



**PUBLIC-PRIVATE PARTNERSHIPS FOR LIVESTOCK
SERVICE FACILITIES**

Lessons from Djibouti and Somaliland for the Mille Quarantine Center



July 2014

Disclaimer:

The views and opinions expressed in this document are those of the authors and do not necessarily reflect the views and opinions of the Ministry of Agriculture, Ministry of Trade or USAID.

Note:

1 USD = 6,700 Somaliland shillings/170 Djibouti Frank/19.85 Ethiopian birr

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Abbreviations

AKLDP	Agriculture Knowledge, Learning, Documentation and Policy Project (USAID)
AU-IBAR	African Union Interafrican Bureau for Animal Resources
BOO	Build-Own-Operate
DBFO	Design-Build-Finance-Operate
DBO	Design-Build-Operate
ELISA	Enzyme-linked immunosorbent assay
FAO	Food and Agricultural Organization
FMD	Foot and mouth disease
ILO	International Labor Organization
LMD	Livestock Marketing Development Project (USAID)
LSD	Lumpy skin disease
MENA	Middle East and North Africa
NIMCO	Nation's Investment Market
OIE	Office international des epizooties
OM	Operate and Maintain
PFI	Public Finance Investment
PPP	Public Private Partnership
PPR	Peste des petit ruminants
RVF	Rift Valley fever
UAE	United Arab Emirates
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WACC	Weighed Average Cost of Capital

Summary

- Following a request from the Ministry of Agriculture to assess public-private partnership (PPP) management options for the newly-built Mille Quarantine center in Ethiopia, study tours were organized to Somaliland and Djibouti to draw lessons from PPP-managed quarantine centers and other livestock facilities.
- The livestock ban imposed by Saudi Arabia persuaded both Somaliland and Djibouti to introduce PPP management systems for their quarantine centers. The net benefits gained through these arrangements have now been expanded to public abattoirs, water supply systems and live animal markets in Somaliland. The shift to a PPP management system has greatly benefitted both countries, enabling Djibouti to export up to 1.5 million animals per year before Somaliland adapted a similar system. Once the system was introduced in Somaliland, the volume of exports has been maintained at about 3.2 million animals per year since 2010.
- PPPs have led to the necessary investments, efficiency, technical know-how and management skills to both Somaliland and Djibouti, including the timely delivery of supplies and consumables for effective operation. The private companies have set the standards higher, building the confidence of Middle East importing countries. These countries are now requiring the management of quarantine centers by private companies in preference to services rendered by government agencies. There are now 10 such centers in Djibouti, Somaliland, Somalia and Sudan. The relevant authorities in both Somaliland and Djibouti are satisfied with the performances of the private companies, and recognize the mutual benefits to both parties. The level of profits associated with PPPs has led to one company in Somaliland establishing up an additional quarantine center that also doubles as a cattle feedlot center, about 90 km from Berbera port.
- The PPP managed public abattoirs and a livestock market in Somaliland also demonstrate that local companies can also reverse the declining performance of government-managed facilities, but only if government provides proper support to these companies.
- Of note, the international companies managing the quarantine centers in Djibouti and Somaliland have strong ties with companies and authorities in importing countries. This shows that relationships and trust are a key aspect of the business, and that regulations around livestock exports are subject to change and negotiation. Of note, the private sector was instrumental in getting the export ban lifted from Somaliland.
- Ethiopia has been lagging behind livestock export practices in neighbouring countries, and still exports many livestock using third country certificates. A critical aspect of a PPP arrangement is that private companies will only be responsible for routine day-to-day management of the facilities whereas the government retains control of the procedures followed by these companies, including quality control and approving the final export certificate. Private companies must adhere to agreed operating standards set by government or risk penalties or the cancellation of contracts.

- Mille is some distance from the Djibouti port and there are some technical issues of concern that would be best resolved through a PPP arrangement. The option of using a private company for the Mille quarantine management could pave the way for introducing similar practices for other livestock service facilities involving slaughterhouses, live animal markets and artificial insemination centers and so on.
- Ethiopia needs to develop a national PPP policy and guidelines, drawing on experiences from South Africa and other African countries to inform decision-making when entering into negotiations and contractual agreements on PPPs. However, even in the absence of such a framework, there are a number of PPP initiatives that are being implemented in Ethiopia at the national and local levels, which reportedly include two or three public slaughterhouses. The absence of a framework for the time being should not be a barrier to promoting PPPs for applicable sectors.
- Ethiopia needs to emulate the pragmatic actions of Djibouti and Somaliland to make the Mille quarantine a success story, without which the performance of the center is likely to fall below expectations. Similarly, Ethiopia needs to take into serious consideration the introduction of PPPs to public slaughterhouses, live animal markets and other livestock service facilities to ensure continued service provisions.

Introduction

This report is a result of collaboration between the Ministry of Agriculture (MoA) and Ministry of Trade (MoT) of the Federal Democratic Republic of Ethiopia, and the USAID-funded AKLDP and LMD projects. The study was initiated by a request from the MoA to AKLDP and LMD to assess Public Private Partnership (PPP) options for new Mille Livestock Quarantine Center, which is under construction. The study assessed physical capacity and the technical compliance of the quarantine center, along with drawing lessons from Somaliland and Djibouti on PPP-managed livestock service facilities.

As PPP managed livestock facilities also include domestic and public abattoirs, the inclusion of the MoT was felt necessary for this specific assessment in light of the Ministry's new role in overseeing live animal markets in Ethiopia that resulted in the new Live Animal Markets Proclamation.

The following methodologies were used for developing this report:

- A team composed of the MoA, AKLDP and LMD travelled to the Mille quarantine center to assess the capacity and the technical compliance of the center. Discussions were held with the construction workers at the facility and the main findings of this assessment are captured in this report. While in the Region, discussions were also held with the heads of the agricultural and water bureaus to assess their views on water availability and the potentials of producing fodder in the area. The team also visited the Ascoma site, where the Third Livestock Development Project used to produce fodder from 500 hectares under spate irrigation in the 1980s.
- A team of four people¹ – from the MoA, MoT, AKLDP and LMD travelled to Somaliland (17 - 21 June, 2014). The team held discussions with the Minister of Livestock and FAO Somaliland staff members before travelling to Berbera, where discussions were held with the Chief Quarantine Officer of the Government and also with the managers and technicians of the two quarantine centers on various issues regarding the lease PPP arrangement. The team then travelled to Burao and discussed with the Ministry of Livestock staff and the managers of the partnership company, which will manage the newly commissioned slaughterhouse in the town on lease. Returning to Hargeisa, the team also held similar discussion with the company managers of the Mandeeg slaughterhouse and the Hargeis alive animal market. The team immensely benefitted from the visits and discussions held in Somaliland, as reflected in this report.
- A team of three people – from the MoA, AKLDP and LMD travelled to Djibouti (30 June – 2nd July, 2014). Similar discussions were held with the managers of the new quarantine center including a visit to the newly designated livestock port that is not yet commissioned.

¹KassayeErkineh, KelifaHussien, WondwossenAsfaw and Yacob Aklilu.

- Finally, various documents were consulted to provide some background materials on PPP concepts and modalities as a way of introduction to the report.

Structure of the report

The report is divided into four sections:

Section 1 introduces readers to the origins, definitions, modalities, benefits, risks, and types and project cycles of PPPs in general terms.

Section 2 provides a brief background on PPP practices in Ethiopia.

Section 3 provides in some detail PPP practices in Somaliland and to some extent in Djibouti including how quarantine centers, public slaughterhouses and a livestock market are being managed by private companies under lease or service contract from city councils.

Section 4 assesses the status of the Mille quarantine center in some detail and public slaughterhouses and live animal market centers in brief in Ethiopia. It then provides justifications why the facilities and service provisions have not been and can't be sustained under the prevailing modus operandi concluding with the benefits that could be derived if such facilities are managed under PPP options.

Section 1 Public-Private Partnerships: An Overview

1.1 Origins

Pressure to change the standard model of public procurement arose initially from concerns about the level of public debt, which grew rapidly during the macroeconomic isolation of the 1970s and 1980s. Governments sought to encourage private investment in infrastructure, initially on the basis of accounting fallacies arising from the fact that public accounts did not distinguish between recurrent and capital expenditures.

The idea that private provision of infrastructure represented a way of providing infrastructure at no cost to the public has now been generally abandoned; however, interest in alternatives to the standard model of public procurement persisted. In particular it has been argued that models involving an enhanced role for the private sector, with a single private-sector organization taking responsibility for most aspects of service provisions for a given project, could yield an improved allocation of risk, while maintaining public accountability for essential aspects of service provision.

PPPs are organized along a continuum between public and private nodes and needs as they integrate normative, albeit separate and distinct, functions of society—the market and the commons. A common challenge for PPPs is allowing for these fluctuations and reinforcing the intended partnership without diminishing either sector. Multi-sectoral or collaborative, partnering is experienced on a continuum of private to public in varying degrees of implementation according to the need, time restraints, and the issue at hand. Even though these partnerships are now common, it is normal for both private and public sectors to be critical of the other's approach and methods. It is at the merger of these sectors that we see how a unified partnership has immediate impact in the development of communities and the provision of public services.

1.2 Definition

A **public-private partnership (PPP)** is a government service or private business venture which is funded and operated through a partnership of government and one or more private companies. These schemes are sometimes referred to as PPP, P3 or P³(²). Or, in broad terms PPP can be defined as:

“A contractual framework, or structure, where the public and private sector come together to deliver a project/service that is traditionally provided by the public sector, by means of risk transference. Whilst various structures exist, the key principle is that better value can be achieved through leverage of private sector competencies and the allocation of risks to those parties best-suited to manage them”(ILO, 2011).

All PPPs incorporate three key characteristics:

- A contractual agreement defining the roles and responsibilities of the parties;

Wikipedia: http://en.wikipedia.org/w/index.php?title=Public-Private_partnership&oldid=614200316

- Sensible risk-sharing among the public and the private sector partners, and
- Financial rewards to the private party commensurate with the achievement of pre-specified outputs.

PPP involves a contract between a public sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project. In some types of PPP, the cost of using the service is borne exclusively by the users of the service and not by the taxpayer (Tan et al., 2012). In other types (notably the private finance initiative), capital investment is made by the private sector on the basis of a contract with government to provide agreed services and the cost of providing the service is borne wholly or in part by the government. Government contributions to a PPP may also be in kind (notably the transfer of existing assets). In projects that are aimed at creating public goods like in the infrastructure sector, the government may provide a capital subsidy in the form of a one-time grant, so as to make it more attractive to the private investors. In some other cases, the government may support the project by providing revenue subsidies, including tax breaks or by removing guaranteed annual revenues for a fixed time period.

1.3 Drivers of PPPs

There are usually two fundamental drivers for PPPs. Firstly, PPPs are claimed to enable the public sector to harness the expertise and efficiencies that the private sector can bring to the delivery of certain facilities and services traditionally procured and delivered by the public sector. Secondly, a PPP is structured so that the public sector body seeking to make a capital investment does not incur any borrowing. Rather, the PPP borrowing is incurred by the private sector vehicle implementing the project and therefore, from the public sector's perspective, a PPP is an 'off-balance sheet' method of financing the delivery of new or refurbished public sector assets (Zheng et al., 2008).

The benefits of PPPs can be summarized as providing:

- More efficient service delivery through competition (through competitive tendering processes);
- Cost reductions;
- Risks allocated to party best able to manage it;
- Innovation through technology, finance and better management practices;
- Enhancement of relationship between public authority and private operator; and
- Greater accountability in the way services are managed and delivered.

