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**Impact Assessment of the ACDI/VOCA Livestock Markets in
Pastoralist Areas of Ethiopia**

PLI Policy Project
Tufts University

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Summary

In 2005 USAID Ethiopia provided a grant to ACDI/VOCA, a US-based private non-profit organization (hereafter called ‘the implementer’) to strengthen livestock marketing in Afar, Somali and Oromia regions, with a view to increasing market off-take and enhancing pastoralist livelihoods. The project budget was approximately US\$ 8 million. From October 2005, project activities included the construction of new livestock markets. A cost extension phase from 2008 focused on the introduction of local management arrangements for the markets.

In June 2010 and at the request of USAID Ethiopia, Tufts University conducted an impact assessment of the market construction and management components of the project. The assessment was based on visits to 18 livestock markets constructed by the project in the three regions, from the 25 markets which were constructed in total. The impact assessment design included attention to attribution and specifically, analysis of trends in the absence of project inputs (counterfactual analysis). Ideally, an impact assessment of new market infrastructure would measure the additional volume and value (if any) of market transactions before and after the construction of the markets. The assessment would then determine whether any measurable changes were attributable to the project, or, whether these changes would have occurred even the project had not been implemented. These kinds of measurements help to overcome the weaknesses of ad hoc, direct observation of market activity and the reporting of market transactions with no reference to a baseline. The lack of available baseline data on market activity before the project hindered this kind of analysis.

In part, this approach involved examination of two bush markets, which evolved independently of the project. Although the assessment used some participatory methods, the overall design of the assessment was not participatory. Participatory impact assessment requires specific target communities and geographical areas to be defined for a project, and this did not occur in the project.

Main findings

The main findings of the assessment were as follows:

- **Drivers of market activity** - of the 18 markets visited, nine markets were active and some of these were an important source of livestock for export. The drivers of increased trade included increasing demands for meat in the Middle East combined with higher-level Ethiopian government commitment to supporting meat exports, and to a lesser extent, live animal exports. Both trends were evident before the project started, and therefore, could not be attributed to the project. The main beneficiaries of the export trade include the export companies, intermediaries, and wealthy and middle-wealth group pastoralists.
- **Markets as a cause of conflict** - in pastoralist areas the careful positioning of new services and structures is needed to ‘do no harm’ and avoid conflicts between neighbouring groups, or conflicts between new structures and with the owners of existing services. In the project three markets were closed indefinitely because of conflicts (in Yallo, Chereti and Kersadula), and three other markets were adversely affected when one ethnic group refused to use the market because of

tensions with another group (in Negele, Moyale and Hudet); in other words, nearly 25% of the new markets that were constructed were affected by conflict issues. This finding points to an initial weak analysis when positioning the markets. The emergence of new bush markets was partly a response to these conflicts, as the bush markets were positioned so as to avoid confrontation between ethnic groups.

- **Systematic institutional issues** – the project supported Livestock Marketing Management Boards (LMBBs), and these had been established in Somali and Oromia regions. However, a working system for the appropriate collection of market revenue and use of revenue for market maintenance and running costs was in place, partially, in only two markets (Haraboke and Finchewa) and was not evident in the remaining 16 markets. In the more active markets (nine in total), in theory the volume of livestock trade should have been sufficient to generate revenue for the long-term market maintenance and running costs. However, various deep-rooted institutional weaknesses hindered progress, including the informal collection of taxes and fees. Given that market infrastructure was already deteriorating, the likely scenario was that the markets would fall further into disrepair unless further external assistance was provided. The assessment did not examine the written agreements between the project and local government partners, which were reported to describe the government roles and responsibilities for maintaining the markets. However, stakeholder interviews indicated that in most cases, these agreements had not been met. Analysis of local organizational capacities and institutional arrangements before, or at the onset, of the project should have informed an assessment of future risks for the project, such as over-reliance on local government capacities. In part, problems with livestock market management by the public sector reflect wider governance challenges in pastoral areas.
- **Dormant markets** - of the 15 new markets which were initially assumed to be active, six were more or less dormant. The low volume of trade in these markets - less than 50 goats and few cattle at most per market day – was predicted in 2005, indicating that these markets should not have been constructed. It is very unlikely that these markets can raise enough revenue to even hire market attendants.
- **Use of specific market facilities** - the design of the new markets included various facilities such as water and feed troughs, partition pens, livestock scales, crushes, bulletin boards and public toilets. In the 15 open markets which were visited, only 27% of these facilities were in use. This finding supports the conclusion that most of the market features which the implementer initially deemed necessary were not actually needed. The most commonly used facilities included veterinary posts, and livestock compartments, and in some markets, the loading ramps.
- **Marketing guidelines** - draft livestock marketing guidelines were prepared for the three regions by the project. The guidelines proposed an allocation of 30% of market revenue for the maintenance of the facilities. The guidelines were not being implemented at the time of the assessment.
- **Veterinary posts** - at some of the new markets, veterinary and other services were available. In the case of veterinary care, analysis of impact requires baseline data

on the accessibility, availability, affordability, acceptance and quality of service. This information was not available. However, the provision of clinical veterinary care by local government at market locations could be seen to contradict policies which support delivery of clinical veterinary services by the private sector. Further assessment is needed to determine the impact of these new veterinary facilities. The assessment should include the extent to which these government services complemented or undermined pre-existing private veterinary service providers in the project areas. There are also various technical questions to consider, such as the risks of positioning veterinary posts at livestock markets and the possible contact between sick and healthy livestock.

