly from Somali region of Ethiopia to Togwajale. In Togwajale market center, livestock are sorted in to two groups: export quality and local quality. The export quality livestock are purchased by export traders or their agents (wakiil), while local quality animals are purchased by local traders (faashle). The trade in livestock between pastoralist and exporters is facilitated by Brokers (Dillaal), who are respected by the community (FEWS NETS, 2013).

Figure B2: Livestock value chain along the Togowajale corridor attle value chain along the Moyale corridor



Source: FEWS NETS, 2013

The key features of the livestock value chain the region include (i) clan-based and trust-based trading (ii) the role of price setters (iii) quality grades and standards (iv) fattening to improve return:[14]

Clan-based trading: Cross-border trade in the Horn of Africa is sustained by high levels of social capital among key market actors. Mohamed (2008) document that livestock sales are transacted mainly based on ethnic and familial ties. This could be due to the uncertain business environment, absence of strong institutional or judicial intermediation and formal systems of credit enforcement, weak infrastructure, limited market support services and prevalent insecurity in pastoral areas. In the absence of ethnic ties, a trust-based network of pastoralists, intermediates, traders and final buyers is important (Awour, 2007). Though clan-based and trust-based marketing facilitate trade, they can also distort the livestock market in the region (Little, 2007). It may result clan-controlled monopoly market. For example, in Ethiopia's Oromia region, there are two ethnic communities namely Garri and Borana that are involved in Ethiopia-Kenya cross-border trade. In Ethiopia-Kenya trading routes, traders of Garri ethnicity do not participate in Borana dominated markets such as those at Harobake and Dubluk (Pavanello, 2010).

Price setting: There are many factors that determine livestock prices in the Horn of Africa such as drought, holidays, seasons (Awour, 2007, Little 2015). On average, livestock prices decrease during droughts as their weight declines. On the other hands, prices tend to rise during holidays when meat is in high demand. For example, in Somalia the Muslim Hajj period (between July and September) causes sharp increase in price of cattle and small ruminants (Musa et al, 2020). In terminal markets, however, butchers and middleman are the main price setters (Awour, 2007). In general, along the value chain, the price gets lower all the way down to the pastoralist.

Quality grading and standards: In spite of constraints related to scientific capacity, livestock collectors in the Horn of Africa grade and standardize animals based on breed. Breed standard covers observable qualities of animal such as color and appearance, size and region of origin. In the case of goats and sheep grading, hair or wool characteristics are used in addition to color, appearance and region of origins (Samuel et al, 2000).