These benefits are subject to PPPs ideally achieving the following objectives:

- Maintain or improve service levels
- Leverage private sector skills in project delivery through improved skills, technologies and innovation
- Access to capital and cost efficiencies
- Value for money
- Efficient asset management, and
- Optimise risk transfer

1.4 Controversies

One common complaint with PPP projects is that private investors obtained a rate of return that was higher than the government's bond rate, even though most or all of the income risk associated with the project was borne by the public sector (Roehrich and Wright, 2010). The authors further argue that it is certainly the case that government debt is cheaper than the debt provided to finance PFI projects, and cheaper still than the overall cost of finance for PFI projects, i.e. the weighted average cost of capital (WACC). This is of course to attempt to compare incompatible and incomplete economic circumstances. It ignores the position of taxpayers who play the role of equity in this financing structure. Making a simple comparison, however, between the governments' cost of debt and the private-sector WACC implies that the government can sustainably fund projects at a cost of finance equal to its risk-free borrowing rate. This would be true only if existing borrowing levels were below prudent limits. The constraints on public borrowing suggest, nevertheless, that borrowing levels are not currently too low in most countries. These constraints exist because government borrowing must ultimately be funded by the taxpayer.

Another concern is that the party that is best placed to manage these risks in a cost-effective way may not necessarily always be the private sector. However, there are a number of mechanisms products available in the market for project sponsors, lenders and governments to mitigate some of the project risks, such as: hedging and futures contracts; insurance; and risk mitigation products provided by international finance institutions (World Bank, 2012).

1.5 Challenges with PPPs

PPP arrangements also come with challenges; some of the most important are:

- The number of parties involved and the long-term nature of their relationships often result in complicated contracts and complex negotiations, with high transaction and legal costs. PPP projects can take years to complete.
- There is a risk that the private sector party will become insolvent or make large profits during the course of the project – this can cause political problems for the public entities.
- The long-term nature of a PPP project means that debt is incurred long before the benefits appear.

1.6 Participants' requirements for successful PPPs

Public

- Regulatory / institutional framework in place
- Stakeholder buy-in (political / institutional)
- Accelerated project delivery (finance / innovation)
- Risk transference (cost / schedule)
- Cost efficiencies (best practices / technology)
- Competition (price)
- Qualified providers (experience)
- Internal resources (procurement / administration)
- Accountability (monitoring / management)

Private

- Regulatory / institutional framework in place
- Essential to public (“demonstrated” need)
- Demonstrable feasibility (market / technical / environmental / financial / risk allocation)
- Risk management (allocation / rewards)
- Transparency (procurement)
- Due diligence (volume / costs / revenues / risks)
- Public sector “buy-in” (permitting / acquisition)
- “True” partnership (contractual framework)
- Innovation (costs / risks / revenues)

1.7 Policy Frameworks

A PPP policy framework represents a critical factor in the formulation and implementation of PPPs. According to ILO (2011),

“The imperative for a PPP policy framework arises from the understanding that private participation in PPP projects should have a clear basis in policy. A policy framework allocates authority and responsibility within the parts of government, for example, between national and local government and between central and line agencies, to ensure the proper management of tension between parties. The policy framework would also define the process for proposing, identifying and structuring PPP projects to facilitate the generation and implementation of viable project that are integrated with national and local planning processes. It is also important that those who will be affected by projects participate in their planning, implementation and evaluation. The PPP policy framework should also provide for evaluation and revision in light of experience and lessons learned. It should also help in focusing and directing the evolution of PPPs”.

The notion that private entities with vested interest in working together provide core competencies in operations, technology, funding and technical expertise has led governments to formulate centralized, regional and/or municipal PPP units with increasing tendencies in setting up centralized PPP units as ‘gate keepers’.

The World Bank (2007) states that governments tend to create centralized PPP Units as a response to weaknesses in the central government’s ability to effectively manage PPP programmes. Different governments suffer from different institutional failures in the PPP procurement process, hence these centralized PPP units need to address these different issues by shaping their functions to suit the individual government needs. The function, location (within government) and jurisdiction (i.e. who controls it) of dedicated PPP Units may differ amongst countries, but generally these include:

- Policy guidance and advice on the content of national legislation. Guidance also includes defining which sectors are eligible for PPPs as well as which PPP methods and schemes can be carried out.
- Approving or Rejecting proposed PPP projects i.e. playing a gatekeeper role that can occur at any stage of the process i.e. at the initial planning stage or at the final approval stage.

- Providing technical support to government organisations at the project identification, evaluation, procurement or contract management phase.
- Capacity building i.e. training of public sector officials that are involved in PPP programmes or are interested in the PPP process.
- Promote PPPs within the private sector i.e. PPP market development.

A review on the value of centralized PPP Units focusing solely on providing evidence in terms of decision making as to whether to set up, or not, a centralized PPP Unit found (Lemma, 2013):

- Very little quantitative evidence of the value of centralized PPP coordination units against ministries or government agencies individually procuring PPP projects.
- The majority of the PPP Units reviewed in the literature do not play a particularly important role in approving or rejecting PPP programmes or projects. Whilst their advice is used in the decision making process by other government bodies, the majority do not actually have any executive power to make such decisions themselves. Hence, when they have more authority their value is seen to be higher.
- PPP Units differ by country and sector: Government failures, in regards to PPP units, vary by government. The requirements for PPPs also vary by country and sector and so do the risks involved (i.e. financial, social etc.) for the country government. Hence PPP Units need to be tailored to solve these failures, properly assess risks and be located in the correct government departments where it can command the most power.
- The lack of rigorous evidence does not prove that PPP Units are not an important contributor to the success of a country's PPP programme. The literature review does show that whilst there is no quantitative data, there are widespread perceptions on the importance of a well-functioning PPP Unit for the success of a country's PPP programme.

Table 1: Function of PPP Units in selected countries

	Policy formulation & coordination	Quality control	Technical assistance	PPP market development	Standardization and dissemination
Bangladesh	□	-	□	X	-
Jamaica	-	X	-	□	-
Portugal	□	□	□	-	-
S. Africa	□	□	□	-	□
Rep. Korea	□	O	□	□	□
Philippines	X	X	□	O	X
UK	□	□	□	□	□
Victoria (Australia)	□	□	□	□	□

□ = Function Intended and Effective Function, X = Intended but not Effective Function, O = Intended Function but unclear effectiveness, - = Not an Intended Function

Source: World Bank (2007) as cited by Lemma (2013)

The author of the 2013 review found no literature that rigorously evaluates the usefulness of PPP Units. The literature does show that PPP Units should be individually tailored to different government functions, address different government failures and be appropriately positioned to

support the country's PPP programme. Where these conditions seem to have been met, there is consensus that PPP Units have played a positive role in national PPP programmes.

1.8 Value for money

Value for money is a critical factor in PPP arrangements in that the private provision of a government function/service results in a net benefit to government, defined in terms of costs, price, quality, quantity or risks transfer, or a combination thereof.

In general, PPP can generate improved value for money through a number of ways including:

- Reduced whole life costs
- Better allocation of risk
- Faster implementation of the project
- Improved quality of service
- Generation of additional revenues

1.9 Types of PPPs

There are different types of PPP arrangements varying in purpose, service scope, legal structure, risk sharing and duration. At one end of the spectrum would be an outsourcing of some routine operation while the other could involve the private sector conceiving, designing, building, operating, maintaining and financing a project, thereby taking a considerable proportion of risks. Some of the common types of PPPs are listed below (Kwak, *et al*, 2009).

Operation-Maintenance (OM): The private sector is responsible for all aspects of operation and maintenance. The private sector may not take financing responsibility if it is managing capital investment funds or determining how funds should be used, in cooperation with the public sector.

Design-Build-Operate (DBO): Private sector is responsible for the design, construction, operation and maintenance of the service for a predetermined set of time, before passing it on to the public sector.

Design-Build-Finance-Operate (DBFO): Private sector is responsible for the finance, design, construction, operation and maintenance of the project. In the majority of cases the public sector tends to retain full ownership of the project.

Build-Operate-Transfer (BOT): Private sector is responsible for the finance, design, construction, operation and maintenance of the project for a predetermined set of time. The project is then transferred back to the government at the end of the concession period, most often at zero cost.

Build-Own-Operate (BOO): Similar to a BOT project but the private sector retains permanent ownership of the assets. The government agrees to purchase services for an agreed period of time.

1.10 Contractual arrangements

The allocation of risk between the partners is a key consideration that affects various other aspects of partnership agreements, including rewards, investments and responsibilities. The following contractual arrangements indicate the level of risks shared between the two parties (ILO, 2011).

Service Contract - Service contracts are for short periods of time and leave coordination and investment responsibility with public sector management.

Management contract - Management contracts are similar to service contracts in that the length of the contractual period typically varies around three to five years. The responsibility for operation and maintenance is transferred to the private sector while investment responsibility rests with Government.

Leasing - With leases, most commercial risks of the operations are assumed by the private provider, and the profits of the private operator depends on how much he can reduce costs.

Concession contracts - Concession contracts are those where the private sector contractor recovers its costs either through direct user charges or through a mix of user charging and public financial assistance. The government usually retains property and residual rights of all assets, and the latter return to Government at the end of the contract, which is usually after 25 or 30 years.

1.11 Risks

Risk sharing is the basic tenet of PPPs. These risks, including rights and responsibilities, are distributed between the public sector and the private sector according to the PPP options. For example, under the supply agreement structure, the government retains all the obligations to finance, own, construct and operate the infrastructure service. To the extent that it does not have the expertise to construct, operate or provide inputs necessary to provide the infrastructure services, it would retain the private sector. This structure assumes that the financing for the infrastructure asset would come from the government.

Under the management agreement structure, the government owns the infrastructure and is responsible for the finance and construction of the infrastructure. The private entity would be responsible for the operation and maintenance (O&M) of the infrastructure assets as provided under the O&M agreement.

Under the lease structure, the government finances and constructs the infrastructure asset. On completion, the government maintains the ownership of the infrastructure, but contracts out to the private sector the operation, management and maintenance of the infrastructure assets. The private operator is entitled to the revenues generated from the ownership of the infrastructure asset. The following table illustrates the level of risk allocations between the private and public sectors.

Table 2 - Types and allocations of different risks

Risk	Public	Private
Legislative (existing and future)	Major responsibility	Sharing with defined parameters
Acquisition and environmental	Major responsibility	Sharing with defined parameters with public sector assistance
Permits and planning	Major responsibility	Sharing with defined parameters
Design and construction		Major responsibility
Operation and maintenance	Sharing with defined parameters	Major responsibility
Financing		Major responsibility
Termination		Major responsibility unless demonstrably caused by public
Force majeure	Sharing based on event	Sharing based on event

Source: ILO (2011)

According to the South African National Treasury's PPP manual, examples of some risks in PPP include:

Completion risk: delay in construction or installation with additional cost implication.

Cost overrun risk: Actual project costs exceeding the projected cost during design and construction phase.

Design risk: The possibility that the private party's design may not achieve required specifications.

Exchange rate/forex risk: Exchange rate fluctuations impacting on the costs of imported inputs or the project's debt or equity.

Force Majeure: the occurrence of certain unexpected events beyond the control of the parties, whether natural or man-made, that affect the project.

Market demand risk: the demand for the services may be less than projected.

Operating risk: factors other than force majeure such as projected operating expenditure such as skills requirements, labor disputes, employee fraud, etc;

Political risk: Unforeseeable conduct by a government institution that materially and adversely affects the expected return on equity, debt service or costs of the project. This includes expropriation and nationalization.