- **Growth of bush markets** - the new bush markets observed during the assessment reflected the dynamic nature of livestock marketing in pastoralist areas, and the efficiency of ‘appropriate technology’ in responding to trends in market demands. In these markets locally-based traders were sourcing animals for direct movement to export companies. These markets were easier to access for producers, and enabled producers to sell to traders who were more trusted. One implication is that the bush markets will further reduce the viability of the more formal, new markets in urban centres and on main roads.
- **Women’s groups** - the project supported service provision in the new markets e.g. by helping to organize women’s groups and by aiming to provide these groups with seed money. At the timing of the assessment, it was too early to measure the impact of this activity. For example, not all groups had received the seed money.
- **Construction issues** – as stated above under use of specific market facilities, there was limited use of many of the facilities. In addition to some facilities not being required, was evidence that many facilities had fallen into a state of disrepair either due to weak maintenance, and/or, problems with the quality of the initial construction.

Recommendations

The overall conclusion of the assessment was that USAID should not provide further support to livestock marketing infrastructure in pastoralist areas. Attempts to improve market management need to be considered against the question of whether elaborate market infrastructure is really needed for pastoral livestock marketing. In general, simple bush markets work well. The assessment also concluded that a main driver of livestock price increases and related trade from pastoral areas, especially in Borana, was government commitment to support meat exports. The key challenges relate not to market construction, but to various outstanding policy and institutional constraints.

The assessment team did not include construction experts, and the pre-agreed questions for the assessment did not include an examination of the quality of market construction. However, given the poor physical condition of market facilities in some locations, at a relatively short time after construction, USAID should consider a separate independent review which looks specifically at construction issues and supervision of construction subcontracts.

Four specific recommendations are made, focusing on the need for better pre-project analysis and opportunities to strengthen government and implementer capacities in such analysis.

Recommendation 1

Attempts to intervene in pastoral livestock marketing systems should document local marketing behaviours by wealth group and carefully examine any proposed causal pathway that associates more market infrastructure with more sales. Such pathways are unlikely in pastoralist areas. Policy engagement and economic analysis with government partners is needed to raise understanding of these issues at federal and regional levels.

Recommendation 2

Livestock markets in pastoralist areas require basic facilities, such as loading ramps and water troughs. Investment in more elaborate infrastructure is only warranted if a positive pre-project benefit-cost analysis shows an appropriate return on investment. In addition, a pre-project assessment of local government management and administrative capacities is needed, including analysis of the actual capacity of government to deliver versus their proposed/stated capacity e.g. as expressed in project agreements. In many cases, the key constraints to pastoral livestock markets will be policy and institutional (e.g. inappropriate taxation; restrictive livestock movement regulations), rather than hardware. Support to government to improve understanding of these issues and build capacity for benefit-cost analysis and organizational capacity analysis is warranted.

Recommendation 3

In addition to a capacity to conduct economic analyses and understand local marketing behaviours, implementers also need to understand local cultural, social and conflict dynamics, and recognize the need to consult a range of local actors and stakeholders. In conflict-affected or conflict-prone areas, ‘Do No Harm’ approaches are needed, as already recommended and used by other USAID implementers in pastoralist areas. When selecting implementers, USAID needs to consider past organizational experience specifically in pastoralist areas, and understanding and capacity to conduct conflict analysis and implement conflict-sensitive programming.

Recommendation 4

USAID supports ‘scaling-up’ of new approaches based on evidence. In the case of livestock markets in pastoralist areas, a substantial body of evidence already exists. Future needs include building the capacity of government and implementers to conduct appropriate, comprehensive pre-project analysis using mainly existing information, but supported by rapid applied assessments as needed.

1. Introduction

Under the Pastoralist Livelihoods Initiative (PLI) project in Ethiopia, USAID provided a grant to a US-based private non-profit organization (hereafter called ‘the implementer’) to strengthen livestock marketing in Afar, Somali and Oromia regions. The aim was to increase market off-take and enhance pastoralist livelihoods. The project budget was approximately US\$8 million. From October 2005, project activities included the construction of new livestock markets. In August 2008, an impact assessment was conducted on 10 of these markets, which were judged by the implementer to be functional at that time. Some of the key findings of the earlier assessment in 2008 were as follows:

- in the new markets only 20% of the facilities were being used;
- livestock marketing activity was taking place outside seven (out of 10) of the new markets which were assessed;
- there was no evidence to show that livestock sales had increased as a result of the construction of the new markets;
- taxation had increased in the locations with the 10 new markets; on average these increases were 10% for cattle and 33% for camels, sheep and goats.

