

Pastoral Livestock Trade and Growth in Ethiopia

Summary

In Ethiopia, government support to the export of livestock and livestock products started soon after the eradication of rinderpest. This was generic multi-sector support from which the livestock sector benefited, and pre-dated the New Alliance. Although Ethiopia has seen dramatic increases in formal exports, it is less recognised that pastoralist areas supply most of the animals for export. For this supply to be maintained or increased, specific livestock policy support is needed based on consultation with pastoralists, traders and other private sector actors, along with stronger coordination of the government ministries that oversee different aspects of the production and trade system. There are also opportunities to further apply systems to support cross-border trade, in line with the policies of the African Union and IGAD, and supported by certification systems such as the COMESA Green Pass. In terms of the New Alliance objective of supporting equitable growth, commercialisation of pastoral systems is

associated with increasing wealth disparity and out-migration of poorer or destitute pastoralists.

Introduction

The New Alliance for Food Security and Nutrition, a partnership of G8 nations, African governments and private investors in support of agricultural development in Africa, aims to improve food and nutrition security and promote more inclusive agricultural sector growth. In the Horn of Africa, only Ethiopia is a member of the New Alliance, and its commitments include support to the livestock sector. This policy brief reviews recent trends in livestock development in Ethiopia against national plans and the New Alliance, with a focus on livestock exports. As described in the brief, livestock development in Ethiopia – and especially export-orientated trade – is inseparable from the development of pastoralist areas, because these areas have long been the main source of animals for export, and this trend is likely to continue.

Pastoralist livestock and trade

Domestic trade

It is often unrecognised at the policy level that pastoralist producers are the sole suppliers of livestock to domestic consumers, especially those adjacent to pastoralist areas – and 60 percent of Ethiopia's land surface is covered by such areas. In addition to using livestock for meat, the Ethiopian highlands are known for their dependence on oxen for ploughing, and some 20 percent of the plough oxen used by farming communities originate from pastoral areas.ⁱ With improved roads and communications, this figure seems likely to increase. In addition, the meat that commands premium prices in major consumption centres like Addis Ababa, Adama, Dire Dawa and Awassa also comes from cattle originally sourced from pastoral areas and then stall-fed by farmers using traditional methods. Pastoralists have also responded to increasing domestic demands associated with the high and increasing human populations in urban areas, and rising purchasing power among some consumers.

Pastoral livestock are also increasingly sought for breeding purposes. Government and donor-funded development programmes and

commercial farmers are buying large numbers of heifers from pastoral marketing cooperatives. Considering all of these trends, it can be safely assumed that 40-50 percent of the cattle and goats supplied to domestic markets originate from the pastoral system, while the proportion of sheep could be much lower. Pastoral camels are also increasingly sought in domestic markets in mid- and highland areas, as farmers see their value as a drought-tolerant pack animal.ⁱⁱ

Export trade

Without doubt pastoral areas remain the major, and in some cases the sole, supplier for both formal and informal live animal and meat exports. Ethiopia's exports consist of live cattle, sheep, goats and camels, as well as chilled goat meat and mutton, which are mainly sourced from pastoral areas.ⁱⁱⁱ Pre-dating the New Alliance there was an unprecedented growth in formal exports, and this trend has continued (Table 1). The main supply areas are Borana for cattle and chilled sheep and goat carcasses, and Somali Region for live camels, sheep and goats. Other supply areas include the lowlands of Bale, Southern Nations, Afar and the mid-altitude agropastoral zones of Oromia. Critically, rather than showing pastoral producers as conservative and market-averse,

Table 1: Formal live animal and meat exports from Ethiopia, 2005-2013

Year	Live animals		Meat	
	Number	Value (US\$1,000)	Amount (tons)	Value (US\$1,000)
2005/06	163,000	27,259	7,717	15,598
2006/07	234,000	36,507	7,917	18,448
2007/08	298,000	40,865	5,875	15,471
2008/09	150,000	77,350	6,400	24,480
2009/10	334,000	91,000	10,000	34,000
2010/11	472,041	148,000	16,877	63,200
2011/12	800,000	207,100	17,800	78,800
2012/13	680,000	150,000	16,500	68,000

Source: National Bank of Ethiopia (NBE)

Table 2: Live animal exports from Berbera, Somaliland

	2011	2012	2013
Camels	106,167	101,686	73,789
Cattle	150,905	190,606	202,548
Sheep and goats	3,116,978	3,191,434	2,852,875

Source: Somaliland Chamber of Commerce

the data on formal exports indicates substantial market responsiveness by these producers.