Regulatory risk: Consents required from government authorities or independent regulatory agencies are not obtained or result in additional costs.

Utilities risk: The utilities (water, electricity, etc) for the project are not available.

1.13 The PPP Project Cycle

The PPP project cycle is composed of four phases:

- Inception
- Feasibility
- Implementation, and
- Contract management

As applied in South Africa, each stage of the project cycle involves the followings:

PPP inception

- A municipality (or for that matter another government agency) registering the project with the Ministry of Planning and International Cooperation and/or the Ministry of Interior);
- Appointing a Project Officer;
- Attracting a Transaction Advisor;
- Receiving and evaluating Transaction Advisor bids; and
- Finalising and signing the contract with the Transaction Advisor

PPP feasibility study

Feasibility study is undertaken to help municipalities or other government agencies determine whether conventional public sector procurement or a PPP is the best choice for the proposed project. The feasibility study stages are as follows:

- Needs analysis
- Options analysis
- Project due diligence
- Value assessment
- Economic valuation
- Procurement plan
- Feasibility study report for Transaction Advisor, and
- Revisiting feasibility study for Transaction Advisor

Procurement

The procurement cycle includes the following phases:

- pre-qualification;
- request for proposals (also known as "RFP", this is a principal tender document in a procurement provided only to short-listed bidders);
- best and final offer (BAFO),⁵ where appropriate; and
- negotiations
- financial closure

1.14 Managing the PPP agreement

The Project Officer is responsible for preparing and implementing the PPP management plan.

The following are the key aspects of PPP agreement management:

- the institution's roles and responsibilities;
- the approach to PPP agreement management;
- partnership management;
- service delivery management;
- PPP agreement administration;
- key challenges and tasks of PPP agreement management; and
- The PPP agreement management plan and the PPP agreement management manual.

Section 2 Public Private Partnerships in Ethiopia

Unlike South Africa and a few other African countries, Ethiopia has not established a national/municipal PPP strategy, policy or guidelines or a central PPP Unit. Yet, a study commissioned by the Addis Ababa Chamber of Commerce on ‘The Potentials for Public Private Partnership in Ethiopia’ (Asuboteng, 2011), establishes that contrary to common belief that PPPs are non-existent in Ethiopia,

“50% of agencies in private and public sector, development partners and the Addis Chamber of Commerce are piloting one form of PPP or another and that the scope of these PPP initiatives cover housing; construction of side road pavements; dry waste management and recycling services; agro and food processing; irrigation for small-scale farming; management of Addis Ababa City Government Exhibition Centre; textile and garment processing; and prepaid metering and unified metering.”

The paper further adds that while the irrigation project and the Addis exhibition center are run, respectively, through a PPP management contract and a PPP management agreement the rest of the pilot initiatives are managed through service agreements. The author considers this as a ‘normal practice’ since service contracts serve as entry points for lease and management contracts, which entail more investment responsibilities and risk sharing, while service contracts serve in the interim as a bridge to build confidence between partners.

Among other things, the author recommends PPPs as the vehicle for meeting two major objectives in Ethiopia. The first involves bolstering employment opportunities. Using aggregate data from the *Study on the Determination of the Share of the Private Sector in Ethiopian Gross Domestic Product* (Kolli, 2010), the paper highlights that the share of private corporations and government in total employment rose from 4.6 percent and 2.6 percent in 2004/5 to 5.8 percent and 3.0 percent respectively in 2008/9, while on the other hand, the share of informal sector employment has decreased from 91.5 percent to 89.7 percent during this period. Within this sector the share of agricultural employment has fallen from 76.1 percent in 2004-05 to 70.6 percent in 2008-09. But non-agriculture employment by private corporations has risen from 15.4 percent to 19.1 percent. The author notes that, *“What emerges from here is the relatively stable share of employment in the institutional sectors, with marginal upward trends in the shares in non-agriculture informal sector and private corporate sector.”* The author concludes that, for a country considering to further bolster its employment possibilities, PPP arrangements can provide sustainable employment conditions if the institutional frameworks controlled by the government and the agility of the private sector are coupled with proper design and structuring.

The second objective is in meeting the Millennium Development Goals given that the 2010 MDG report postulates a medium-term strategy to achieve the followings by 2015: tackling dependence on rain-fed agriculture through the expansion of small and large-scale irrigation and strengthening of *public-private partnership*; a reduction in urban employment to below 20 percent; providing support for small and micro-enterprises through micro-finance institutions; the implementation of solid waste disposal and waterborne sewage disposal systems as well as improving rural-urban linkages. Obviously, these interventions provide opportunities for urban/rural governments and line ministries to engage small/medium business enterprises for

potential PPP investments to contribute to achieving MDG. Meanwhile, a list of existing PPPs in 2011 is provided in the following table including proposed potentials for expansion.

Table 3- Existing and potential PPPs in Ethiopia (2011)

Agency/institution	Existing PPP Project/type	Potential PPP Project type
Micro and Small Enterprises Development Agency	Condominium Housing - Pavement of side roads - Textile, Garment and Food (fruit) processing via service contract	Bamboo processing and bamboo panelling of houses - Production and supply of concrete poles via Youth and Energy Project
Ministry of Urban Devt. and Construction	Housing Delivery Service Contract	Housing Delivery via Service Contract and Equity Financing
Ministry of Communications and Information Technology	Unified billing of water, electricity, telephone services on pilot basis via service contract	ICT Centers (Management)
Ministry of Water and Energy	Irrigation project – Community-Public-Private (Mgmt. contract)	Scale up small-scale irrigation Project
Ethiopian Electric Power Corporation	Prepaid Metering pilot project via service contract	Power generation and distribution may be potential after five years. First phase of study on reforms is under review to address failed PPPs
Ministry of Agriculture	None (land is leased to private investors long-term based on crop types)	None
Privatization and Public Enterprises Supervising Agency	Hilton Hotel, Matador Addis Tire, Ambo Mineral Water ,and a few farms — under lease management and/or joint venture arrangements	None – Divestiture success rate of 90 percent is high so agency wants to sustain it
UNDP/UNCDF	Waste management (but not well structured)	Road construction , Waste management and recycling
GIZ	Food processing (sun dried tomatoes), construction (enhance quality production and use of cobble stones and steel works), sustainable coffee production and marketing	To be decided after pilot review
Construction Contractors Association of Ethiopia	Road and Housing – Service Contracts	Toll Roads, parks and gardens, municipal waste services
Chamber of Commerce – Addis Ababa (AACCSA)	Exhibition Centre – AACCSA (Management Contract with Addis Ababa City government)	Exhibition Centre (replication in other cities and regions)
Chamber of Commerce – Ethiopia	None	Management of Information Technology Centers

Source: Asuboteng (2011)

Due to the scope of this paper, further PPP initiatives at the national level since 2011 have not been looked into. Meanwhile, although not confirmed by the authors of this paper, some of the recent initiatives are reported to include the management transfer of municipal abattoirs from municipalities to PPPs in some towns such as DebreBerhan and Adama under service contract.

Such developments indicate the gradual acceptance of PPPs by municipal authorities even in the absence of national or municipal policies and guidelines.

At the same time, despite some expectations, Asuboteng (2011) states that feedback from the MoA on the ministry's engagement with PPPs shows a deliberate regulation to push the sector to the promotion of export-oriented crops over long-term investment arrangements. Accordingly, *"...land is leased to commercial farmers.....and the existing arrangement seems to suggest that the government is more inclined towards pushing more investment responsibilities to private commercial farmers rather than pooling resources together in a true partnership fashion."*

While this remains the case with regard to large-scale cash crop investments, there are multiple sectors within the MoA's sphere of influence where PPPs can potentially provide sustained and efficient services to achieve MDGs. Potential sectors include service providing centers on which the Government or donors have already made investments but where actual service provision is inadequate or the facilities require further investment for renovation and upgrading. In the livestock sector, for example, these include (World Bank, 163):

- Clinical interventions
- Preventive vaccinations
- Veterinary surveillance
- Provision of veterinary supplies
- Artificial insemination
- Slaughterhouses
- Live animal market yards
- Feed quality analysis
- Laboratory services, and
- Quarantine services as demonstrated in Somaliland and Djibouti, to name a few.

Obviously, such an arrangement will relieve the Ministry from the day to day management of service provision and focus more on its quality assurance and regulatory roles, which matter most.

Section 3 Public Private Partnerships in Somaliland and Djibouti

According to FAO (2013),

“Somalia is the most enduring case of state collapse in recent times, during which internal conflict has prevailed across most of southern and central Somalia, associated with a rise in jihadist insurgency, currently spearheaded by Al Shabaab. Some of the most violent conflict in Somalia’s history took place between 2006 and 2010, directly contributing to the famine in 2011. Regional and global political agendas have had considerable influence in Somalia in the past eight years; the international community has attempted to play a key role in state-building and ‘stabilisation’”.

The paper also adds that,

“Somaliland and Puntland have followed a different political trajectory, declaring independence in the case of the former in 1991 and a semi-autonomous region in the case of the latter in 1998. With more established government and administrative structures, both have enjoyed greater stability but have been in political limbo as their future status remains unresolved.”

Despite the unresolved status of the country, Somaliland has been functioning with a central government in a stable manner close to a decade and half. However, building statehood from the ruins of war is not an easy task in light of the political and security tensions, the destruction of basic infrastructure and public and private services that prevailed in the first decade of self-declared independence. The nascent government institutions were weak in terms of capacity and resources where institutions were forced to operate in policy vacuums. Yet, despite this difficult start, commendable achievements have been made in strengthening public and private institutions, developing policy frameworks, rules and regulations including in the provision of services under the circumstances. While foreign aid still plays a critical role in the economy, Somaliland has been exhibiting a substantial surge in the volume of its live animal exports, the mainstay of the economy. PPPs have contributed to this growth.

Somaliland’s economic survival emanates from its open approach to trade – by letting the private sector take over if there is a net benefit in such an arrangement or if the government is not capable of providing the required services. In Somaliland, PPPs provide electricity, manage water supplies, solid waste removals, abattoirs, livestock markets and quarantine centers, to name a few. Three key factors seem to have contributed to the successful application of PPPs in Somaliland:

- The entrepreneurial nature of Somalis
- The willingness of the Government (largely filled by diasporas with foreign exposure) to opt for PPP arrangements, if they see a net benefit, and
- The critical support provided by aid agencies in institutionalizing PPP learning by training central and local government agencies as well as private operators, capacity building of local councils, conducting reviews and assessments and sharing best practices, development of PPP tool kits, strategies and policy framework, etc. These include UNDP, FAO, UNICEF, ILO and TerraSolidari.

These concerted efforts have led to the formulation of a national PPP strategy, policy and guidance and the establishment of a PPP unit in the Ministry of Commerce, Industry and Tourism.

