



# Enhancing Livestock Trade in Ethiopia

## The role of public-private partnerships in live animal export quarantines

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Ethiopia's Second Growth and Transformation Plan has a target of exporting 1.2 million live animals per year, by 2020. Relative to average annual export figures for 2010 to 2017, this represents a two-fold increase in live animal exports.

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### Introduction

Livestock development is an important part of Ethiopia's Second Growth and Transformation Plan (GTP II), from 2015 to 2020. The livestock objectives of the plan include a target of exporting 1.2 million live animals per year, earning USD 526 million annually by 2020.<sup>i</sup> Between 2010/11 and 2015/16, official live animal exports totalled between 474,000 animals and 779,000 animals per year, with a decline in exports to 280,000 animals in 2016/17.<sup>ii</sup> Therefore, the GTP II target represents a substantial increase in live animal exports.

A key aspect of live animal exports is the capacity to quarantine animals and reduce the risk of disease spread to other countries.<sup>iii</sup> Indeed, a well-managed export quarantine facility is one of the preconditions specified by all importing countries, together with an International Health Certificate for all consignments of livestock and their products.

Until very recently, there were no international standard quarantine facilities in Ethiopia and instead, feedlots with veterinary support were used for quarantine. Some importing countries, such as Egypt, accepted this arrangement, whereas other countries did not. At the same time, Ethiopia was affected by repeated livestock trade bans, imposed by importing countries because of concerns over trans-boundary diseases.<sup>iv</sup> Live animal exports were also channelled through the Djibouti quarantine system, with international health certificates issued in Djibouti. However, these animals were identified as originating in Djibouti, which is not in Ethiopia's long-term interest as it affects competitiveness and export statistics.

There are two newly constructed, government owned export quarantine facilities, in Mille and Jigjiga. Mille is located in Afar Region and is intended to facilitate the export of live animals via Djibouti port; Jigjiga, in Somali Region, is linked to the export of live animals via Berbera, in Somaliland. However, these facilities are not operational, and a further investment of approximately Ethiopian birr 2.9 billion (USD 124 million) is needed, as well as skilled human capital; neither the finance nor the workforce are currently available.

This Policy Brief summarizes the current challenges facing export quarantines in Ethiopia, and discusses how **public-private partnerships** can be used to build new export quarantines on existing sites, and ensure that these facilities perform in line with the GTP II targets for live animal exports. The brief focuses on Mille and Jigjiga export quarantines, and draws on a recent, detailed study for the Ministry of Livestock and Fisheries (MoLF).<sup>v</sup>

### Ethiopia's export quarantines: current challenges

#### Targets and costs

Although the Ethiopian government has allocated 600ha of land to each of the quarantine sites in Mille and Jigjiga, to date each site uses only 48ha. Assuming 10 cycles of animals and 75% capacity per year, the current total annual capacity of both quarantines would be 225,000 cattle, 150,000 small ruminants, and 105,000 camels; a total of 480,000 animals. To reach the GTP II target of 1.2 million animals exported, cattle capacity must be doubled, camel capacity should suffice, and small ruminant capacity must be at least tripled. Therefore, both facilities need to be expanded, and managed efficiently. As indicated above, the cost of expansion is substantial, at ETB 2.9 billion (USD 124 million). Furthermore, although the two quarantine facilities are new there are some design faults, and fixing these design problems will also incur costs.

#### Management challenges

The management of quarantines is a complicated task. For strong bio-security to be maintained, professional supervision is needed along with a capacity for rapid decision-making at various points as animals are moved from markets, through the facility, and on to waiting grounds at ports. This requires a high quality, well coordinated, efficient and effective quarantine management system, applied from source all the way to end markets. This cannot be achieved with the current manpower and service provisions in Government.

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The current combined annual capacity of the new Mille and Jigjiga quarantines is only 480,000 animals/year, relative to the GTP II target of 1.2 million animals/year. There is a need to expand the capacity of these facilities.

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The major operational cost for export quarantine facilities is animal feed, equivalent to about 75% of all expenses. Feed could be supplied from irrigated fodder production schemes, but these schemes in themselves need substantial investment, and strong management capacity.

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The World Bank defines a PPP as, “A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance”.

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### **Animal feed supply and costs**

While in quarantine, animals need to be properly fed to maintain their body condition and market value. Animal feed represents the major operational cost for quarantine facilities, equivalent to approximately 75% of all expenses.