In 2008 USAID awarded a cost-extension to the implementer with the aim of resolving some of the management issues in the new markets.

In June 2010 USAID requested Tufts University to conduct a second impact assessment of the project. The assessment was based on visits to 20 markets as follows: 15 out of 18 new livestock markets which the implementer reported as open at the time; three out of seven markets which were new but judged to be non-functional (note –the project constructed 25 markets in total); and two local bush markets which were not part of the project. In agreement with USAID and the implementer, the assessment focused on the following issues:

- progress made towards sustained use of markets;
- changes in livestock supply, sales volume and prices, if any, and attributable factors;
- transaction modalities and perceptions of market actors and service providers on issues of importance;
- intended and unintended impacts of the new markets on livestock trade and transaction modalities in general;
- status, and usage level of installed facilities;
- lessons to be drawn from the exclusive use of the Shinile market by a livestock exporter.

2. Design and Methodology

The same team who conducted the 2008 impact assessment also conducted the assessment in 2010, and 10 markets initially covered in the earlier assessment were also included in the 2010 assessment. This approach allowed the assessment team to track progress over a two-year period in 10 markets.

2.1 Markets visited

The markets visited during the assessment are listed in Table 1.

Table 1. Location and status of markets assessed in 2008 and 2010

Location and type of livestock market		Impact assessment August 2008	Impact assessment June 2010
Somali Region			
New, open	Jijiga	+	+
	Hartisheikh	+	+
	Lefe Issa	-	+
	Moyale	+	+
	Hudet	-	+
New, non-operational ¹	Shinile	-	+
Afar Region			
New, open	Eliwoha	-	+
	Chifra	-	+
	Asayita	+	+
	Logia	-	+
New, non-operational	Gewane	-	+
	Andido	-	+
Oromia Region			
New, open	Teltele	+	+
	Negele	+	+
	Dubuluk	+	+
	Bokoloboma	+	+
	Finchewa	+	+
	Harobake	+	+
New, bush market ²	Surupa	-	+
	El Waya	-	+

¹ Of the non-operational markets, Shinile market was leased to live animal exporters and the intention was for Andido market to be leased to a traders association; visits were made to these sites to see how they are operating.

² Two bush markets were included in the assessment to appraise their performance compared to the newly constructed markets. The bush markets had evolved independently of the project.

2.2 Key informants

The assessment was carried out in close collaboration with project coordinators. All sites were visited on market days. Key informants are listed below.

- Pastoralists, traders and brokers and people providing cattle holding and loading services to local traders in bush markets.
- Truck owners, tax collectors, guards and women and children selling tea, food and cold water at market sites.
- Local councils and administration officials and various associations linked to livestock marketing activities.

Inevitably, when interviews involved sensitive questions around tax collection, use of revenues, conflicts and other issues, most informants preferred to remain anonymous.

Research instruments were designed in consultation with the implementer. The question checklist for the assessment is provided in Annex 1.

Specific information provided by informants during interviews was triangulated with information provided by other informants, and with secondary data including:

- An audit of livestock marketing in Ethiopia, Kenya and Sudan conducted in 2002, providing data from before the ACIDI/VOCA project¹;
- Field assessment of the performance of livestock marketing groups in Borana in 2004, providing market trend and price information for the period before the ACIDI/VOCA project²;
- Various papers arising from the USAID-funded GL-CRSP project that conducted research on livestock marketing in northern Kenya and southern Ethiopia, mostly before the ACIDI/VOCA project³;
- Minutes of the quarterly PLI Technical Coordination Meetings for Oromia and Somali regions since October 2005;
- Information from the Livelihoods Information Unit, Ethiopia, on livestock market prices.
- A study on livestock marketing constraints in Ethiopia and Kenya conducted as part of the USAID-funded regional Pastoral Areas Coordination Analysis and Policy Support project in 2008⁴;
- Field research in Borana and Somali areas conducted as part of an IGAD-FAO study on livestock marketing in pastoralist areas of the Horn of Africa in 2009⁵;
- A policy paper on the potential for pastoralist livestock to support national economic growth in Ethiopia, commissioned by DFID and presented to the Prime Minister's Office in late 2010⁶.

In summary, these and other reports enable analysis of market trends in Borana and Somali areas over about ten years.

The assessment team was not provided with copies of the implementer's monitoring reports, and therefore, did not use project M&E data to triangulate the findings of the assessment.

2.3 Data issues

Ideally, an impact assessment of new market infrastructure would measure the additional volume and value of market transactions before and after the construction of the markets. The assessment would then determine whether any measurable changes were attributable to the project, or, whether these changes would have

¹ Akilu, Y. (2002). *An Audit of the Livestock Marketing Status in Kenya, Ethiopia and Sudan*. AU/IBAR and Tufts University, Nairobi.

² Aklilu, Y. (2004). Pastoralist Livestock Marketing Groups in Southern Ethiopia: Some preliminary findings. Presentation to the CORDAID *Access to Markets Workshop*, November 2004, Nazareth.