According to ILO (2011), early PPP initiatives in Somaliland included:

- *“An agreement between two private companies (DHIS and SABOWANG) and Hargeisa Municipality in 2007 which stipulates among the others that the two companies would collect, transport and dispose of solid waste into approved dump sites. In return, Hargeisa municipality has transferred its waste equipment and machinery to the private service providers under agreed terms’ in a management contract*
- *‘In Boroma , the management of the water system was transferred to the private operator (SHABA) following the collapse of the system in 2000. With financial support from UNICEF and USAID, SHABA succeeded to provide efficient and effective services to residents of Boroma,’ under a lease arrangement. The company is a success story and provides running water to all at an affordable price.*
- *‘The Somalia Highway Authority (SHA), which is the government agency obligated with the responsibility of constructing and maintaining highways as well as the construction of feeder roads within Somaliland, has contracted Total Oil Company to collect fuel levy on its behalf’ under a service contract. Part of this revenue is invested in road maintenance and construction.”*

3.1 An overview of the livestock export trade in Somaliland

Whether during war or peace time, Somalia’s economy is overly dependent on livestock resources. The sector accounts for 60-65 percent of GDP and is the source for 80 percent of the foreign exchange revenue (FAO, 2012). It is the main and complementary source of livelihood for pastoral and agro-pastoral communities, which make up 55 percent of the total population (some 4.2 million people). Those who depend indirectly on the sector along the market and feed supply chains and through other service provisions may number a million or more.

Somalia’s reliance on livestock trade emanates primarily from its proximity to the Middle East. The importation of food and other essential commodities depends on livestock exportation to this region. In the five years before the ban imposed in 2001, annual live-animal exports from Somalia proper averaged about 2.5. During the ban years, the private sector, particularly those from Somaliland and Puntland, was forced to re-route animals through Djibouti and Yemen. Because of the loss of the Saudi market, which had taken up to 80 percent of Somalia’s live animal exports, revenues significantly decreased.

The ban forced Somali livestock traders to shift to meat exports, and four export abattoirs were set up in Burao (Somaliland), BeletWeyne, Galkayo and Mogadishu. However, between 2006 and 2009, the abattoirs were only able to export a total of 811,519 chilled shoat carcasses or an average of 162,300 carcasses a year (FAO, 2012). The abattoirs were beset by a number of problems: low hygiene standards (resulting in the rejection of carcasses by importers); low

carcass weight of 7 kg on average; certification problems; a flight ban imposed on old propeller aircrafts being used for meat cargo; and shortages of supplies during the drought. The fierce competition from live animal exporters finally forced the closure of all abattoirs in 2009 (FAO, 2012).

Meanwhile, during the ban years, agencies like FAO Somalia were forced to re-focus their efforts on the domestic meat market chain in Somaliland (and also in Puntland). In Somaliland, these included the construction of slaughterhouses in Boroma and Burao; upgrading of meat markets in Hargeisa, Burao and Boroma; a livestock market yard in Hargeisa and support to the formulation of Meat Acts, institutional capacities (lab and meat hygiene units), training of meat inspectors, meat vendors and other actors in the value chain. Managing such facilities necessitated to look at PPP options.

At the same time, the dominance of Abu Yasir's company in Djibouti led a competitor, Al Jabir, to negotiate and close a deal with the Somaliland Government in 2007 to rehabilitate, expand and manage the old quarantine center in Berbera, under the name of the Saudi-Emirates Quarantine Co. Later, this company also built a new quarantine center in Bosasso. Saudi Arabia lifted the ban on Somaliland and Puntland following these developments in mid-2009, whereas other initiatives had failed to affect the ban (e.g. Somaliland and Puntland governments, UN agencies, and AU-IBAR). Abu Yasir followed suit by establishing new quarantine centers in Berbera (the Berbera National Quarantine Center) and Bosasso (the Bosasso National Quarantine Center). Following the lifting of the ban in mid-2009, the volume of live animal exports from Somaliland increased substantially, and averaged 3 million/year since 2011 (Table 4); Puntland exports averaged between 0.8 and 1 million animals/year during the same period. The Saudi-Emirate quarantine manages 70 percent of the animals exported through Berbera while 30 percent pass through Abu Yasir's quarantine. The latter has made efforts to build and manage similar facilities in Ethiopia to compete with facilities in Berbera, but with no progress to date. Various anecdotal sources suggest that 50-70 percent of the animals exported through Berbera and Bosasso ports originate from Ethiopia.

Table 4 -Live Animal Exports from Berbera, Somaliland

	2008	2009	2010	2011	2012	2013
Camels	18,517	34,274	97,165	106,167	101,686	73,789
Cattle	59,519	121,845	136,001	150,905	190,606	202,548
Sheep and goats	940,976	1,640,065	1,569,094	3,116,978	3,191,434	2,852,875

Source: Somaliland Chamber of Commerce

Encouraged by the rising levels of live animal exports, the Saudi-Emirates Quarantine Co. is now constructing one additional livestock quarantine facility, which will also double as a cattle fattening center. This center is located inland, some 90 km from Berbera port. This initiative may have been prompted by the examples of the feedlot operations around Adama and Mojo in Ethiopia, as some of the finished cattle from these locations are reportedly being transacted across the border into Somaliland. Meanwhile, the live animal export trade from Somaliland has led to increased fodder production through spate irrigation systems consisting of mainly Sudan grass and other fodder species providing substantial income for tens of thousands of agro-

pastoralist households. A lesson can be drawn from this initiative for Mille quarantine center i.e. promoting fodder production through spate and borehole irrigation closer to Mille to cut costs of transporting fodder from the central parts of the country, and to provide economic opportunities for Afar herdsman, while increasing the competitiveness of exporters. The benefits of such an initiative will also extend in availing fodder for local livestock.

To summarize, quarantine centers have become both a prerequisite and an integral part of the live animal export business as per the requirements of importing countries and the recommendations of regional offices of the Office international des epizooties (OIE). As a result, and including the new quarantine/feedlot center in Somaliland under construction, the total number of such centers has now reached 11 in the region. These include three in Somaliland (including the new one), two in Bosaso, one in Mogadiscio, one in Djibouti, one in Eritrea, two in Sudan, and the new Mille center in Ethiopia. Of these, nine are located at ports, while Mille and the new quarantine in Somaliland are at some distance from the coast. Kenya is also planning to support quarantine centers and Kenyan officials were on a lesson learning mission recently in Somaliland.

The key experience to date is that in addition to the physical facilities put in place, what makes quarantine centers more effective is the management system being able in commanding the confidence of importing countries. This needs to be clearly understood, as the regional live animal export trade is essentially a ‘buyer’s market’. For example, following the recent exportation of FMD-infected cattle from Al-Jazeera quarantine in Mogadiscio to the United Arab Emirates (UAE), letters exchanged between the Ministry of Livestock, Forestry and Range of Somalia and the Ministry of Environment and Water of UAE (obtained in confidence) unequivocally state that further importation of livestock from this specific center will only commence subject to the center being managed by a credible international PPP, rather than the Government, as was the case before.

3.2 PPP practices in the livestock sector in Somaliland

PPP management systems are applied in domestic slaughterhouses, live animal and meat markets, and in quarantine centers in Somaliland. While the two quarantine centers are managed by foreign-owned PPPs, the rest are operated by local companies excepting one domestic abattoir in Burao, which is going to be managed in partnership with a foreign company. In all cases, the private sectors have incurred substantial investments to construct new or upgrade existing facilities, have sustained and improved services, repaired and maintained the facilities and provided better pays for employees. The only exception is the Burao abattoir, as its facilities are being upgraded at the moment through a considerable investment but has not yet started operation. How these livestock facilities are operated and managed by the PPP companies is provided in some detail below.

3.2.1 Quarantine centers

3.2.1.1 Origins of the Somaliland quarantine stations

Towards the end of 2000 the Kingdom of Saudi Arabia (KSA) imposed an import ban on all livestock and livestock products from the Horn of Africa, including Somaliland. Other Middle East and North Africa (MENA) countries soon followed the KSA position. These bans followed earlier bans 1998 and 1999, and all were associated with outbreaks of Rift Valley Fever (RVF) in northern Kenya and southern Somalia, and especially the zoonotic risk of this disease.

In mid-2001 some MENA countries lifted the ban on live animal imports, while the embargo by KSA was maintained, with major implications on trade. The Saudi blockade continued until September 2009, leading to fluctuations in livestock export volumes, reduction in foreign exchange inflows, and weakening of the Somaliland shilling, among others.

In response to the negative impacts caused by the continued import ban by the KSA, Somaliland livestock traders partnering with foreign investors made significant investments in quarantine stations in the Red Sea Port of Berbera as a precondition for getting the ban lifted by the Saudi authorities. The first station started operations in September 2009. This station is owned and operated by the Saudi-Emirates International Veterinary Quarantine Management Company (SEIVQMC). The second station was opened a year later in October 2010. This facility is a joint venture between Indha-Dheero Group Companies and the businessman Mohammed Qaid Sa'eed (also known as Abu Yasser), and has the capacity to house 250,000 small livestock. Exports of livestock from Berbera have risen by more than 100 per cent following the construction and commissioning of these two new quarantine stations, and their livestock certification systems. Last year alone 3.5 million livestock, predominantly small ruminants, were exported through the two stations.

3.2.1.2 Saudi-Emirates International Veterinary Quarantine Management Company (SEIVQMC)

SEIVQMC currently owns two quarantine stations, one in Puntland, and the other in Somaliland. The construction of its first quarantine station in the Red Sea Port of Berbera cost around US\$5 million. The facility now consists of two main areas, one for keeping healthy animals ready for export, and the other for hosting animals suspected to be infected with disease. The Berbera quarantine station can hold 300,000 small ruminants or the equivalent in cattle and camels at one time, or more than two million animals per year. Suleiman Al-Jabiri, renowned as a Saudi entrepreneur and livestock investor, constructed the quarantine facilities as a rest, feed, and inspection point for animals before they are transported to the Arabian Peninsula. SEIVQMC is building an additional quarantine/feedlot facility for cattle 90 km away from Berbera and spanning over an area of 4km² where 5,000 head of cattle were being conditioned at the time of the team's visit. This facility has a strategic location close to feed sources, where fodder production takes place through spate irrigation consisting mainly of Sudan Grass and other fodder species.

The infrastructure was leased from the government in 2007, and upgraded and expanded by the company. The lease agreement with the government is for 25 years. The company is responsible

for repair and maintenance of the facilities and payment of utility bills (water, electricity, insurance, etc.).

The company used to charge traders US\$5 for sheep and goat and US\$18 for cattle and camels. The services provided include shade, water, vaccination and testing for various diseases depending on the requirements of importing countries. However, following competition after the second quarantine was opened the service charge was reduced to US\$4 per sheep and goat and US\$15 for cattle and camels. The government also levies an additional US\$5 per cattle and camel and US\$2 per sheep or goat. Government also collects lease charges and profit tax from the company.

Feed is provided by the exporters themselves. Feed production and marketing is well established and efficient in Somaliland, providing sustainable livelihoods for tens of thousands of agro-pastoralists.

The quarantine period, type of vaccination and tests required vary depending on the requirements of importing countries. For example the quarantine period for Yemen is one week and for KSA two weeks. Oman requires vaccination for lumpy skin disease (LSD), Yemen for peste des petis ruminants (PPR), and KSA for RVF and foot and mouth disease (FMD).³ A more exhaustive list of tests and vaccinations required by the various importing countries for livestock coming from the Horn of Africa is attached as an annex.



Saudi-Emirates international quarantine, Berbera

The facility is under the direct **supervision and oversight of the public veterinary services** under the Ministry of Livestock. The roles and responsibilities of the two parties are stipulated in the lease Agreement. Generally, **the government role is supervisory, quality control and issuance of final animal health certificates** for animals destined for export. Government veterinary officers regularly check whether standard procedures such as laboratory tests and

³ The varying requirements of importing countries in the same region indicates mixed interpretations of the international standards relating to animal health and safe trade, as described in the Terrestrial Animal Health Code of the Office international des epizooties <http://www.oie.int/international-standard-setting/terrestrial-code/access-online/>.

vaccinations are fulfilled and adhered to. The officers can suspend the quarantine operation if they are not satisfied with the quality and standard of service provided. They carry out inspection when animals are loaded onto vessels, and this is almost always done at night. The inspection covers proper ventilation, feed, water and other welfare requirements. Livestock movement permits, from the borders of Ethiopia, are also controlled by government officers.