If the Mille Quarantine works at full capacity on the current site area, the daily requirement for animal feed will be approximately 115 to 150 tonnes dry matter (hay equivalent).<sup>vi</sup> Assuming 10 cycles of animal throughput per year, each with a quarantine period of 21 days (weighted average), then the annual feed requirement would be between 24,000 and 31,500 tonnes. If the site is expanded to meet GTP II targets, in the case of small ruminants the capacity of the quarantine must be tripled. This indicates a maximum feed requirement of just over 94,500 tonnes per year. In turn, this will require an area of up to 3,500 ha of well-managed and irrigated fodder production. This also applies to the Jigjiga quarantine.

A recent study points to substantial potential for fodder production in the Dubti/Ascoma areas of central Afar region<sup>vii</sup>, where land and water could be available. However, growing, assembling and transporting feed to both quarantines is a huge challenge for government to handle, and requires massive investment, and capacity to manage and maintain large-scale irrigation schemes.

### **Public-private partnerships (PPPs): can they work?**

Export quarantine services are public goods. However, this does not mean that Government must provide quarantine services, but instead, must ensure that these services are provided according to the requirements of importing countries. Therefore, the day-to-day operation of quarantines can be carried out by the private sector, under contract to government. Government authorities ensure that standards are met, and issue international certificates. This type of partnership can also be extended to include export quarantine construction, whereby the private partner builds, operates and maintains an export quarantine, delivers a quarantine service of high standard, and charge users for the services. The government ensures that the construction and services are performed as agreed, and provides the overall regulatory and quality control of the facility through regular monitoring, and enforcement as necessary. This arrangement could apply to the development of the remaining 552 ha of land in each of the Mille and Jigjiga quarantine sites.

Many private partners can be considered in relation to export quarantines. However, as live animal exporters are the main clients of these facilities, they could be appropriate private partners for export quarantine PPPs, in the form of associations or consortia, or individually. Other potential partners include operators of quarantine facilities who have direct linkages to the ports and markets, as well as actors with international experience in managing quarantines.

### **PPP Options**

**For existing/constructed facilities at Mille and Jigjiga quarantines (48 ha in each site)** – as the facilities are already constructed, an “Operate, Maintain and Own” (OMO) PPP arrangement can be used. Whereas leasing the facility would provide only the rental income to the Government, an OMO also involves royalty payments from the private partner to Government. An OMO can be a good option for the live animal exporters because the up-front capital investment requirement is limited. In order to rapidly operationalize the quarantine facilities, it is important to consider operators of quarantine facilities, who have direct linkages to ports and livestock markets, and those with international experience in managing quarantines, is important.

**New facilities on the vacant land (552 ha in each site)** – significant investment is needed to build quarantines in the remaining 552 ha vacant land, and a “Build Own and Operate” (BOO) PPP arrangement is the preferred option. The contract period often ranges from 20 to 30 years. Given the large vacant areas of land at Mille and Jigjiga, it would be possible to divide these areas into three or four portions, and allocate portions for different investors based on the economic-size of the land parcels. If the entire vacant area is offered to a single investor, it would potentially bear the risk of under-use due to the developer’s limitation of attracting business, risk appetite, and financing capacity. Also, a large scale single concession brings a risk of monopoly related issues. Allotment of facilities could be for:

- **Captive facilities:** The exporters would develop a quarantine facility for their own exports only. These would not provide service to other exporters.
- **Service provider:** Investors to set up facilities that would provide Quarantine services to the exporters and would charge fee for the service.

Mille and Jiggiga quarantines could be declared and developed as Quarantine Zones. Government may consider attracting investors by provision of tax incentives and allotting a nearby piece of land for fodder production.

### Value for Money

An analysis of value for money is provided in the Table below, and clearly illustrates how the OMO and BOO options for export quarantines are financially viable for both the private partner and for Government.

PPP option	% share of revenue to Govt	Project IRR	Equity IRR	NPV @ 14% (million ETB)	Payback period Years / months	PV to Govt (million ETB)
BOO	16.6	19.51	20.82	67.9	6 yr 6 m	295.3
OMO	26.6	20.01	20.73	45.7	6 yr 11 m	472.4

IRR – internal rate of return; NPV – net present value; PV – present value (of the stream of royalty payments using a discount rate of 14%).