³ McPeak, J.G. and Little, P.D. (2006). *Pastoral Livestock Marketing in Africa: Research and Policy Challenges*, IT Publications, Rugby.

⁴ Aklilu, Y. (2008). *Livestock Marketing in Kenya and Ethiopia: A review of policy and practice*. Tufts University, Addis Ababa.

⁵ Aklilu, Y. and Catley, A. (2009). *Livestock Exports from Pastoralist Areas: An analysis of benefits by wealth group and policy implications*. Report for the Intergovernmental Authority for Development and Food and Agriculture Organization. Tufts University, Addis Ababa.

⁶ Akilu, Y. (2009). *Livestock and Animal Product Trade and their Importance for Pastoral Economic Growth in Ethiopia*. Unpublished Concept Note for the Pastoral Economic Growth and Development Study, Addis Ababa, Ethiopia.

occurred even the project had not been implemented. These kinds of measurements help to overcome the weaknesses of ad hoc, direct observation of market activity and the reporting of market transactions with no reference to a baseline. Such observations and reports are of limited value in terms of assessing impact, because active markets might have been present before the project, or, would have occurred despite the project. The lack of available baseline data on market activity before the project hindered this kind of analysis.

3. Findings

3.1 Local market management

The focus of the cost-extension phase of the project was to establish management systems for the new livestock markets and to introduce standardized systems, fair management practices, and ensure the sustained use of the installed market facilities. Progress towards these aims was based on the formation of Livestock Marketing Management Boards (LMMB), established in Oromia and Somali regions, but not Afar region. The LMMB members were representatives from the municipality, and finance, agriculture, health, water development, cooperative and security bureaux (in the case of Jijiga, brokers were also represented). The LMMBs had conducted at least one meeting in Oromia and Somali regions.

Before the formation of the LMMBs in Oromia, new official receipts were issued for Harobake market (which were being used by the four kebeles), with some financial support from the project. The project had also negotiated for the relocation of women engaged in service provision to the vicinity of the Moyale livestock market.

3.1.1 Progress towards local market management

Outcomes of the LMMB meetings included the following:

- A water pipeline had been extended to Moyale, Negele and Teltele markets;
- Woreda Agriculture Offices opened or reopened veterinary posts and assigned personnel in all operational market sites, including the provision of drugs in some markets;
- The implementer negotiated with the authorities in Negele for the use of a single receipt for taxation purposes by the Revenue Office;
- The implementer facilitated the opening of bank accounts for the Harobake and Finchewa markets. At the time of the assessment mission, the Harobake bank account showed a deposit of EB 18,400 (~US\$ 1,343) and Finchewa EB 10,000 (~US\$ 730). The savings are to be used for the maintenance of infrastructure.
- The implementer organised women operating around the new market sites into cooperatives and donated EB 15,000 (~US\$ 1,095) seed money per cooperative; by June 2010 this money had been provided to the cooperatives, other than those in Jijiga, Negele and Moyale markets.
- Livestock marketing guidelines were drafted in cooperation with the three regional governments.

3.3.2 Outstanding local management issues

Market-related income and its management

The implementer made notable efforts with regional and local authorities to introduce a management system for the sustained use of the markets, on a self-financing basis. The LMMBs were established in two regions (not Afar Region) and agreements were reached, at least theoretically, to allocate 25 to 30% of the market-related income for maintenance purposes. The practicality of this arrangement was doubtful in all markets visited, except in Harobake and Finchewa where saving accounts were opened for maintenance purposes. Officials in Jijiga in particular stated that the maintenance of the market facilities was the responsibility of the regional government (as for other infrastructure in the region) and therefore, a separate bank account for the maintenance of the market was not needed.

Taxing of unsold animals in Oromia markets was still evident despite the implementer's efforts to get this repealed. The LMMB members stated that tax standardization and the allocation of money to the revenue office versus maintenance purposes was beyond their mandate, and should be dealt with at regional or federal level.

Savings in Harobake and Finchewa markets did not reflect actual income levels, as agreed with the implementer. In Harobake, savings over a 50-week period were EB 24,400, of which EB 6,000 was used for the printing of official receipts. The savings arrangement with the implementer was for the four kebeles to deposit EB 2,000 per market day for the first 35 weeks of the year, and EB 500 per market day for the last 15 weeks of the year⁷. Therefore, the total net saving for the 50 weeks should have amounted to about EB 71,500. In Finchewa too, the municipality head confirmed that deposits into the savings account was interrupted for undisclosed reasons.

In Harobake there was one market day a week, which sold around 1,200 cattle, 300 small ruminants and about 100 camels per market day (1,600 livestock in total). Five thousand new tax collection receipts were issued to market tax collectors on 17th March 2010, to be used for all livestock species brought to this market. At roughly 1600 animals sold per market day, these receipts should all have been issued within three weeks (i.e. three market days). However, when visiting the market on 27th June 2010, the receipts were still in use. That was 10 weeks after the receipts should all have been issued. One explanation for this discrepancy was that receipts were not always issued when tax was collected.