The PPP arrangement has created better job opportunities and payments for veterinarians, animal health assistants, daily laborers and others. Veterinarians and Animal Health Assistants are paid US\$640 and US\$540 per month respectively. For those on secondment from the Government, this payment is in addition to their government salary (the government pay scale is US\$100 for veterinarians). Daily laborers are paid US\$250 USD per month; laboratory personnel make up 10 per cent of the total staff.

The PPP arrangement has reduced rejection rates of livestock exported to the Arabian Peninsula substantially. During the 1990s when live animal quarantine was managed by the Somali Veterinary Professional Association rejection rates were quite high (about five shipments/year or 100,000 to 125,000 animals). Only one shipment was rejected from this quarantine in the last three years during which time over 10 million animals were exported. This station handles 70 per cent of the livestock exported from Berbera. Government officials stated that the PPP arrangement has not only enabled them to transfer investment and operational risks to the company but also in setting up an efficient quarantine system. Of note, they also added that the company has been instrumental in the marketing of animals, including in penetrating new markets.

3.2.1.3 Abu Yasir Quarantine Centre

Berbera national Animal Quarantine Centre is a joint venture between the Indha-Dheero Group of Companies and Mohammed QaidSa'eed. The company operates under open agreement. In a given year, the facility has the capacity to handle 1 million small ruminants and 100,000 camels or cattle.

Service charges

The quarantine center charges exporters US\$18- 20per head of cattle/camels and US\$4 for sheep and goats. Government levies include US\$3.5 USD per head of cattle/camels andUS\$1.5 for small ruminants from the exporters. The government also collects profit taxes from the company.

Laboratory Service

The quarantine center has a good laboratory facility with the necessary equipment and staff. Thousands of samples are tested in the lab on a daily basis. Routinely performed tests include test for brucellosis and FMD:

- For brucellosis, sera from all animals were screened with the spot agglutination Rose Bengal test using buffered *Brucella abortus* antigen (RoseBengala, CZ Veterinaria, Spain) on flat glass plates. Samples showing any degree of agglutination were considered positive.
- For FMD, antibodies against the 3ABC non-structural polyproteins of FMD virus in cattle sera were determined using an indirect enzyme-linked immunosorbent assay (ELISA).

All lab staff, both expatriate and local, are recruited by the company, and additional veterinary personnel are recruited on contract basis during peak seasons. Payment for staff is on performance basis for inspection, blood sampling and analysis at the rate of US\$0.15 per small ruminant and US\$1.35 per cattle or camel.

Vaccination and testing depends on the requirement of importing countries, as stated earlier. Since 2011, only one shipment was rejected from this quarantine center, but because the vessel arrived at the wrong destination (rather than for breaches in animal health standards). This station handles 30 percent of the animals exported through Berbera.

3.2.2 Abattoirs in Somaliland

3.2.2.1 Mandeeg slaughterhouse, Hargeisa

Following the destruction of public facilities during the civil war in Somalia, animal slaughter was carried out under unhygienic conditions creating the risk of environmental pollution and community health hazards. Similarly, the meat sold in Hargeisa town was far below minimum safety levels. This led to the building of a new slaughterhouse by UNDP (in 2005) and later upgraded to some degree by FAO. Later on, FAO also worked on improving the slabs and the walls with tiles in the town meat market. The slaughterhouse does not use a railing system but has a few concrete tables inside for slaughtering small ruminants, and a slab outside (in the open) for cattle and camel slaughtering. Soon after the local council started operation, the sewerage facility became clogged with blood and offal due to improper design. The slaughterhouse not only became a health hazard in a confined space, but the council also lost about US\$2,000/month due to reported fraud by employees and the constant need to clean the facility.

Mandeeg Co. is owned by two Somali partners and their initial interest was in partnering with the council in solid waste management. However, the mayor insisted that they either take over the entire management of the slaughterhouse, and a lease agreement was signed between Mandeeg and the council in 2005. The lease period extends until the company has recouped what it has invested in the facility, based on a monthly allocation of an agreed sum with the council. In an interview with the mayor in 2010², he stressed that this move was necessary to ensure the sustainability of the abattoir, upgrade its standards, enhance the capacities and skills of employees, and provide high quality and wholesome meat to the local community, while also releasing the council from the day-to-day routine management of the abattoir (FAO, 2012).

Mandeeg invested US\$350,000 for improving the structure, sewerage system, flooring, painting, equipment, etc. and began delivering meat to four locations with refrigerated vehicles. Currently, the company provides slaughtering services for 700-800 small ruminants, 60-65 cattle and 20-25 camels per day, on average. Service fees are charge at 300 Somali shillings per sheep/goat, 3,300 Somali shillings per camel and 2660 Somali shillings per cattle. Of these, the local council is allocated 200 Somali shillings/shoat, 1,000 Somali shillings/camel and 700 Somali shillings/cattle. The income from this allocation brings the council about US\$25,000 per year, at no cost. The central government also taxes the meat vendors US\$0.90/shoat and US\$4 USD/cow or camel slaughtered in the abattoir. Mandeeg also allocates about US\$0.20/cow and camel for the local meat vendors association, consisting entirely of women, to build their capacity and maintain good relations.

Initially, the meat association was opposed to the idea of the slaughterhouse being transferred to private management fearing higher service charges. Meat vendors did not trust the company and waited at the slaughterhouse to make sure that the meat they receive was coming from their animals. Today, all this has changed. Numbers and names have been assigned to meat boxes for each meat vendor and the meat is delivered direct to their stalls on time. Delays entail fine. Meat is also delivered to private houses on request.

Mandeeq has invested in 10 more refrigerated vehicles since then and runs a total fleet of 15 vehicles. The lease period has been extended with this investment. Distribution points have expanded from four to twenty three outlets. It has 85 permanent employees, which include 15 meat inspectors. Two additional meat inspectors are also assigned on a daily basis from the Ministry of Livestock and the local council to supervise the company's meat inspectors. The company provides transportation and free breakfast for the meat inspectors and pays them US\$110 USD/month (whereas government pays US\$80/month). The company also employs undercover inspectors to check on the operation's compliance with halal.



A sign post indicating the PPP management of the Hargeisa abattoir



Part of Mandeeq's fleet of meat transporters

The confidence in the company has made the public to report illegal slaughterers on three occasions. In connection with this and referring to the Somaliland Meat Act, the company feels proud in changing the mindset of the people ‘to legally abiding citizens’. The company says it is responsible for the health of 600,000 residents in Hargeisa and wants to improve the standard of the abattoir even further. One regret it has is that the council has not agreed to raise the service fee charges since it began operation in 2005, unlike in places like Boroma, where fee reviews take place every few years.

3.2.2.2 *Burao slaughterhouse*

Similar unhygienic slaughtering, meat distribution and retailing systems as in Hargeisa persuaded FAO to commission a new slaughterhouse in Burao town at a cost of US\$1.7 million and completed at the end of 2013. The slaughterhouse is not yet operational due to serious design faults.

A private local company in partnership with a Malaysian company (Tayib Co) approached the mayor of Burao for a lease management. Both the mayor and the meat vendors of the town were initially opposed to the idea but later agreed to the request, after they were taken on a visit to Boroma town where a private company is managing the local abattoir efficiently and hygienically. A lease agreement was signed between the council and the partnership company for a period of 15 years in April 2014.

Tayib is now in the process of investing US\$1.2 million of which US\$400,000 is allocated for modifying the existing structure and US\$800,000 for cold chain systems to upgrade the facility to export standard. The company’s investment will be converted into lease years. Under the current arrangement, the company will pay rent to the council and is responsible for the upkeep and maintenance of the facility and payment of utility bills. The municipality will also collect taxes at the rate of 1,000 Somali shilling per goat and 3,000 Somali shilling per camel or cattle. The company has reached a tentative agreement by directly negotiating with the town meat vendors on slaughtering service fees while deliberately not involving the council officials to create trust and bondage with their customers. According to the tentative agreement slaughter service fees will be US\$2.5/sheep or goat and US\$8/cattle or camel.

The company is currently training the town meat vendors on meat handling and meat hygiene. Five levels of training will also be provided to the company’s 82 employees, from semi-skilled to master butcher level. The training will be provided by Dr. Said Abdirahim, the representative of the Malaysian Tayib Co, who has worked in the industry for 33 years including doing international audits for the last 15 years.

The company plans two types of operations. The morning operations will serve the local meat vendors, involving 450-500 sheep and goats, and 25-30 cattle or camels. As these operations are usually completed by 9am, the company’s operation thereafter will focus on the export market. For the export market, the daily throughput will be around 1,000 sheep and goats and 100 cattle or camels per day. Planned export destinations include chilled meat by air to the Middle East and frozen beef to Malaysia, Indonesia and Brunei and East Timor. Malaysia alone is reported to import 500 containers of beef per month. This strategy enables the company to utilize the slaughterhouse to its full capacity, unlike in Boroma and Hargeisa where the slaughterhouses

serve the domestic market only and remain unused for most of the day. The upgrading of the Burao slaughterhouse to export standard also means that the company will maintain the same service standard for the domestic market. The strategic partnership with Tayib Co. also brings unparalleled advantage to penetrate the South-East Asian market, as Tayib is a major meat company in the region according to the local Malaysian representative. The operations of the company will be supervised by veterinarians and meat inspectors from the Ministry of Livestock and the Burao Council.

3.2.3 Livestock markets – Hargeisa

The Nations Investment and Market Management Company (Nimco) is owned by three Somalis. Nimco was engaged in a protracted negotiation with the Hargeisa council over a PPP arrangement for the Hargeisa livestock market, for over three years. While the elected mayor was supportive of a PPP arrangement, the executive secretary of the council (an appointee) happened to be an obstacle to the process. Another obstacle was the livestock market committee. Nimco had to work hard to influence everyone following which it was asked to submit a proposal under the ‘invest and manage’ option.

Nimco agreed to invest US\$300,000, half of which is raised by the three partners and the other half as a loan from the Somaliland Business Development Fund (a Fund that caters for such types of investments). Nimco proposed to set up the following facilities:

- 5 sheds, 3 for livestock and 2 for humans
- 50 shops and 10 offices
- 15 public toilets
- 4 feed and 4 water troughs, and
- A mosque for women

Nimco was then requested by the local government to submit a business plan and the contract, following which an agreement was signed with the council. Under this agreement, 50 percent of the income from service fees is to be retained to recoup the investment, 25 percent to be kept as the company’s profit, and the remaining 25 percent to be channeled to the local government for livestock development. The agreement also stipulated that Nimco will collect tax on behalf of the government, on a 10 percent commission basis, and more interestingly, gather market information with the council still having the control to oversee Nimco’s operation and the final say. In addition, the Ministry of Livestock will also assign experts in the market to check on the health status of the animals. Nimco plans to train market data collectors and to use the influence of religious leaders, as traders are not willing to provide price information. Of note, the mayor of Hargeisa in 2012 stated that the council is losing about US\$2,500 /month due to employee fraud.⁴

The daily supplies of livestock to the Hargeisa livestock market is about 2000 sheep and goats and 150 cattle or camels. However, during the Haj season lasting about 100 days, the volume of daily supplies goes up to 10,000 small ruminants, 1,800 cattle and the same number of camels. Government collects market fees at the rate of 1,000 shillings per sheep or goat (raised to 2,000

⁴Reported to a team member of the FAO evaluation team, who also led the current mission to Somaliland.

recently) and 10,000 shillings per cattle or camel, whether the animals are sold or not. Nimco proposed to reduce the market fee for small ruminants to 500 shillings – a gesture not expected at all from a profit making company.