The formal export process follows different procedures by species. Goats and sheep are exported either as chilled carcasses by air or live through Djibouti. Pastoral cattle are conditioned for three to four months before export. Camels sourced from the southern pastoral areas are exported without conditioning through Djibouti and Sudan. On the other hand, intensive camel conditioning takes place in the little-known camel market chain stretching

from south-eastern to north-western Ethiopia, which eventually feeds Sudan.

More controversial at the policy level are Ethiopia's informal pastoral livestock exports, which pass via Somaliland, Somalia and Djibouti to the Gulf States. Livestock export records from the northern Somali ports date back to the 1920s, and the supply from Ethiopia is part of a very well-established and generally robust marketing system. Ethiopia also has a substantial informal livestock trade south into Kenya.^{iv} Proxy measures of the informal trade



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are available from detailed data provided by the Somaliland Chamber of Commerce, as indicated in Table 2.

It seems likely that Somalia's and Somaliland's booming livestock exports are associated with increases in the informal supply from Ethiopia. Somaliland and Puntland have benefitted from the lobbying made on their behalf by the Saudi tycoons operating the quarantine centres in Berbera and Bosasso. Furthermore, the recent political tension between Sudan and Saudi Arabia^v has impacted negatively on Sudan's livestock exports. As a result of these and other events, the total volume of exports from Somalia in 2012 and 2013 has been reported to be over 4m animals, which some see as the ecosystem's productive limit. Figures obtained for Somaliland exports alone indicate a huge disparity with Ethiopia.

Drivers of Ethiopian livestock exports: does policy matter?

During the last 40 years, trade policies in Ethiopia have shifted from free market (up to 1974), through a command economy (1975-1991), and then back to a liberalised system (from 1992).^{vi} However, land still belongs to the Government and can be used only on a lease basis. Looking specifically at the marked growth in formal livestock exports detailed above (Table 1), a milestone was the eradication of rinderpest, a disease which had previously prevented cattle exports.^{vii} The World Organization for Animal Health certified Ethiopia as free from rinderpest in May 2005. Since then, policy incentives for the livestock sector included the formation of industry associations, deregulation of domestic prices, liberalisation of foreign trade, institutional support for the export sector and promulgation of liberal investment and labour laws.^{viii} These changes were important for establishing privately-owned export abattoirs

and the construction of market yard facilities in pastoral areas. When combined with greater market stratification, mainly through feedlot operations, and improvements in roads and mobile phone systems, the result was a boost in the formal export of livestock and livestock products from the country.

Yet, many of these developments are rooted in the pastoral livestock resource base, with supply dominated by commercially-orientated producers using mainly traditional rearing systems. Although the investment policy favours the creation of ranches and farms, to date this has not happened – unlike foreign investment in agriculture in the country. At the same time, it seems that privatised government ranches have not been widely used for livestock production. This raises an interesting question because pastoralism actually outperforms 'modern ranching'^{ix} in African drylands; therefore, the provision of land to investors may well have undermined rather than enabled growth in the sector.

Ethiopia's influential Growth and Transformation Plan (GTP), released in 2010, aimed to generate US\$1bn from livestock exports by 2015. However, current formal export values from livestock are only about 25 percent of this target, and the substantial gap can be attributed to three main factors:

- Close proximity, demands and profits continue to drive a substantial proportion of traded livestock to Somalia and Somaliland.
- As in other countries, investment policy is skewed heavily towards crop production rather than livestock. For example, a factsheet on Ethiopia's GTP^x offers over 8m acres of land to commercial farming investors, but only for crops; livestock is not mentioned. Instead, a GTP policy matrix^{xi} on the livestock sector

is limited to breed improvement, fodder production and animal health services.