Overall, the value for money of PPPs for export quarantines is demonstrated by:

- Royalty payments from the private partner to the Government.
- The private partner will complete the many pending upgrading works of the current facility
- Private partners constructing up to 6-8 new (3-4 in each quarantine), well-designed (avoiding the problems encountered with the existing facilities constructed by the public sector) and internationally compliant quarantines to cope with the expected increased flow of live animal exports. It is most unlikely that the public sector would be able to provide the capital required.
- Introduction of skilled management and well-trained staff by the private partners will lead to effective and efficient quarantine operations.
- The concessionaries must secure large quantities of good quality feed and the private sector can provide the required capital and expertise.

Overall, PPPs are a technically sound and financially viable alternative for addressing the current challenges in the export quarantines, and achieve an increased export of live animals from Ethiopia as set in GTP II (1.2 million heads by 2020).

### The way forward: How can Government promote PPPs for export quarantines?

The Ministry of Finance and Economic Cooperation (MoFEC) has recently developed a PPP Proclamation and a PPP Policy, and both will enable rapid progress with PPPs in the livestock sub-sector. Establishing a PPP team in the MoLF is now needed, to work closely with the MoFEC and implement the new PPP policy and proclamation.

The Federal Government could facilitate the introduction of PPPs by providing the following export quarantines specific supports:

- An agreement needs to be made with the Djibouti authorities to (i) enable quarantining and certification of Ethiopian livestock at Mille (and not in Djibouti as at present), and (ii) provide a holding area in which to keep Ethiopian livestock pending shipment.
- Illegal cross-border trade of animals, which is significant at present, has to be effectively curbed.
- Declaring and developing Mille and Jiggiga Quarantines as Quarantine Zones. Government may consider attracting investors by provision of tax incentives.
- Livestock facilities, particularly quarantine facilities, must be included in priority sector for lending at lower rates by Commercial Bank of Ethiopia and Development Bank of Ethiopia. This is necessary for successful financial close of the projects.
- Project viability is most sensitive to cost of fodder. The government needs to support a full technical, social and economic feasibility study for fodder production in the two sites.

**Disclaimer:** The views expressed in this Policy Brief are those of the AKLDP project and do not necessarily reflect the views of USAID or the United States Government.

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### Endnotes

<sup>i</sup> Ministry of Livestock and Fisheries (2016). *The Second Growth and Transformation Plan for the Livestock Sector (2016-2020)*. Ministry of Livestock and Fisheries, Addis Ababa, Ethiopia

<sup>ii</sup> Ministry of Livestock and Fisheries - GTP II Annual Performance Evaluation Reports for 2015/2016 and 2016/2017 and Ministry of Agriculture GTP I performance evaluation report of 2010/11-2014/15

<sup>iii</sup> According to the World Animal Health Organization (OIE), an export quarantine is defined as, “An establishment under the control of the Veterinary Authority where animals are maintained in isolation with no direct or indirect contact with other animals, to ensure that there is no transmission of specified pathogen(s) outside the establishment while the animals are undergoing observation for a specified length of time and, if appropriate, testing and treatment”.

<sup>iv</sup> Transboundary animal diseases (TADs) are diseases which are designated by the World Organization for Animal Health as causing substantial economic losses, and which can be spread between countries.

<sup>v</sup> Agriculture Knowledge Learning, Documentation and Policy Project (2017). *Study to Assess the Feasibility of Public-Private Partnerships for Selected Livestock Facilities/Service Areas in Ethiopia*. USAID/Ethiopia AKLDP Project, Addis Ababa Ethiopia. Available from <http://www.agri-learning-ethiopia.org/wp-content/uploads/2015/10/PPP-Report-final.pdf>

<sup>vi</sup> Using figures provided by the site manager.

<sup>vii</sup> Seid, N., Kidane, G., Mohammed, S., Bedru, S., Ebrahim, K., Teshale, T., Demelash, N. (2016). *Socio-economic, Agro-ecological and Technical Potential of the Proposed Ascoma Spate Irrigation Project*. Samara University, Afar National Regional State Ethiopia. Available from: <http://www.agri-learning-ethiopia.org/wp-content/uploads/2016/07/Seid-et-al-Ascome-Spate-report.pdf>