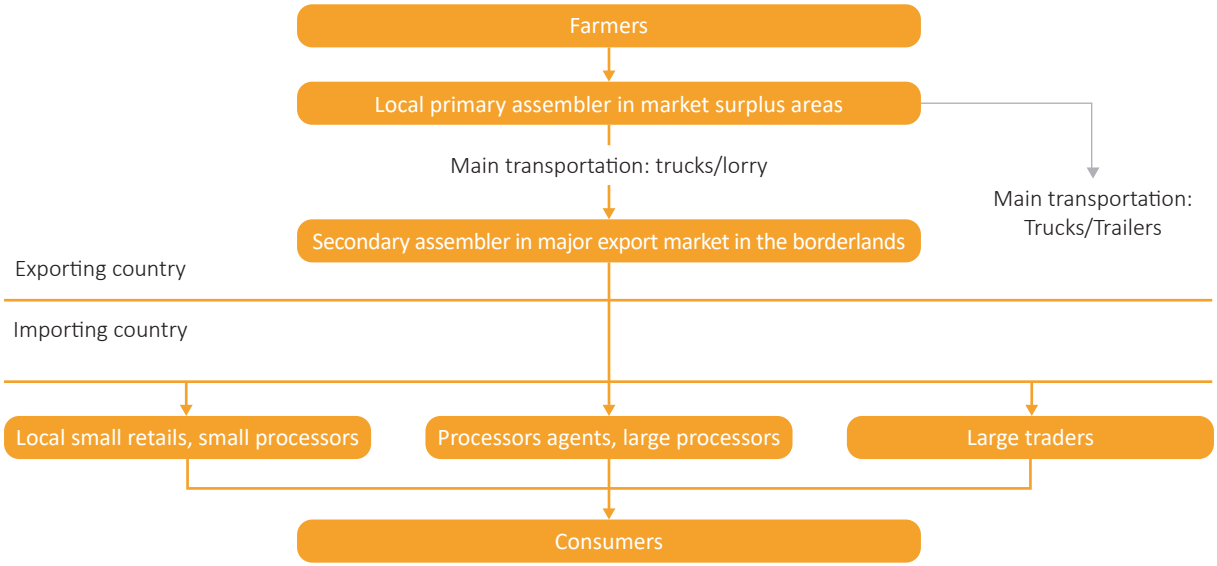
Fattening: Along the value chain, small and large livestock traders in the Horn of Africa buy animals from primary and secondary markets for fattening. For example, in Adama city (92 KM away from Addis Ababa), there has been a large private feedlot that buys and fattens cattle for sale for domestic as well as cross-border traders. They use agricultural processing by-products from the flour factory, oil mills, feed shops and crop mills for fattening the cattle ((Akiliu 2002). Similarly, in Somalia, middlemen purchase and fatten animals for up to two years before selling them. Recently, however, fattening practice has been declining due to constraints related to land access and the high cost of fattening products. Moreover, from the demand side, butchers' demand for fattened cattle is low and offer reduced prices compared to pasture-fed cattle on the notion that the meat from these animals has a lower shelf life.

[14] (Little and Mohamoud, 2005, Awour, 2007; Mahmoud, 2008).

Agricultural commodities value-chain

The key cross-border agricultural commodities traded between Horn of Africa countries are maize and maize flour, wheat and wheat flour, rice, sorghum and sorghum flour (East Africa Cross-Border Trade Bulletin, 2019). In general, the process and main actors in the agricultural commodities value chain in the Horn of Africa are shown in Figure 17. The great majority of agricultural commodities are produced by smallholder farmers who sell mainly to local primary assemblers. Local assemblers are small traders who bulk crops, vegetables and fruits from market surplus areas for onward sale to larger domestic and export markets. They may also be agents of secondary markets assemblers. Local assemblers usually purchase commodities on local market days, especially during harvest seasons. They may also collect commodities from farms. In most cases, they use hired vehicles, non-motorized transport (donkey and bicycles) or small trucks to collect commodities from local markets or farms to their stores (Awuor, 2007). Accumulated agricultural commodities from surplus areas are then transported to major export markets near or along borders. These markets usually have storage facilities. Export assemblers in export markets dry, sort, weigh, and package commodities for export. Importers come to these markets to inspect, choose and purchase commodities. Importing traders have at least three options in selling their commodities: i) small retailers some of whom have small millers of maize, millet and sorghum, ii) large processors that usually receive high quality products, iii) large traders for onward sale to processors, humanitarian organizations or reserves (Awuor, 2007).

Figure 17: Value chain in Crops



Source: FEWS NET, 2013

SECTION 5

Impact of Cross-Border Trade

Cross-border trade is an important part of the economies of HoA countries. In the Horn of Africa, it is estimated that cross-border trade supports about 17 million people including pastoralists, agro-pastoralists, small and medium local traders, cross-border traders, brokers, butchers, trekkers and others (OECD, 2017; Tesfaye and Amaha, 2018). Among others, cross-border trade in the region contributes to greater food security, enhanced income earning opportunities and reduced poverty, generating employment opportunity for poor households particularly for women (see for example, Aklilu, 2002, Little, 2005, Mohammud, Mejid, 2010, Pavenello, 2010 Bouet et al, 2018).