- In pastoral areas the production system performs well, but in non-pastoral areas the sector has not attracted large private investments in commercial livestock farms; the reasons for this require further study.

Policy coordination

While there have clearly been improvements to Ethiopia's formal livestock exports since 2005, challenges remain at the policy level. Critically, there is still no specific livestock marketing policy that harmonises the production, animal health and marketing aspects of the system as a whole. This is because different ministries are mandated to support different aspects of the production-marketing chain, and the specific mandates of each ministry are fluid and subject to frequent changes. For example:

- The mandate for overseeing live animal markets has changed twice between the Ministry of Agriculture and Ministry of Trade since 2005.
- At present, the Ministry of Industry is in charge of the export abattoirs while the Ministry of Trade is responsible for managing live animal markets.
- The Ministry of Agriculture is confined to the production and health aspects of the sector.
- The Ministry of Finance sets VAT on livestock feed – despite a critical feed shortage in Ethiopia, and the practice of exporting raw oil crops which is depriving the country of substantial quantities of oil cake feed.
- Ethiopia's Agriculture Transformation Agency (ATA) will soon establish a Livestock Team.

One recent development is the enacting of a new Live Animal Marketing Proclamation through the Ministry of Trade. The proclamation aims to limit live animal markets to primary and secondary markets only to shorten the supply chain, remove brokers from the scene and replace livestock traders with pastoral marketing cooperatives in a bid to reduce transaction costs. The Ministry also plans to introduce a transparent auction system based on weight, grade and breed of livestock. Meanwhile, some of the provisions in the proclamation overlap with the Ministry of Agriculture's mandate on issues related to livestock movement permits, ear tagging procedures and so on.

A further challenge with policy coherence is national-regional harmonisation. Ethiopia is a member of the African Union (AU), Common Market for Eastern and Southern Africa (COMESA) and Intergovernmental Authority on Development (IGAD), bodies promoting regional economic integration and the 'free movement of goods, services and people' (see below). In line with this thinking, the COMESA Green Pass certification system is a progressive and science-based approach for supporting regional and international livestock trade.^{xii} In contrast, the new Live Animal Marketing proclamation in Ethiopia reinforces the notion of cross-border livestock trade as illegal, with concomitant fines. The impacts of the proclamation on both the domestic and the export trade remain to be seen.

Regional policies and initiatives

At the level of regional policy there has been increasing recognition of the economic contributions and potential of pastoralist areas, and the ways in which these areas can benefit from regional integration. This relates to the particular characteristics of many pastoral societies and economies that

are cross-border in nature, and which already involve movements of people and livestock. An important development was the release of the African Union's Policy Framework for Pastoralism in Africa in October 2010, produced by the Department of Rural Economy and Agriculture.^{xiii} The first main thrust of the framework is to recognise and ensure the rights of African pastoralists, and to 'secure and protect the lives, livelihoods and rights of pastoral peoples and ensure continent-wide commitment to political, social and economic development of pastoral communities and pastoral areas.' The second thrust focuses on economic growth through livestock development and aims to 'reinforce the contribution of pastoral livestock to national, regional and continent-wide economies.' This second objective views livestock as the core asset of pastoralists and includes specific strategies for supporting trade in livestock and livestock products:

- Developing livestock value chains, improving market access, reducing tariff and non-tariff barriers, enhancing market information and financing mechanisms;
- Supporting the development of infrastructure with emphasis on road communication and mobile networks;
- Supporting economic analyses of the potential for free regional trade in livestock and livestock products and other commodities in pastoral areas;
- Developing comprehensive regional programmes to control transboundary animal diseases; and
- Coordinating and organising African representation at international standard setting bodies.

In addition, the AU policy supports risk-based drought management in pastoralist areas.