The problem of saving money for maintenance purposes is mostly explained by the low level of revenue raised from the majority of the markets. Markets with low transaction volumes, notably in Afar and Somali regions but also including Bokoloboma in Oromia Region, are unlikely to acquire meaningful sums for future maintenance because much of the limited revenue they raise is paid as salaries of market attendants. For example, in Afar tax income data collected by project staff from Chifra (the best performing market in the region) showed a tax income of

⁷ The arrangement was for each kebele was to collect tax on monthly basis and deposit the fixed amount for market maintenance into a bank account in Yabello.

between EB 1,000 to EB 1,500 per market day, equivalent to EB 4,000 to EB 5,000 per month. However, the monthly salaries of three guards and three cleaners, needed to take care of the three market compartments amounted to EB 3,600 per month (using the EB 600 minimum government monthly salary rate for Afar region). Many of the other markets were raising less than half the taxes seen in Chifra.

The finding above implied that in theory, the Borana markets (including Moyale) had the potential to raise money for maintenance and upgrading. Two of these markets, as mentioned above, had made a start although progress was irregular. However, the markets in Borana raised fees from sold and unsold animals, plus additional fees were collected from traders and producers by individuals in the market, with no receipts provided but with apparent authorization by the kebeles. Loading ramps and other facilities or services had become income-generating activities for people who had organised themselves into an informal association. Similar behaviour was also observed in Asayita. In summary, there were varied personal and group interests in acquiring extra, informal income from the markets. The effort of the project to formalize and streamline market management was undermined by this behaviour, even in markets which raised substantial revenues; this needs to be clearly understood. However, to some extent such opportunistic tendencies are predictable if local government capacities are considered along with the pre-existing system of taxation on livestock trade and the imposition of various 'informal taxes'. The directive that regional governments should also raise as much local revenue as possible was also used as a pretext to redirect market income for private personal or group benefit.

Leasing of markets for alternative uses

The new Shinile market had never been operational and it was decided to lease it to private livestock exporters as a feedlot and holding ground. The first company which leased the facility installed water and feed troughs inside the market compartment⁸ but then withdrew. Project staff indicated that a shortage of feed and the high price of feed may have been the reason for the withdrawal. The current lease arrangement was made between the Shinile Municipality and the REZ Agrovet Company, based in Dire Dawa. The lease agreement was EB 3,000 per month plus covering the salaries of three guards. The company was expecting to start using the facility in August 2010, although the lease agreement began in March 2010 and the company had paid rent for three months, including salaries for the guards (amounting to EB 10,800). Municipality officials refused to disclose how this money was being used, but agreed that it was not saved.

Despite these arrangements, it was notable that both parties were still requesting the implementer to add missing market facilities or repair dilapidated facilities, instead of using the lease money. While the project initiative to lease the market for an alternative use was commendable, serious questions remain over the capacity of local government to manage the lease and the related income.

⁸ This is a practical arrangement compared to putting water troughs outside the market yard.

Marketing guidelines

The draft guidelines developed in collaboration with the three regional governments had not yet been finalized. The implementation of these guidelines remains doubtful unless robust enforcement mechanisms are put in place to control the various personal and group interests at the local level. For example, the guidelines propose the use of official, printed receipts for all tax transactions but there is no mechanism to ensure that tax collectors actually issue a receipt for all transactions.

3.2 Trends and market performance

Two emerging trends were observed with potential implications on the performance of the new livestock markets covered in the assessment. The first trend involves a marketing strategy employed by local livestock traders, and the second was a result of inter-clan conflicts. Both trends were outside the control of the project.

3.2.1 Local traders and bush markets

Taking advantage of improved roads and access to mobile phones, locally-based livestock traders were increasingly sourcing livestock from bush markets, instead of markets on the main roads. Such traders seemed to be financially well-established and ventured into bush markets with their own trucks in a bid to out-compete non-resident traders, by purchasing animals at source. This trend prompted producers to set up basic loading ramps and holding grounds close to the bush markets, for rent. Producers were also selling hay to trade herds from enclosed *kallos*⁹.

The growing importance of bush markets in Borana was very evident in El Waya and Surupa. Compared to 2009, the average supply of camels in the Surupa market had increased by 40%, sales by 30% and price by 18% in 2010. In El Waya, the average supply of cattle had also increased by 17%, price by 30% while sales has gone down by about 1%. Similarly, the supply of small ruminants went up by 30%, sales by 10% and price by 20%.

Pastoralists in Borana, including Moyale have become increasingly resistant to the use of scales when selling animals. This is due to the experience of being cheated by non-local agents buying sheep and goats for the export abattoirs¹⁰. The refusal of these agents to use the scales provided by the implementer in the new markets reinforced the suspicions of producers. Although the owners of the export abattoirs seemed to be aware of such malpractices, they chose to remain silent in fear of losing their agents.

These trends towards greater use of bush markets had enabled locally-based livestock traders to take the lead in livestock transactions in Borana, and in raising their status as the main suppliers of livestock to live animal exporters, feedlot operators and export abattoirs. As a result, these major actors had effectively exited from operating directly in Borana markets, except through such locally-based intermediaries.