Cross-border trade in the Horn of Africa is crucial for food security, improving food availability, food use and stability in the region. Little (2010) documents that trade in the border areas facilitates cross-financing in trading agriculture products. In many parts of the region

the income from livestock and livestock products trade is used to subsidize grain and other food consumptions. This is particularly the case for herders living in food deficit zones. For example, along the Ethiopia-Somalia trade routes, income from livestock trade to finance grain imports has improved food security in the area (Umer, 2007). This has been also documented along other routes including southern Ethiopia-northern Kenya (Teka et al 1999; Mahmoud 2003), southern Somalia-northern Kenya (Little 2000; 2006), and eastern Ethiopia-Djibouti (Teka and Azeze, 2002).

There are three main channels through which cross-border trade affect the food security in the border areas (Take (2001)): First, cross-border trade increases and broadens available market supply and demand for livestock and food crops in the region. Hence, pastoralists in the borderlands benefit from the increase in demand for their animals and commodities. For example, Togwajale market is key to food security of households in catchment areas of Eastern Somalia region who sell livestock and livestock feeds to Somaliland in order to buy food and non-food items. In addition, imported food and none-food commodities from Berbera port are trucked to Togwajale cross into Eastern Ethiopia (FEWS NET 2013). Second, people in the border consume food items produced in other neighboring countries or imported from elsewhere that could not be supplied cheaply from domestic markets. For example, eastern Ethiopia imports rice, wheat flour, pasta, sugar and vegetable oil form Djibouti and Somalia borders. These products, however, are either unavailable or relatively more expensive in the domestic markets. Thirdly, by generating employment opportunities, cross border trade provides incomes to purchase food (Little, 2015). Improvement of food security is particularly important in food-importing countries suffering from drought which is common in the Horn Africa countries.

Cross border trade in the Horn has contributed to improvements in smallholder income and poverty reduction. This trade has been found to enables herders to provide for their children's education, housing and other basic needs. Along the value chain, cross border trade also increases income of traders, trekkers, fodder produces and traders, brokers and other marketing service providers in direct or indirectly (Amhaa and Tesfyae, 2014). Cross-border trade constitutes a vital source of livelihood for the poor, in particular for low-income and low-skilled traders in border districts (UNCTAD, 2019).

Cross-border trade widens employment opportunities for both men and women in the border areas where there is no alternative employment (Amaha and Tesfaye, 2014). In the Horn of Africa, although the cross-border trade has been dominated by men, it has contributed to job creation for women who may not have the time or support necessary to enter into formal employment channels (Boute et al, 2018). Comparing employment opportunity in the borderlands, the participation of women is much more prevalent in Ethiopia-Somalia borderlands, where Somali women are very active in small stock marketing, than the Ethiopia-Kenya border areas which is male dominated (Berihanu, 2016). Cross-border benefits women by providing business opportunities for those who engage in the cross-border trade. Tiki (2012) shows that trade in goat and sheep, fruits and vegetables in Moyale is dominated by female traders who buy and sell in the same market. Women are also found working in hotels and restaurants that are linked to cross-border trade. Further, although women are rarely involved with the cattle trans-border trade, they often participate in the value chain such as through fattening animals or engaging in grain production. Finally, women participate in small-scale trade-related activities in the border areas. For example, along the Ethiopia- Djibouti trade routes there are large numbers of women traders in Dire Dawa, Shinnile and Melka Jebdu, who sell food items to traders crossing to Djibouti. (Amha and Tesfaye, 2014). For many women in these towns, cross-border trade activities are the only source of income to contribute to their families' subsistence and wellbeing.

SECTION 6

Major challenges in cross-border trade in HoA

The potential for cross-border trade in the Horn of Africa countries is undermined by a range of constraints. Table 14 summarizes the main challenges facing the different actors involved in the cross-border trade value chain. These barriers are then discussed in more detail below.