The policies of IGAD are in line with the AU policy framework. For example, in 2009 the IGAD Regional Policy Framework on animal health and trade was released, and IGAD is in the process of developing a regional migration policy framework.^{xiv} Both policies will have significant implications on livestock and livestock products trade in the region. Following another episode of humanitarian crisis in the Horn in 2011 and 2012, the IGAD Drought Disaster Resilience and Sustainability Initiative (IDDRSI) was established with strong donor support, and an IDDRSI strategy paper was published in January 2013.^{xv} The paper identifies seven Priority Intervention Areas (PIAs) with natural resources and environment positioned first, and market access, trade and financial services positioned second. Specifically related to trade, the paper calls for 'enhancing access to markets, financial services and trade as a precursor to IGAD Free Trade Area (FTA) and common market'. The envisioned strategies for the sector include:

- Enhancing access to markets, financial services and trans-boundary trade;
- Securing and supporting equitable access to basic social services;
- Promoting transport communication network, infrastructure and market development;
- Enhancing pro-poor women market access and financial services, and facilitating access to relevant information on business and related issues;
- Securing and supporting pastoral mobility for robust trade;

- Promoting trans-boundary disease control, bio-security, bio-safety and SPS measures and standards;
- Promoting bio-security and bio-safety of trade, value chains, products, production and livelihood systems; and
- Supporting research, outreach and human capital development in markets access, financial services and trade.

While recognising the importance of the pastoral economy and peasant agriculture in providing a critical platform for economic interdependence amongst IGAD members, the IDDRSI strategy paper also seeks to promote small-scale trade under a Simplified Trade Regime, whereby goods under US\$500 in value are allowed to cross borders without duties. A simplified cross-border trade travel and customs documents is also proposed to facilitate mobility, with local issuance of documents so that small-scale traders can easily and quickly access the documents. The strategy paper also proposes better access to affordable trade finance in the region.

Drafted in 2009, the COMESA Policy Framework for Food Security in Pastoralist Areas^{xvi} was developed under CAADP Pillar III, and again recognised the economic importance of livestock trade from pastoral areas. Drawing on COMESA expertise in regional trade in agricultural commodities, the policy supported regional free trade in livestock and livestock products and other commodities in pastoral areas, including continued policy support to develop the COMESA Green Pass system. Related to these recommendations was liaison between COMESA and the Gulf Cooperation Council (GCC) to ensure the acceptability of the Green Pass to livestock importing countries in the Gulf. This process was formalised at a

general level between COMESA and GCC in April 2010 with the signing of a Memorandum of Understanding covering cooperation on trade and investment. However, the status of the COMESA policy framework for pastoralist areas remains unclear, as the policy seems not to have been ratified. If not, COMESA currently lags behind other regional bodies by promoting livestock trade but not having specific policies for pastoralist areas.

Lessons learned from livestock marketing and trade programmes

Market yard infrastructure – A persistent myth is that market yard facilities are critical for livestock supply and demand, and for overcoming ‘inefficiencies’ in pastoral livestock marketing. In Ethiopia, this led to the construction of 25 new livestock market yards in pastoral areas between 2005 and 2008, similar to World Bank-funded market yards in Sudan and Kenya in the past. Subsequent assessments of the 25 new livestock market yards in Ethiopia in 2010 showed that only nine of these were still active, but these were constructed close to pre-existing markets and showed no evidence of increased supply or demand attributable to the new markets. The other new markets were used minimally or not at all. More importantly, the infrastructure was vandalised in most markets beyond repair, while taxation was increased in the operational markets. Donors such as USAID no longer fund market infrastructure projects in Ethiopia.

Market information systems – As a way of improving transparency and supporting market actors to make informed decisions, numerous projects were set up through donor funding in Ethiopia and the region. To begin with such initiatives were short-lived, with no complaints from market actors when the projects were phased out. More importantly, there seems

to be no evidence that pastoralists, brokers or traders have ever benefitted from information generated through such initiatives. Mobile phones, on the other hand, were reportedly found to be effective in obtaining market information by traders and producers at least cost.