⁹A *kallo* is an enclosed area to help the re-growth of pasture or hay, usually protected by temporary or permanent fences, and privately owned.

¹⁰ During the assessment, the team observed an event where an agent weighed a goat and told the owners it weighed 20kg. The actual weight was 24kg. When we confronted the agent, he ran away with the scales.

The growth of bush markets was impacting the supply levels of livestock to the new market facilities in Borana, including the volume of sales (compared to 2009). This will result in the under-use of facilities and a corresponding reduction in the amount of fees and taxes to be raised. Similarly, the income of other service providers in and around the new markets will also decrease.

The development of bush markets will likely bring mixed results. Vibrant bush markets will attract other types of businesses including the provision of commodities by traders. Therefore, producers will not have to travel long distances to sell animals and purchase essential commodities. Rural producers will benefit from alternative income sources through service provision (guarding, trekking, renting loading ramps and holding grounds, etc.). As commercialization intensifies, the production mode will gradually become market-oriented in response to the market demand. Value adding could take place at village levels by using commercial feed and pasture from enclosed *kallos*. Increased use of *kallos*, in turn, could promote agro-pastoralism with the resulting restrictions on seasonal movements and could become the source of tension and localized conflicts.

3.2.2 Local conflicts

The creation of new bush markets was also affected by inter-ethnic conflicts, and such markets tend to be positioned to avoid conflict (Table 2).

Table 2. New livestock markets affected by inter and intra ethnic conflicts

Location of new market	Type and outcome of conflict
Yallo, Afar Region	Market not opened - the new market was never opened by the project. A clan which was gaining income from the old market, about 5km away, refused to allow the new market to open.
Chereti, Somali Region	Market not opened - for the same reason as above, the new market was not open by June 2010.
Kersadula, Somali Region	Market not opened - the new market was never opened because of a land issues between the Oromos and Somalis. The Oromos owned the famous old market in Medawalabu, an historic site where the Welabu clan originated. The new market site was about 5km away from the old Medawelabu market and was located on the Somali side.
Negele, Oromia Region	Reduced market supply - the Digodi (Somali) pastoralists stopped visiting Negele due to conflict with the Oromos. The Digodis are establishing a new bush market at Awregebeya, located about 50km from Negele.
Moyale, Somali Region	Reduced market supply - Boran pastoralists were not using this market, preferring to sell cattle in Kenya Moyale and small ruminants on the road side; this was due to deep-rooted conflict with the Somali Garis.
Hudet, Somali Region	Reduced market supply -the Borans have refused to use the Hudet market for the same reason as above.

It appears that livestock market dynamics in southern and south-eastern Ethiopia are influenced by three major factors: locally-based traders are increasingly promoting

bush markets, assisted by improved roads and mobile phones; ethnic conflicts and conflicts of interest are leading to the boycotting of the new markets or the establishment of bush markets; and in a few cases, the location of the new markets have become a cause for conflict. These trends were particularly evident in Borana, but also in Somali Region and in one specific case in Afar Region.

The trends suggest that livestock markets will become more ethnically-orientated as bush markets expand and grow in some areas, and with corresponding reductions in the supply of livestock to markets in major settlements or close to main roads. Reduced income from market fees and taxes, in turn, will affect the long-term viability of the new markets, despite possible improvements to market management. Crucially, the fact that bush markets operate efficiently without modern market infrastructure and facilities raises the question as to whether such amenities were ever really needed in the first place.

Producers confirmed to the assessment team that market information (as regards prices of animals) is not a problem to them because they can get this information easily from brokers, who are clan members. They added that the expansion of mobile telephone networks and wireless telephone service has made it possible to get information on livestock prices without the need to come to market sites.

3.3 Changes in livestock supplies and prices in 2010

3.3.1 Camels

Camels were on sale in seven markets (Jijiga, Moyale, Negele, Harobake, Dubuluk Chifra and Aysayta) during the field assessment (Table 3). The supply was low in all Borena markets¹¹ (except Negele) compared to Afar and Somali regions¹². Substantial increases were observed in camel prices relative to 2009.

Table 3. Camel market transactions in new markets and bush markets, June 2009 and June 2010

Market location	Supply trend ^a		Sales trend ^a		Average price (EB)	
	June 2009	June 2010	June 2009	June 2010	June 2009	June 2010
New markets:						
Jijiga	38	62	16	37	5,070	8,950
Moyale ^d	38	62	13	41	3,995	10,200
Negele	28	72	21	62	3,900	7,875
Dubuluk	63	38	54	13	ND	ND
Harobake	61	39	52	24	7,125	11,750
Chifra	32	68	11	41	ND	ND
Aysayta	31	69	17	32	4,500	7,000
Bush markets^b	29	71	13	55	43% increase ^c	

^a Data derived from proportional piling. For the supply trend informants were given a pile of 100 stones to depict all animals supplied to the market in June 2009 and June 2010. They were then asked to divide the stones to illustrate the relative supplies in June 2009 and June 2010. These two piles were

¹¹ Excluding the bush markets.