After the contract was signed, Nimco constructed the livestock and human sheds, water and feed troughs and the mosque for women, but the construction of shops and offices was opposed by the livestock marketing committee on the grounds of there being not enough space around the market. The livestock market committee is composed of feed and water providers, exporters, traders and dilals, shops and loading ramp owners. Nimco is negotiating with three representatives of the committee and the company hopefully plans to take over the management of the market in August 2014. Meanwhile, by way of compromise, the council has allocated land for Nimco in another market on which to build the shops and offices.

Nimco's future plans include constructing a borehole and the production of fodder (by buying a fodder farm) to provide water and feed in the market for which it plans to charge appropriate price. This will be done in collaboration with the livestock market committee and Nimco believes this is one way of supporting the committee. Nimco's future ambition include extending its management services in other livestock markets in Somalia and even further in Ethiopia.

3.3 PPP practice in Djibouti

The protracted live animal export ban (2001-2009) persuaded AU-IBAR to set up a quarantine center in Djibouti (through USAID funding) in around 2004, and which was supposed to be owned and managed by livestock exporters from Ethiopia, Somaliland and Djibouti as a regional hub. However, upon the completion of the center the Government of Djibouti decided to handover the management of the facility to a company owned by Abu Yasir, under a PPP arrangement. As livestock traders from Ethiopia and Somaliland had no choice but to use this facility to export animals to the Middle East, Djibouti's livestock exports soared from near zero to about 1.5 million per year.

However, following the lifting of the ban on Somaliland and Puntland, the Djibouti quarantine has been relegated to handling only what is officially and unofficially exported from Ethiopia. The volume of exports through this center has been on the decline since 2010 due to the competition from Berbera and Bosasso. Yet, a new Djibouti Regional Quarantine has been commissioned 25 km away from the center of Djibouti town and is built on 600 hectares of land. The quarantine facility is 3 km from the Somaliland border (perhaps in a bid to attract livestock from Somaliland). A new livestock port has also been designated adjacent to the quarantine station, though not yet commissioned.

The quarantine has the following partitions.

- Unit 1 (A) and (B) is the first unit in which animals are received and quarantined. It accommodates:
 - 50 sheep and goat pens with a capacity of 3,000 head each
 - 9 cattle pens with a capacity of 1,500 head each
 - 10 cattle pens with a capacity of 1,000 head each
 - 10 camel pens with a capacity of 1,000 head each

- Unit 2 (C) accommodates sheep and goats consisting of:
 - 105 sheep and goat pens with a capacity of 3,000 head each
 - 5 camel pens with a capacity of 1,500 head each

There are seven loading and unloading ramps, two of each for cattle and camels, three for sheep and goats. Ramps are fitted with crushes (stanchions) that permit the inspection and handling of individual animals. All ramps are fitted with spray units for ectoparasite control; in addition, a shower race and a concrete-lined dip are annexed to camel and sheep stations, respectively. The quarantine facility has a slaughterhouse with a capacity for handling 35 sheep/goats and 15 cattle/camels per day, and also has a thermoelectric incinerator.

Quarantine and testing requirement

Each and every country has its own sanitary quarantine and other requirements (see annexes). For example the quarantine period is one week, 21 days, 2 weeks and one month for Yemen, KSA, Egypt and Bahrain respectively. In addition, several importing countries have differing health requirements for the same disease; for example, whereas some countries demand vaccination, others require a test-and cull policy for the same disease.

The 3ABC ELISA for FMD differentiates between vaccinated and infected animals, provided that highly purified vaccines are used. The test is considered a reliable indicator of infection with any FMD virus serotype whenever there is no history of vaccination.

Rejections at the quarantine and destination

The rejection of consignments at the quarantine facility or at the port of the destination country causes considerable difficulties for traders: rejected animals have to be returned to the country of origin or, when applicable, housed and cared for outside the facility for several weeks. Both options entail considerable cost.

Service charges

Service charges vary depending on the species and importing country requirements. For example, service charge for cattle destined for Oman is US\$25 USD while to KSA is US\$30. Charges for small ruminants are around US\$9 USD of which US\$3 goes to the Djibouti government.



Quarantine gate in Djibouti for cattle and camels with tyre/foot bath

Section 4 Selected livestock service facilities in Ethiopia: the rationale for PPP management options

4.1 Mille quarantine center

The absence of international standard quarantine centers in Ethiopia has impacted the livestock industry, resulting in Ethiopian live animals being exported through third country health certificates and the branding of Ethiopian animals as if originating from such countries. This situation is further aggravated by new developments in Djibouti and Somalia where investments in new quarantine centers hinder direct live animal exports from Ethiopia, on the basis of Ethiopia having no such facility. Given the huge resource base in the country and the significant proportion of the human population that depends on livestock production, the Government has reviewed facilities in Ethiopia. In fact, the Government has already made a decision to set up quarantine centers in strategic locations in the country. For example, the construction of the quarantine center at Mille, in Afar Regional State, is almost nearing to completion with an outlay of 90 million Birr. According to the Animal Health Directorate of the MoA, 90 percent of the construction work is completed.

The primary aim of constructing the quarantine facilities is to apply strict management and bio-security procedures for animals destined for export as live, in order to prevent the introduction and spread of diseases to importing countries in Middle East and North Africa. The specific objectives of establishing quarantine facilities in Ethiopia are to:

- certify Ethiopian animals as free from transboundary animal diseases
- apply importing country requirements and other international standards to live animal export of the country
- prevent bans as a result of trade related animal diseases
- sustain and further develop markets for Ethiopian live animals by increasing the competitiveness of the country at international markets.

Authorities in MENA importing countries have expressed willingness to accept Ethiopian live animals on the condition that animals are certified free from trade-related diseases based on a 21-day, all-in-all-out quarantine. The quarantine facility will accommodate cattle, sheep, goats and camels. Djibouti will serve as the port of exit for quarantined animals.

Mille town is located 520 km north east of Addis Ababa and 405 km from the Djibouti port.

Capacity of the facility

The total area given to the quarantine station by Afar Regional State is 600 hectares. However, the constructed site consists of only 48 hectares. The quarantine station has a total of 87 pens of size 42x33m² each (total 1,386m²). Of these, 11 are for small ruminates and 76 for larger stock (44 for cattle and 30 for camels). At the rate of 1.5m²/sheep or goat, 4m²/cattle and 6m²/camel, Mille quarantine facility will roughly accommodate 10,000 sheep and goats, 15,000 cattle and 7,000 camels at any one time. With ten quarantine cycles per year the annual total capacity of the center will be 320,000 animals. This figure is much lower than the annual live animal export of the country, which reached 800,000 head in 2013.

Structural modification requirements (requiring additional investments)

The Mille export quarantine is in its last phase of construction. Here are some observations and comments which might be useful to improve its functionality and reduce risks.

1. The overall capacity of the quarantine center is too small compared to the volume of live animals going out through the Djibouti corridor. Therefore, there is an urgent need for major expansion of the facility to handle current and future needs. Fortunately there is adequate area already allocated for such expansion but requiring substantial investment.
2. The source of water is not yet identified but there are plans to sink bore holes. Lack of water supply will seriously hamper all future operations of the quarantine, such as watering animals, disinfection, cleaning, washing, laboratory and clinical services.
3. There is only one loading and off-loading ramp beyond the recommended width allowing animals to turn around, which needs to be modified. In addition, the off-loading and loading ramps should be separated and should be far apart to ensure a one way movement of animals.
4. There is no designated place for disinfection of vehicles and they all pass on the same route from the gate to the ramps, regardless of bringing in or taking out the animals from the quarantine. There should be separation of entrance and exit routes with separate gates.
5. There is a need to provide adequate space between pens to minimize contact of animals of different health status. Pens should be at least 2m apart to minimize contact. The supply routes should be wide, at least 8m, to facilitate vehicle movement. These routes should have ample gates to facilitate a flow of vehicles around the pens.
6. The roof is of flat type rather than gable to ensure adequate provision of shade. During hot periods this will be uncomfortable for the animals.
7. The shaded area is small. It should be 40 percent of the pen. The shade areas for the animals are relatively small and do not seem to provide sufficient protection for the animals from the extreme hot climate conditions of Afar region.
8. There is no incineration facility.
9. There are no double doors at the reception and washroom areas of the laboratory compromising bio-security of the lab.
10. The distance between the iron bars on the fence is too wide: sheep and goats can easily escape. The ideal distance between bars should be 20cm apart for sheep and goat.
11. The feeding and watering troughs are too small to cater for the number of animals in the pen, which could result in the bruising of animals. Troughs should be long enough to allow 40cm space between animals. Also the water troughs need shading to avoid heat and minimize evaporation.
12. Isolation pens are attached to the main quarantine pens and should be located at some distance

Input requirements- feed and water (spate irrigation)

Inadequate supply of feed is arguably the most serious constraint the quarantine station might face. Cattle coming from feedlots should be placed on a high energy feed to reduce potential weight loss. Hay and concentrate feed will have to be transported to the facility from the central parts of the country. This will incur substantial costs to the exporters reducing their competitiveness.

One way of reducing such costs is producing fodder in close proximity to Mille as hay incurs more transport costs than concentrate feed due to its bulkiness. According to the regional water and agricultural bureaus, there is enough ground water around Mille to undertake such initiatives and the potential to use the Mille River itself for pasture irrigation. The Tendaho sugar plantation also offers a good opportunity in providing animal feed for the facility, as there is a new government plan to encourage agro processing and fattening schemes around the new sugar plantations in the country, including Tendaho.

Another untapped potential is developing spate irrigation from the numerous annual rivers flowing from the highlands. Somaliland uses spate irrigation to provide fodder for over the three million animals it exports every year and the opportunities to expand such scheme is far better in the Afar Region. One of the potential sites is Ascoma, close to Eliwoha town where the Third Livestock Development Project used to produce fodder over 500 hectares through spate irrigation in the 1980s. This necessitates encouraging the private sector to invest in fodder production in close proximity to the quarantine site to enhance the competitiveness of livestock exporters in the regional market.



Ascoma, as it is in 2014

The water requirement for livestock to be quarantined is very high in the extremely hot temperatures of Mille. Daily mean requirement could reach 30 liters for cattle, 5 liters for small ruminants and 35liters for camels. A substantial amount of water is also required for routine operations in the quarantine including disinfection, cleaning, and washing, laboratory, clinic and post-mortem functions. There are five ground water tanks each with a capacity of 240,000 liters (24 MT cubic). The borehole drilled earlier was found to have limited capacity to meet the demand of the center (1.5 liters per second). New initiatives are underway to dig new bore hall around 5 km from the facility. Lack of running water will seriously endanger all future operations of the facility.

Laboratory and animal health service requirements

Various trade sensitive trans-boundary livestock diseases are endemic in Ethiopia. The presence of these diseases hinders access to high end international markets, and makes the country vulnerable to trade bans. Currently the country's live animal and meat export is mostly limited to MENA countries, and even these traditional markets are adopting more stringent health requirements. Maintaining existing markets and future expansion to other potential markets require strict compliance with sanitary requirements of importing countries, including testing and vaccination for a wide range of livestock diseases.