Abattoirs – Following trade liberalisation, around ten private export abattoirs were built in Ethiopia. Two of these are located in Bahar Dar and Makelle and the rest are in close proximity to the capital. The latter have been instrumental in increasing the levels of chilled carcass exports by air from the country and for opening up new markets for pastoral areas. Some of these abattoirs have also established links with pastoral livestock marketing cooperatives, paving the way for long-term buyer-supplier relationships with producers. Meanwhile, the two abattoirs located in Bahar Dar and Makelle are not performing as well as expected because of their locations far away from production centres. The lessons seems to be that abattoirs can work, but only if location and economics are carefully assessed with local stakeholders.

Cross-border initiatives – The Examination and Certification of Livestock Exports (EXCELEX) project was one of the rare initiatives aimed at bringing livestock market actors and relevant government offices (customs, national banks, etc.) from Ethiopia, Somaliland, Puntland and Djibouti together to develop the formalised cross-border livestock trade, including the setting up of a rolling quarantine system to minimise costs. In only two years, the project was successful in concluding an almost impossible agreement between Ethiopia, on the one hand, and Somaliland and Puntland, on the other, through which Somali traders agreed to deposit a certain proportion in hard currency in the Commercial Bank of Ethiopia (CBE) for the livestock they purchase from the country.

In return, Somaliland traders were allowed to take out their purchases through official custom posts without any problem. Following this arrangement, the National Bank of Ethiopia authorised the CBE to provide export permit services in its Jigjiga branch for the first time and traders were able to operate in both countries. The short life span of the project meant a similar deal was not concluded between Ethiopia and Djibouti, and the deal with Somaliland and Puntland was gradually compromised over time.

Transboundary animal disease control – While rinderpest eradication was pivotal for allowing Ethiopia to export beef and live cattle, the value of further investments in the control of transboundary animal diseases (TADs) is debatable if the main objective is to increase livestock exports. The trends shown in Table 1 started soon after Ethiopia became officially free from rinderpest. However, although there was a marked increase in exports from 2005 to 2012, there was no substantial change in the control of other TADs such as foot and mouth disease, and this and other TADs remain endemic in Ethiopia. This indicates that to date, Ethiopia's main trading partners have accepted the levels of disease risk posed by exports of live animals and meat. If so, economic analysis is needed to show the added value that improvements in TAD control might bring. The analysis also needs to consider competitiveness and the extent to which, even with stronger TAD control, Ethiopia is likely to achieve sustained access new markets.^{xvii}

Policy priorities for supporting pastoral livestock marketing

Regional level

Given the potential for supporting cross-border trade under the emerging policies of the AU and IGAD, plus the COMESA Green

Pass system, there are opportunities to pilot approaches in Ethiopia and neighbouring countries that follow the principles of free trade areas. This could involve reactivating an EXCELEX type of programme under the auspices of IGAD, by bringing relevant authorities and market actors from the neighbouring states to a common position. A small levy could be used to support an IGAD monitoring system that would track commitments and progress. Based on livestock trade data, it would be possible to model different cross-border trade systems and compare benefits and costs at different levels and for different stakeholders.

National

Availing land for commercial dairy, beef, breeding and fodder farms – The agricultural investment policy in Ethiopia is biased in allocating large tracts of land for food and commercial crops. Meanwhile, growth in the livestock sector can only be achieved if there are commercial livestock farms, probably in mid-altitude areas, that can provide sustainable services to pastoralists, agropastoralists and farmers – viz, capacity building, introduction of new technologies, improved breeds and the much needed fodder and other inputs as required. Such commercial farms in turn also rely on pastoralists for supplies of young stock and other livestock products, creating reciprocal bonds and mutual benefits. Standards – such as transactions on weight and age and breed classifications – can only be raised through commercial operators, which could pave the way for pastoralists to follow suit. There is an apparent need to change the prevailing perceptions in investment bureaus that livestock investments also require adequate land to operate profitably. This necessitates making a distinction between commercial livestock farms and ranches – the former implies a system in which own fodder and forage are produced under irrigation or rain

for livestock raised in the farm. Ranches, on the other hand, rely on the natural range spanning over vast tracts of land for grazing far fewer animals. The track record of ranches in African countries shows these often operating at a loss, and they need not be encouraged in Ethiopia.