¹² For example, there were only six camels brought for sale at Dubluk on the day of the assessment team's visit.

then further sub-divided to show the proportion of animals sold e.g. in Jijiga in 2009 the supply figure of 38 was reduced to a sales figure of 16.

^b Averaged data.

^c Data derived from proportional piling.

^d Camels sold in Moyale included those sourced in Kenya and Somalia; camels from Somalia were known for their large size.

ND = No data.

In terms of attributing increases in camel supply, sales or prices to the construction of new markets, similar trends were also evident in the two bush markets in Oromia Region. Also, traders explained that the price of camels has gone up due to increased export demand. Subsequently, supplies of camels increased in Afar and Somali markets in response to the demand, whereas the volume of supply decreased in markets along the Yabello-Moyale route. Overall, marked increases were observed in camel prices and supplies in 2010. The average price of camels rose by around 86% relative to 2009 from EB 4,500 in 2009 to EB 9,155 in 2010.

The increase in camel prices was more pronounced in Moyale and Harobake markets. Of note, most of the camels brought to Moyale market were sourced from Kenya and southern Somalia. Meanwhile, the camel supply at Harobake was affected by the growing importance of Surupa bush market. However, the substantial increase in camel prices in both markets (amounting to EB 6,000 in Moyale and close to EB 5,000 in Harobake) could imply that the quality of 'exportable camel types' in these markets was far better relative to other markets. The price increase in Jijiga, Negele and Aysayta markets was also substantial in 2010 (at between EB 3,000 to 4,000) but lower than Moyale and Harobake markets because these markets responded to the export demand by increasing supplies.

Of the seven new markets where camels were sold, the proportion of camels sold in 2010 was higher in Negele, Moyale, Chifra and Jijiga. The exceptions were: Harobake because of the increasing dominance of Surupa, as a major camel market; Dubluk, because of the importance of Surupa and Moyale markets for camels; and Aysayta, because exporters were not operating in this site. Given the good rains in 2010 (*gu/genna* season), the increase in supplies indicates a positive response to demand. The rise in the price of camels is partially attributed to the good rains as pastoralists have the option to take back unsold camels if they did not agree on the price.

3.3.2 Cattle

Cattle were on sale mainly in Jijiga, Chifra, Aysayta, Negele, Moyale, Dubuluk, Teltele, Harobake and Finchewa markets during the assessment (Table 4). Cattle sales were very low in Lefe Isa, Hudet and Bokoloboma markets.

A substantial reduction was observed in the proportion of cattle supplied and sold in the markets studied in 2010 compared to 2009, but prices were far higher in 2010 (Table 4). At the nine new markets the average price increase was from EB 2,141 Birr in 2009, to EB 3,105 in 2010, equivalent to a 34% increase.

Table 4. Cattle market transactions in new markets and bush markets, June 2009 and June 2010¹³

Market location	Supply trend ^a		Sales trend ^a		Average price (EB)	
	June 2009	June 2010	June 2009	June 2010	June 2009	June 2010
New markets:						
Jijiga	59	41	37	12	918	2,060
Moyale	70	30	60	24	1,965	2,895
Negele	39	61	30	42	1,963	3,592
Dubuluk	45	55	21	39	2,775	3,650
Teltele	59	41	37	29	2,125	3,350
Harobake	36	64	21	41	4,075	4,650
Finchewa	42	58	22	30	3,000	4,000
Chifra	68	32	43	13	1,800	3,000
Aysayta	78	22	45	10	650	750
Bush markets ^b	46	54	32	37	82% increase ^c	

^a Data derived from proportional piling – see Table 3 for methodology.

^b Averaged data.

^c Data derived from proportional piling.

Table 5. Small ruminant market transactions in new markets and bush markets, June 2009 and June 2010

Market location	Supply trend ^a		Sales trend ^a		Average price (EB)	
	June 2009	June 2010	June 2009	June 2010	June 2009	June 2010
New markets:						
Jijiga	69	31	48	11	281	454
Hartishekh	56	44	39	15	258	382
Moyale	88	12	71	11	ND	ND
Negele	48	52	26	34	ND	ND
Dubuluk	62	38	56	29	400	625
Teltele	61	39	40	35	250	700
Harobake	64	36	46	30	ND	ND
Finchewa	58	42	43	37	ND	ND
Bokoloboma	67	33	55	29	483	345
Chifra	28	72	15	59	400	450
Aysayta	45	55	11	41	475	418
Eluha	41	59	34	66	ND	ND
Logia	69	31	55	12	ND	ND
Bush markets	35	66	19	51	43% increase ^c	

^a Data derived from proportional piling.

^b Averaged data.

^c Data derived from proportional piling.

ND = No data.

¹³ The main cattle buyers in Jijiga and Aysayta markets were highland farmers and local butchers. Highland farmers buy young bulls from these markets to raise them as plough oxen. Demand for young bulls in these markets is, therefore, seasonal and drops low during the farming season – the main reason why cattle prices are lower in these markets relative to others.