Therefore, the Mille quarantine center should be furnished with all essential laboratory equipment to enable it to perform routine and advanced tests. Well-trained and qualified staff should be assigned to carry the tests to the required standard and quality. Sufficient and regular supply of laboratory consumables, reagents and kits should be ensured. Most of the lab equipment is expensive and needs regular maintenance and calibration. The logistic involved in ensuring the timely and regular supply of consumables for running thousands of tests on a routine basis is an overwhelming task. Laboratory quality management system should be implemented to ensure that test results coming out of the laboratory are reliable and credible.

Employment incentives requirement

Mille is one of the hottest areas in the country with poor facilities and services. As a result, obtaining and retaining adequate and qualified staff for the quarantine station would remain a big challenge. Moreover, the current level of salary and other benefits will not attract and retain qualified staff, especially in such remote area. Therefore, adequate employment incentives should be in place to attract and retain qualified staff and enhance the credibility and acceptance of the facility. Vehicles should be available for staff to purchase provisions from Mille town and for other necessities.

Implications of the above

The existing pens at Mille quarantine are very limited in number to sufficiently handle live animals to be exported through Djibouti port. Current capacity should be tripled to meet this requirement. Any attempt by the Government to improve the infrastructure and service delivery requires significant capital investment and recurrent expenditures.

The provision of daily care, feed and water for tens of thousands of animals by the Government requires high level financial, administration and management capacity. Moreover, testing and vaccination of each and every animal brings heavy logistical challenges. Especially the regular provision of laboratory consumables of the required standard and quality to run the tests demanded by importing countries will also be a daunting task.

Potential challenges from regional quarantine centers and importing countries

The livestock trade in the Horn of Africa links Ethiopia, Djibouti, Somaliland and Puntland with each other and with markets in the Arabian Peninsula and the Gulf. It is a volatile business

environment that is highly susceptible to political shocks and the influences of tycoons, as this is essentially a ‘buyer’s market’. The three ports of Djibouti, Berbera and Bossaso are critical loci of power and a key source of revenue for the governments of Djibouti, Somaliland and Puntland respectively. To a large extent, all three countries rely on the livestock resource base of Ethiopia. Meanwhile, all existing quarantine stations in the three ports are managed by business tycoons with strong linkages to importing countries. The importing countries like KSA and UAE also prefer quarantine facilities to be managed and administered by private entities, rather than by governments, as stated by the Middle East Regional OIE representative and apparently, documented.

Therefore, Ethiopia should seriously consider the regional livestock export business and political dynamics in deciding on the type of administration and management for the Mille quarantine center. The business and political climate necessitates Ethiopia to consider international companies with the relevant technical expertise and adequate financial resource base that have already established strong linkages with importing countries as potential PPP partners.

Potential benefits of PPP management options for Mille quarantine center

PPPs are growing in popularity as vehicles for delivery of public goods and services. This trend may accelerate as governments experience fiscal deficits and look for alternative ways to finance and deliver government services at no or shared cost. PPPs have proved their worth by bringing about improvements in public service quality through shorter delivery times, better value for money and increased innovation through the use of competition across a range of infrastructure sectors. Generally, this collaborative relationship between the public and private sectors has mutual interest for both parties – governments will have new investment funding opportunities and entrepreneurial skills from the private sectors while the latter gain access to new and expanding markets. In such partnership, both sectors share skills and assets in delivering public service or goods.

While the government retains ultimate responsibility for the delivery of the goods or service, it becomes a partner with the private sector in decision making and delivery. The daily operation of quarantine stations such as feeding, watering and veterinary care like vaccination, de-worming and spraying etc. would be better managed by the private sector, with public sector staff asserting the Government’s supervisory role in overseeing that quality control is performed according to international standards. All costs associated with the hiring of personnel to attend to the ruminants, destruction and disposition of dead quarantined ruminants should also be borne by the private operators. Exporters using these facilities will be charged by the private sector for the quarantine services and international animal health certificates.

Bringing investment for structural modification, laboratory service and consumables, fodder production

The private sector often brings with it efficient construction capacity, labour productivity and technology than would be available in the public sector. As already discussed, the Mille quarantine facility as it stands now, is too small to handle the number of export animals going through the Djibouti corridor. Expanding the center and modifying the existing structural faults require substantial investment. Similarly, investment is required for the laboratory facility and

equipment, while the constant replenishment of consumables necessitate the agility of the private sector. The production of irrigated fodder in close proximity and the provision of high volume of water to the quarantine center on a daily basis from boreholes could be a drain on the government's budget if not financed by the private sector. Even if all these facilities were in place repairing and maintaining the infrastructure will be beyond the capacity of the government. Such risks are transferred to the private partner in a PPP arrangement.

Provision of quality and efficient services

Services include pre and postmortem examination, laboratory analysis, submission of reports to Government for final certification, and the provision of water and shade of animals. The detailed PPP contract for the quarantine facility will be structured around a stated specification of the required output and defines the financial, operational, laboratory and clinical standards that the private partner must meet. The government retains its role as the ultimate overseeing body and regulates the quality of the services rendered.

Private financing can support increased infrastructure investment relieving the government from borrowing but enabling it to generate revenue from the venture. At the same time, the private sector's capacity to innovate can lead to increased efficiency; this in turn should translate into a combination of better quality and lower cost services. These services include pre and post quarantine inspections, laboratory tests, vaccinations, animal welfare, biosecurity and provision of adequate water and shade for the animals.

Building the trust of importing countries

Live animal trade from the Horn of Africa has faced repeated bans from importing countries. Past restrictions on trade appeared to be imposed with limited information and based more on perceptions and cursory information. Unfortunately, Ethiopia has not escaped the economic consequences of restrictions on meat and livestock trade imposed by importing MENA countries. Bans on meat and livestock imports have been imposed because of concerns about transboundary animal diseases (TADs), such as FMD and, most recently, RVF. These bans have disrupted trade with major costs to Ethiopian producers, livestock traders and meat exporters.

Ethiopian livestock producers and exporters must have secure markets in order to justify their investments. Without an internationally-approved certification system, Ethiopia remains at risk of arbitrary trade restrictions imposed with little or no advance notice.

Several of the importing countries indicated that trust in the reliability of animal health certificates was an important criterion in decision-making. The management and administration of quarantine facilities in ports of Somaliland and Djibouti through PPP arrangements are good examples to demonstrate how mutual trust and confidence can boost trade in live animals. The private companies who concluded PPP agreements with respective Governments are owned by renowned individuals with strong business links and ties with importing countries. Managing and administering Mille quarantine station with PPP arrangement would bring similar benefit to Ethiopia and build the trust of importing countries in MENA.

Skills development of employees

PPPs are being proposed as a possible solution to leverage needed technical and managerial expertise, secure capital injections and greater efficiency. Involving the private sector often brings stronger managerial capacity, access to new technology, and specialized skills that governments cannot afford to develop on their own.

Employment of animal health professionals at competitive rates

The capabilities and effectiveness of a standard quarantine station depends primarily on skilled staff. The quarantine station should be staffed by those who have formal educational qualifications relevant to the necessary range of skills and responsibilities. These will include many staff members with scientific and/or technical discipline based skills (e.g. microbiology, immunology, virology, etc.).

The PPP arrangement of the quarantine station would allow the recruitment of well qualified staff at attractive salaries and benefits. This will allow the performance of laboratory tests and other services to the required standard and quality. This in turn enhances credibility and acceptance of laboratory test results and certificates by the importing countries. PPPs also provide regular training to raise the skills of staff abreast of new developments.

Accountability

The PPP partnership will be based on clear monitoring, reporting and evaluation of results, measuring the sustainable impact of PPPs and sharing of the lessons learned from the partnership. From the outset robust transparency and accountability systems will be built in the process and the agreement to be concluded.

Sustainability of services and infrastructure

Private sector operators under PPP arrangement enter into an investment or contracting agreements with the clear goal of maximizing profits. These profits are generated in large part by increased efficiency in investment and operations. If the PPP is structured to let the operator pursue this goal, the efficiency of the quarantine services will likely be enhanced. Improving the efficiency of the quarantine services and operations also increases the chances that those services are economically sustainable and provided at affordable rates even after satisfying the profit requirements of the private operators. Hence, sustainability of services and infrastructure will be assured.

Collecting fees and taxes on behalf of the Government

The private company engaged in a PPP arrangement with the Government can collect fees and taxes on behalf of the government. This arrangement ensures efficiency and effectiveness in operation and increase in revenue yields. Moreover, private fee and tax collection helps in saving some costs for the Government through avoiding the high administrative costs resulting from the maintenance of permanent employees including fraud. Generally private fee and tax collection will be cheaper compared to the bureaucratic method of revenue collection by the Government.

Government will still maintain its regulatory roles

Export of livestock and livestock products is predominantly the responsibility of the private sector. The Government has the overall responsibility with regard to export inspection and certification of live animals. Therefore, the implementation, financing and/or management of the quarantine facilities in partnership would strengthen or improve the economic viability and competitiveness. The expectations of public and private actors concerning cooperation differ according to their specific functions and roles.

The government keeps control over the quality of the quarantine services in a number of ways:

- The government typically owns the infrastructure, while the private-sector has a lease or a right to use the infrastructure for a fee.
- The government establishes the performance standards and penalizes the private-sector partner in the event standards are not met. These include laboratory tests, bio-security measures and welfare standards.
- The government oversees the user charges and terms on which the private operators can access the quarantine facility, and
- The government issues the international animal health certificate.

4.2 Live animal markets

Potential benefits of PPP management options

The history of putting up livestock service facilities through bilateral or multilateral funding in Ethiopia, the Sudan, Kenya and Somalia goes back to the 1970s involving holding grounds, market yards, loading ramps, crushes, stock routes etc. However, nearly all these facilities collapsed before serving the purposes they were built for because either the facilities were used for free or there were no contingency plans on how to maintain the structure from the service fees charged. The root cause was ‘problem of ownership’, as they were government property.

A rather recent example of this nature brings the picture closer to home. Twenty five livestock market yards were constructed through USAID funding (US\$8 million) in the Afar, Oromia and Somali Regions of Ethiopia under the Pastoral Livelihood Initiative programme. Facilities in the markets included feed and water troughs, partition pens, livestock scales, crushes, public toilets and bulletin boards. Guidelines were prepared for the three regions in which 30 percent of the revenue raised from the facility was to be used for maintenance of the infrastructure.

An assessment that took place three years after the commissioning of the markets (in 2010) verified that the guidelines were not implemented. Of the 18 markets visited at the time, only nine were still active. Of the 15 new markets, six were more or less dormant (some of which were leased for other use by local authorities). Only 27 percent of the facilities were used in the 15 markets visited. While the more active markets could have raised sufficient revenue for long-term market maintenance and running costs, progress was hindered by various deep-rooted institutional weaknesses including the informal collection of taxes and fees. Facilities in most markets were in a state of disrepair. The conclusion of the assessment was to disengage from investing in such facilities in the future. This was obviously a ‘problem of ownership’.

PPPs can solve the problem of ownership

A private partner who has a vested interest in the business and the smooth functioning of such centers will for their own interest and as obliged by the terms of the contract will take care of the facilities ensuring sustained service provisions.

Bringing private investments

The new Live Animal Market Proclamation (819/2014) stipulates the construction of more new live animal markets to provide ease of access for livestock producers. PPPs can be ideal partners for making such investments either on equity basis or in full relieving the government from public borrowing and dependence on donors. PPPs will also be interested to set up other amenities around the market center, such as shops, drug stores and restaurants to generate more revenue while providing meaningful employment for others.