Removing VAT application on livestock feed – VAT is applied in principle on products, the value of which has increased from its original form and content. On the contrary, most livestock feed ingredients are by-products of other processing activities, the value of which has been degraded. So, in principle, VAT should not be applicable on livestock feed. Secondly, if VAT is not applied on veterinary drugs, there is no justification to do so on feed. Thirdly, the prevailing feed shortage and recurring droughts in pastoral areas necessitate considering livestock feed as an input that is also required for emergency responses.

Promoting investments on animal feed production – Breed improvements and animal health interventions alone can't make much impact on the livestock industry unless livestock feed is available in the country in adequate quantity and quality. Feed is critical for improving productivity per livestock unit whether in commercial or pastoral livestock systems and its availability could serve as a precursor for changing the mindset of pastoralists to engage in value addition of livestock beyond production. The investment policy should encourage and attract potential investors to engage in fodder and processed feed production. Coupled with this is attracting potential investors in edible oil production to make the oil cake available for the livestock sector.

Reduce losses due to preventable diseases – It has been estimated that the number and value of livestock that die in pastoralist areas due to preventable diseases greatly exceed the value of



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Ethiopia's formal livestock exports.^{xviii} There is a need to continue to support and improve basic veterinary services in pastoralist areas to prevent losses that affect household food security and the number of animals available for trade. The preferred option is further strengthening of privatised community-based animal health delivery systems, under government licensing and supervision, together with better quality control of veterinary pharmaceuticals.^{xix}

Equitable growth?

The New Alliance aims to promote the equitable inclusion of small-scale producers in value chains. However, in the case of pastoral livestock marketing this objective needs to be viewed against the very long-term trends of commercialisation that started in Somali

areas in the 1960 or before, and in areas such as Borana in the 1970s. In common with other pastoralist areas of the world, and due to the basic economics of pastoral livestock production and household food security needs, commercialisation contributes to a gradual redistribution of livestock from poorer to wealthier producers. When combined with other trends such as human population growth and increasing demands for livestock products, plus recurrent drought, one outcome is the dual presence of market-orientated pastoralism and pastoralist destitution.^{xx} This illustrates the need to combine high-profile initiatives such as the New Alliance with comparable initiatives to improve education and health, and create non-pastoral employment within and outside of pastoralist areas.