Table 14: **Constraints face by pastoralist/agro-pastoralist and cross-border trader in the Horn of Africa**

	Production	Marketing
Pastoralists and Agro-pastoralist	• Lack of/limited access to credit • Climate change/Drought • Low adoption of improved technologies • Limited access to feeds in dry season • Animal disease • Water inadequacy • Declining land base • Absence of value-adding practices	• Poor transport infrastructure • Ineffective marketing information systems • Low and variable price • Insecurity • Border closure and domestic movement retraction • Lack of appropriate slaughtering, cold chain storage • Livestock bans
Traders		• Lack of/limited access to credit • Poor transport infrastructure • Lack of appropriate slaughtering, cold chain storage • High tax and transaction costs in market systems • Border closure and domestic movement retraction • No foreign exchange service • Livestock bans

Source: Little, 2015

The Horn of Africa's poor road, market and communication infrastructures are key obstacles to cross-border trade in the region (Akililu et al., 2013). For example, the feeder roads in the northern Kenya that connect Isiolo-Moyale highways are mostly not paved and often get flooded during the rainy seasons, making the markets inaccessible (USAID, 2018). As such the transport cost in northern Kenya accounts for 25 to 40 percent of the total cost of livestock delivered at terminal markets from northern pastoral areas (Awuor, 2007). The market infrastructure on the Kenya side is relatively poor. Comparing infrastructure of two markets, Borena (Ethiopia) and Mendra (Kenya), Pavanello (2010) shows that Mandera had no basic livestock market infrastructure such as fences delimiting the market yards, no holding grounds and partitions to separate small from big ruminants. The region also suffer from shortage of water, fodder and veterinary services particularly along transit routes for trekked animals (Joosten, Muzira and Mintesnot, 2017).

Transporting animals is negatively impacted by both poor road quality as well as lack of designated vehicles for animal transportation. For example, in northeastern Ethiopia animals are taken from collection sites to feed lots and then transported to Djibouti. In most cases, animals are trekked for several kilometers and then loaded on trucks. Because trucks are overloaded and not specifically designed for carrying live animals, transportation causes stress and damage (bruises) to the animals. As a result, cross-border traders face a rejection rate of 2 – 5% of such animals upon inspection at the port of export. Poor road infrastructure and inadequate transport services undermine the exploitation of economies of scale in livestock trade (USAID, 2013).

Despite an improvement in communications infrastructure, challenges remain especially regarding the expansion of cell phone networks in border regions. The internet penetration rate in Somalia and Ethiopia is very low at 2 % and 18% respectively in 2017 (latest available data).[15] Expanding access to cell phones would contribute to making cross-border trade more efficient, for example, by increasing access to information on market prices and market demands. Another key infrastructure-related constraint to cross-border trade in the Horn of Africa is the lack of storage and warehouse facilities. Most of the border markets in the region have no modern warehouses. The existing storage facilities are small in size and not well ventilated. In this regard, the Moyale corridor is the exception as there are several storage facilities, most of which are privately owned (USAID, 2018). Finally, of particular importance to livestock cross-border traders is access to veterinary facilities, holding grounds, and water points but these infrastructures are poorly developed in the border areas of most countries in the region.

Insecurity is one of the major risks facing cross-border traders in the Horn of Africa. The main source of business insecurity in the region includes ethnic conflict, war, highway robbery, confiscation and business rivalry. There are regular border and ethnic conflicts within the market catchment area in Southern and southeastern Ethiopia, northern Kenya and northern and south eastern Somalia. These conflicts often lead to the closure of the border and disruption to cross-border trade. In recent years, cross-border trade between Somalia and Kenya has ceased several times due to conflict and Kenya's concerns about insecurity in Somalia. In 2019, following a maritime dispute over a 62,000-square-mile triangle of the Indian Ocean, the Government of Kenya closed the border with Somalia with cross-border trade banned in the process. Similarly, trade between Ethiopia and Somalia has been disrupted numerous times due to clan conflict. in 2002, the clash between two sub-clans, Ogaden (Somalia region in Ethiopia) and Isaaq initiated the burning of up to 88 trucks owned by Isaaq businessmen (Eid, 2014).[16] In 2010, conflict spread in Aware area, affecting the Daror/Rabaso and Gashamo trade routes.