Ensuring orderly transactions

The new proclamation makes it clear that livestock transactions take place only in designated livestock market centers. PPPs can effectively enforce this since transactions outside of designated places meant affects their revenue.

Introduction of grading systems and identification

PPP-managed markets can serve as a conduit for introducing livestock grading and ear tagging systems, and the implementation of other new policies and guidelines as the market centers are managed by them, and work in close collaboration with market actors.

Market information

PPPs can form the basis for generating sustained market information requiring no donor support.

Employment opportunities

PPPs will provide employment opportunities for the local youth, women groups, livestock marketing cooperatives or unions, credit and savings association and the like. Any of these groups can set up a company or to manage the market center or engage in other types of businesses using the amenities developed by the managing company around the market (shops, restaurants, etc).

Provision of water and livestock feed

PPPs can also provide water and livestock feed in live animal markets to increase their profit base thereby introducing producers to improved livestock feed.

Tax collection

The private company can also collect tax on behalf of the government on commission basis.

Government still retains control

Government still retains the control and the final say on the procedural operations of the market, ensures that producers and traders are charged the agreed upon fee levels including animal health inspection. The management of the market by a private company will help the government to focus more on market policies and strategies.

4.3 Municipal slaughterhouses

Potential benefits of PPP management options

Many of the municipal abattoirs in Ethiopia were built through the Second Livestock Development Project over forty years ago. While few towns have built new slaughterhouses since then (Adama and Mekelle), most towns are served by very old facilities run by local councils (municipalities). The physical, sanitary and operational conditions of these abattoirs in the country are very poor. The walls, floors and ceilings in these facilities are in various states of disrepair and need significant upgrading to meet the sanitary requirements for supplying hygienic and wholesome meat for public consumption. The facilities are visually dirty with significant build-up of filth. The hand wash sinks in the kill floor had only cold water and no detergents. Many of the facilities are old and have significant cracks, crevices and spaces under doors that could allow rodents to enter the premises.

Effluent and waste disposal is another area that requires substantial improvement. Such abattoirs have no treatment facility and let the waste be absorbed by the soil or in pits. Rumen contents are frequently spread around the facilities for sun-drying. The waste disposal problems are the main reason for the overall unhygienic condition of such facilities. This is a vicious circle, as unavailable-waste treatment combined with pollution and contamination around such abattoirs inevitably also spreads inside the facilities making them similarly unhygienic. Most of them also do not have a perimeter fence and as a result, dogs and cats roam in the facilities scavenging in the waste pit. In addition the areas near the abattoirs have significant bird populations.

A further negative consequence is the observation that meat inspection is carried out very superficially. This is firstly due to the overall unsatisfactory hygienic situation, and secondly due to the fact that equipment for meat inspection is, in many cases, not available, such as racks for red offal, viscera table for green offal and fixation facilities to enable proper head inspection. The abattoir employees do not have a clear understanding of sanitary dressing procedures nor did the plants have appropriate sterilizer and sinks for proper sanitation.

In conclusion, most municipal abattoirs in the country are very unsanitary, with extreme deterioration within the facilities, inadequate sanitary controls and poor operating practices. There is a need for serious construction improvements to allow these facilities produce a sanitary meat product. The design and layout of an abattoir and its equipment shall facilitate the hygienic processing of meat and meat products and any inspection or auditing necessary during or after production. For this reason, the location, design, layout and construction of abattoir premises and the choice of fixtures, fittings and equipment are crucial to ensure that the abattoir can operate under hygienic conditions and produce meat safely. Therefore, there is an urgent need to develop

and enforce national standards with regard to structural requirements, hygiene management practices and environmental compliance for the various categories of abattoirs.

Meanwhile, some new initiatives are reported to have taken place in towns such as Adama, DebreBrehan and Makelle, where the councils have transferred the management of the slaughterhouses to private companies under management contracts. It is also reported that the private companies in these towns were formed by veterinary professionals. This is encouraging and based on lessons learned from these initiatives the practice needs to be expanded in the country to achieve the following objectives.

Attracting private investment

Private companies can bring in the necessary investment for upgrading existing serviceable facilities to the required standard or, where this is impossible, to put up entirely new facilities.

Ensuring the supply of safe and wholesome meat to the population

Similar to Somaliland, such companies will employ qualified meat inspectors to ensure operational procedures follow recommended standards for the supply of safe and wholesome meat to the population. Obviously, the company's meat inspectors will be supervised by government appointed officers to verify that the procedures followed meet acceptable standards.

Minimizing unnecessary wastage

Private companies are keen in minimizing wastages that is commonly observed in most municipal abattoirs. Revenue will be increased from appropriate trimmings and the conversion of offal and other organs into usable bi-products.

Preventing unlawful slaughter practices

The supply of safe and wholesome meat is critical to protecting the health of the population. The population will reject meat coming from other unhygienic sources once it gets used to safe and hygienic meat. The private company will also be engaged in the monitoring of such practices and informing the authorities for appropriate action.

Employment opportunities

Private companies will provide opportunities for employing thousands of veterinarians and other animal health professionals and meat technologists graduating from the universities at competitive salaries reducing the dependence on government jobs.

Improving the image of the country

Slaughterhouses of acceptable standards contribute to improving the image of the country particularly in building confidence when dealing with importing companies.

Sustenance of the system

As private companies are responsible for the repair and maintenance of the facility they will strive hard that they operate on profit basis by minimizing unnecessary costs, broadening their revenue base through innovative approaches and by charging appropriate fees for their services. This will ensure the sustenance of the system on continuous basis.

Benefits to the government

The management of slaughterhouses by private companies will relieve the government from day-to-day management of such facilities while raising revenue without the need to allocate budget for recurrent costs on a yearly basis in addition to the control and regulatory roles it still retains on such facilities.

Government can play a more important role in coming up with design specifications on different standards of slaughterhouses based on the population size and the prevailing specific needs of big and small towns.

4.3 Conclusions

By drawing on the benefits derived in Somaliland and Djibouti, this report has demonstrated the need for PPP options for livestock service facilities in Ethiopia. This position has been taken for various reasons but key among these are the sustenance of such facilities and service provisions as private companies operate on profit basis to ensure continuity. The other important reasons are relieving the government, to the extent possible, from investing in such facilities to minimize public borrowing and also from entangling itself in the mundane day to day administration of such facilities and rather focus on its regulatory roles, strategy development and policy formulation.

Although Ethiopia does not have a national/regional PPP policy unit or guidelines, a number of public – private initiatives are emerging in different sectors of the economy. This implies that PPPs are being applied on the ground preceding the need for a national policy, guidelines or directives indicating their importance. Obviously, having a national policy guideline would help in avoiding some of the pit fall prevalent in such contractual arrangements but not to the extent of delaying such initiatives until this happens. The following recommendations relate to the specific livestock service facilities included in this report.

Mille Quarantine Center - The need for bilateral negotiations with Djibouti

There is an urgent need for high level bilateral negotiations between the governments of Ethiopia and Djibouti to secure a written agreement for livestock transported directly from quarantine facilities in Ethiopia to be transited through Djibouti port where they will be loaded onto vessels.

The facility for holding livestock at Djibouti port until shipment is very small. Moreover, mixing animals from various origin and different health status at this port facility promotes disease transmission. This also should be an area of negotiation with Djibouti authorities. Otherwise, every effort made to ensure the production of safe and healthy animals for export can easily be lost and would be very difficult to provide the required guarantee to trading partners.

The Djibouti Government has recently designated a new livestock port next to the Djibouti quarantine center though not yet commissioned. The terms under which Ethiopia can benefit when this facility becomes operational have to be negotiated. It is likely that animals that have travelled 400 km may not be in good physical condition to be loaded directly onto vessels. The negotiation terms should look into how animals can be rested for 2 or 3 days at the newly designated port.

Negotiations with importing countries

Similar negotiations with major importers like Saudi Arabia should be pursued so that the international animal health certificate issued by Ethiopian veterinary authorities for Mille quarantine center are recognised and accepted. International development partners such as FAO and standard setting organisations especially OIE should be consulted to get their support

The need for negotiation on health requirements: Minor violations to the hygiene requirements demanded by importing countries can and do result in the rejection of entire shipments. Such requirements should be in accordance with the prevailing epidemiological conditions in the importing countries and should be robust enough to allow the flow of trade with minimum risk. The requirement by some importing countries for brucellosis testing (and culling) of male animals intended for slaughter needs reconsideration, even more so after the overall seroprevalence rate of the disease was determined at 2% to 7% after testing more than one million sera.

Improving live animal transport system

It was common practice to tie camels down while on board and they often arrive at the quarantine facility with bruises, fractures, myositis and pneumonia as a result of inappropriate transport conditions. There is an urgent need for regional institutions involved in the livestock sector to address these issues more effectively.

Support in availing capital funds

Private companies that will likely manage domestic slaughterhouses and live animal markets may consist of animal health professionals, livestock marketing cooperatives and unions and the like. These groups may not have the required capital outlay for upgrading or investing on a new facility. This will necessitate setting up a 'special fund', which the companies can access as loan to raise half of their investment needs, while contributing the other half from their own. The 'Somaliland Business Fund' is such a scheme providing loans for upstart companies in PPP arrangements. It is mainly funded by donors.

Training requirements

Training in business management and other key aspects is required for domestic private companies to be engaged in public-private-partnership.

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Annex 1

Requirements for export of live animals from the Horn of Africa (Standard Methods and Procedures for Export Quarantines in the IGAD Region)

COUNTRY	RVF	FMD	CBPP	BRUCELLOSIS	POX	LSD	QUARANTINE PERIOD (DAYS)
EGYPT	Vaccination	Test	Test	--	--	Vaccination	30
EMIRATES	Vaccination	Test	--	Test 10%	--	--	21
KUWAIT	Vaccination	--	--	--	Vaccination	--	10
OMAN	Test 5%	--	--	Test 50%	--	--	21
SAUDI ARABIA	Vaccination	--	--	Test 100%	Vaccination	--	30
YEMEN	Vaccination	--	--	--	--	--	10
QATAR	Vaccination	Vaccination	--	--	Vaccination	--	10
JORDAN	Test 10%	Test 10%	Test 10%	Test 100%	Vaccination	--	30
LEBANON	Test 100%	Test 5% + Vaccination	Test	Test	RP Test 3%	--	30
BAHRAIN	Vaccination	Vaccination	--	--	Vaccination	Vaccination	7-21

Annex II

LABORATORY TESTS FOR THE MOST IMPORTANT TADs CURRENTLY USED IN THE QUARANTINES IN THE HORN OF AFRICA

	Disease	Prescribed tests by OIE (OIE standards)	Tests currently used	Confirmatory test	Response to positive test result
1	FMD	ELISA	ELISA	ELISA	Culling and notification
2	RVF	HI, ELISA	ELISA (IgGIgM)	ELISA	Culling and incineration under official supervision and notification
3	PPR	VN, ELISA	ELISA	ELISA	Culling and notification
4	LSD	VN	-VN ?	ELISA	Culling and notification
5	Sheep and goat pox	VN	-VN	AGID	Culling
6	Camel pox	-	-VN?	AGID	Culling
7	CBPP	CF, ELISA	ELISA	Culture, CF	Culling, incineration and notification
8	CCPP	CF	CF, ELISA	CF, Culture	Culling, incineration and notification
9	Brucellosis	RBT,CF	RBT	CF, ELISA	Culling under official supervision