End Notes

- ⁱ For example, see Coppock, L. (1994) *The Borana Plateau of Southern Ethiopia: Synthesis of Pastoral Research, Development and Change, 1980-91*. ILCA Systems Study, Addis Ababa, Ethiopia: International Livestock Centre for Africa / http://pdf.usaid.gov/pdf_docs/PNABW360.pdf [accessed April 2014]
- ⁱⁱ Aklilu, Y. and Catley, A. (2011) *Shifting Sands: The Commercialization of Camels in Mid-altitude Ethiopia*, Addis Ababa, Ethiopia: Feinstein International Center of Tufts University / http://fic.tufts.edu/assets/shifting_sands.pdf [accessed April 2014]
- ⁱⁱⁱ Highland cattle from the northwest of Ethiopia are exported to Sudan, but compared to the pastoral livestock exports reflected in Table 1 the numbers are low – around 100,000 head/year in formal and informal exports.
- ^{iv} Ethiopia also receives informal livestock imports, such as supplies of camels from southern Somalia and northern and north-eastern Kenya, and immature cattle and young shoats from Kenya. See Hussein, M. (2013) 'Pastoralists' Innovative Response to New Camel Export Market Opportunities on the Kenya/Ethiopia Borderlands', in Catley, A., Lind, J. and Scoones, I. (eds), *Pastoralism and Development in Africa: Dynamic Change at the Margins*, Abingdon, UK: Routledge, pp.98-107
- ^v For example, see 'Ban on Bilateral Bank Dealings Strains Relations Between Sudan, Saudi Arabia', *Sudan Tribune*, 1 March 2014 / <http://www.sudantribune.com/spip.php?article50141> [accessed April 2014]
- ^{vi} Aklilu, Y. (2006) 'A Review of Policies and their Impact on Livestock Trade in Ethiopia During Three Regimes (1965-2005)', in McPeak, J.G. and Little, P.D. (eds), *Pastoral Livestock Marketing in Eastern Africa: Research and Policy Challenges*, Rugby, UK: Intermediate Technology Publications, pp.187-202
- ^{vii} Awoke, W.A. and Tikue, N.T. (2009) 'Impact of Rinderpest Eradication from Ethiopia and Lessons Learned', *Ethiopian Veterinary Journal*, 13(3):123-132
- ^{viii} Aklilu, Y. (2008) *Livestock Marketing in Kenya and Ethiopia: A Review of Policies and Practice*, Addis Ababa, Ethiopia: Feinstein International Center of Tufts University
- ^{ix} This topic was covered in a recent review, Oba, G. (2013) 'The Sustainability of Pastoral Production in Africa', in Catley et al., *Pastoralism and Development in Africa*, pp.29-36
- ^x See the Finance Ministry website, <http://www.mofed.gov.et>
- ^{xi} Ministry of Finance and Economic Development (2010) *Growth and Transformation Plan, 2010/11-2014/15, Volume II: Policy Matrix*
- ^{xii} COMESA (2009) *The COMESA Green Pass and Commodity-Based Trade in Livestock Products*. COMESA Policy Brief No. 5, COMESA/CAADP / https://wikis.uit.tufts.edu/confluence/download/attachments/24922042/COMESA_PB5-Green_Pass_Livestock.pdf [accessed April 2014]
- ^{xiii} AU (2010) *Policy Framework for Pastoralism in Africa: Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralist Communities*, Addis Ababa, Ethiopia: AU Department of Rural Economy and Agriculture / <http://rea.au.int/en/sites/default/files/Policy%20Framework%20for%20Pastoralism.pdf> [accessed April 2014]
- ^{xiv} IGAD (2013) *Member States Discuss the Action Plan 2014-2018 for the Regional Migration Policy Framework*, IGAD website, 18 December 2013 / http://igad.int/index.php?option=com_content&view=category&layout=blog&id=63&Itemid=159 [accessed April 2014]
- ^{xv} IDDRSI (2013) *The IDDRSI Strategy* / http://www.itacaddis.org/docs/2013_09_24_07_50_06_IDDRSI%20Strategy%20Revised%20January%202013.pdf
- ^{xvi} CAADP (2009) *Policy Framework for Food Security in Pastoralist Areas: Consultative Draft* / http://pdf.usaid.gov/pdf_docs/PNADT675.pdf [accessed April 2014]
- ^{xvii} A framework for analysing the technical options for FMD control in relation to trade is available in Scoones, I. and Wolmer, W. (2008) *Foot-and-Mouth Disease and Market Access: Challenges for the Beef Industry in Southern Africa*, Brighton, UK: Institute of Development Studies
- ^{xviii} Catley, A. (2009) *The Role of Veterinary Services in Pastoral Economic Growth in Ethiopia*. Concept paper for the DFID Economic Growth in Pastoralist Areas Study, Addis Ababa, Ethiopia: Department for International Development
- ^{xix} Leyland, T., Lotira, R., Abebe, D. and Catley, A. (in press) *Community-Based Animal Health Workers in the Horn of Africa: An Evaluation for the Office for Foreign Disaster Assistance*, Addis Ababa, Ethiopia: Feinstein International Center of Tufts University and Vetwork UK
- ^{xx} Catley, A. and Aklilu, Y. (2013) 'Moving Up or Moving Out? Commercialization, Growth and Destitution in Pastoralist Areas', in Catley et al., *Pastoralism and Development in Africa*, pp.85-97

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