Even in relatively peaceful periods, there is the threat of confiscation of their products by government officials. This is particularly the case on the Ethiopia side as the government considers this type of trade in commodities and animals as contraband citing tax evasion and consequent loss of local and foreign exchange revenues (Umer, 2007; little, 2015). In addition, there is a mis-placed perception among Ethiopian officials that Kenya is being a sole beneficiary from the cross-border trade between the two counties (Akilu, 2008).

14 (Little and Mohamoud, 2005, Awour, 2007; Mahmoud, 2008).

15 Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV (ITU, 2017)

16 The Somali Regional government at the time accused the Ogden National Liberation Front (ONLF) of being responsible destruction of the trucks (Eid, 2014).

Lack of access to market information is a well-known constraint to cross-border trade in the Horn of Africa. Pastoralists and agro-pastoralists in the border areas usually have little information about the price of their commodities or animals in their local and other markets (Adugna, 2006; Awour, 2007, Little, 2007). Hence, livestock or crops pricing is characteristically highly personalized and dependent on the severity and urgency of household needs rather than formal standards. For example, along the Ethiopia-Kenya cross-border trade routes, farmers in Borana zone and in Mandera arrive at markets with no knowledge of the price of their commodities and animals on the day. Instead, they obtain the information from brokers and other producers, either at end markets or at markets in Borana zone itself (Pavenello, 2010). However, some organized cross-border cooperatives and associations in Ethiopia and Kenya have come together to share access to information about prices. In Borena zone, for example, there has been a well-organized system whereby traders' cooperatives and private traders share price information on cattle, goats and sheep. Producers, on the other hand, were excluded from the information loop and hence had very little bargaining power in the price negotiations (Little, 2010).

An inadequate formal banking system and limited access to credit effectively act as a barrier to entry for small entrepreneurs into the cross-border livestock trade in the region. Farmers also have limited access to formal credit even though most of them possess a herd of substantial value (Aklilu et al, 2013). As such farmers and small traders rely on a range of different informal financial institutions to support their business. Little (2001) found that about 95 percent of cross-border traders in Southern Ethiopia obtained credit informally from kinsmen, friends, and associates. Less than 10 percent of the total number of traders have access to formal sources of credit. Along the Moyale Corridor, local stakeholders involved in the cross-border trade have not been using formal financial services (USAID, 2018). This is partly due to religious reasons as many of the traders are Muslim.

Livestock trade in Horn of Africa has been regularly constrained by disease outbreaks (Akililu 2013, Tiki, 2014). In the south and southeastern Ethiopia, accessing veterinary services for animals crossing the border is minimal. The prevalence of animal disease, absence of robust provision of veterinary services and lack of effective monitoring and sustainable disease reporting systems across countries in the region intensifies the risk of spread of livestock diseases. The occurrence of animal disease across the border affects both exporting and importing countries. Animals disease in the region affects not only the intra-regional trade but also trade to the Middle East. For instance, Ethiopian and Somalia faced three animals export bans from Middle Eastern countries from 1997/8 to 2010 due to an outbreak of Rift Valley Fever.

Animals and food exports are often subject to high taxes in the region. In addition to fees, the government of Ethiopia has often applied exports bans and export taxes on agricultural products and products such as hides and skins. For example, at the border town of Moyale, Ethiopia, in addition to municipality tax, local officials collect fees at town markets when an animal is sold and another tax if the animal crosses the border for resale in Kenya. Compared to cattle, tax on goats and sheep is quite high. Based on livestock prices in 2013, tax on goats and sheep was 2.5 times more than tax on cattle or camel traders (Little, 2015). (This section to be updated).

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