3.3.3 Small ruminants

Goats and sheep were on sale in 13 new markets during the assessment (Table 5). Data on prices collected from pastoralists, traders and brokers showed on average, a 32% price increase for small ruminants from EB 364 in 2009, to EB 482 in 2010. For exportable sheep and goats, the price per live-weight unit increased on average by 26%, from EB 8.8 per kg in 2009, to EB 11.2 in 2010. A summary of prices for small ruminants, obtained from seven new markets, is presented in Table 6.

In contrast to rising prices, the supply of small ruminants decreased by an average of 16% (from 58% in 2009 to 42% in 2010). No notable differences were observed in sales volume between 2009 and 2010 in the markets assessed.

Table 6. Changes in the prices of exportable shoats (per kilogram body weight) in 2009 and 2010

Market location	Price (per kilogram bodyweight)	
	2009	2010
Eluha	9	9.5
Negele	8	11
Dubuluk	10	12
Teltele	8.5	11.5
Harobake	10	12
Finchewa	9	11.5
Bokoloboma	9	11

3.3.4 Summary of market supply and price trends

Overall, three factors explained the increase in the price of camels, cattle and small ruminants in 2010. These were inflation, increased export demand (particularly for camels, sheep and goats), and the effects of the good rains in the first half of 2010. Pastoralists responded to the current market dynamics in different ways. The exceptional increases in camel prices resulted in increased supplies of camels to Somali and Afar markets, and also to Negele and Surupa markets in Borana. Given that the off-take volume of camels has always been low relative to cattle and small ruminants, it seemed that the unusually high price of camels was an opportunity not to be missed.

However, the response was different for cattle and small ruminants. The good rains meant there was enough food around for pastoralists to withhold supplies to markets in order to re-build herds. It also meant better bargaining power for producers, who raised prices above the level of inflation. This was reflected in a reduction in the proportion of cattle sold while the proportion of shoats sold remained the same in 2010 relative to 2009, despite price increases of well above 30%. This analysis was reinforced by the fact that meat exporters were compelled to leave Afar and Somali markets because of the high prices of small ruminants.

3.4 Transaction costs

Transaction costs were assessed for Dubluk, Finchewa and Harobake markets in Borana. These costs included:

- cattle and small ruminant loading services;
- youth associations trekking cattle to temporary holding grounds;

- hoof tax collected at check points (*kela*);
- other government taxes;
- transport cost, including charges by lorry brokers.

Specific details are provided in Table 7.

There were slight increases in taxation rates relative to 2008 in some of the Somali and Afar markets, but there were no major complaints about the new rates. In Afar and Somali regions, buyers were responsible for paying tax. The practice of taxing unsold animals in Borana, however, began after the new markets were constructed and the practice was continuing despite the efforts of the implementer to halt it.

Table 7. Minimum transactions costs in three Borana markets

Type of transaction cost	Cost (EB) per head of cattle		
	Dubuluk	Harobake	Finchewa
Truck rental	326	326	326
Accompanier	35	31	25
Loaders	10	10	10
Truck brokers	10	10	10
Hoof tax	2	2	2
Government tax	10	10	12
Total	393	389	385
<i>Average cattle price at time of assessment</i>	<i>3,650</i>	<i>4,650</i>	<i>4,000</i>
<i>Total transaction costs as a proportion of price</i>	<i>10.8%</i>	<i>8.4%</i>	<i>9.6%</i>

Note – in these markets, local loaders and cattle accompaniers had stopped traders from using bush-based traditional loading facilities and from bringing their own accompaniers from highland areas, because they are organized into legal associations by the government.

3.5 Use and under-use of market facilities

Market construction in the project was based on the design of a ‘model market’ with various facilities including: compartments; crushes; shaded areas; offices for veterinary and tax officials; detention pens; inspection points; tax check points; water supply; water troughs; feed troughs; loading ramps; public toilets; and stands for weighing scales.

Detailed lists of the facilities constructed and the facilities which were actually in use in the 15 markets are provided in Tables 8 to 10. Overall, 27% of the market facilities were in use in the three regions.

Some findings regarding the use of the market facilities were as follows:

- Jijiga - all user groups were insisting to return to the old market site.
- Aysayta - pastoralists were refusing to use the small ruminant compartments even though the municipality had deployed the police force to try to persuade people to use the facilities.
- Eliwuha - the small ruminant market operated only for a few hours in the morning, due to lack of shade; the cattle and camel compartments in this market were used as storage areas for food aid and animal feed.
- Logia - small ruminants were sold directly to lorry drivers and hotels, and so sellers did not see the need to use the new livestock market; plus, the new market

was located at some distance away and people preferred the old market; part of the infrastructure in Logia market had also been destroyed.

Table 8. Construction and use of new market infrastructure in Afar region (number of open markets assessed = 4)

Type of infrastructure	Installed	In use	Utilized (%)
Cattle compartment	4	2	50
Camel compartment	4	2	50
Sheep/goat compartment	4	3	75
Cattle health check point	4	0	0
Camel health check point	4	0	0
Sheep/goat health check point	4	0	0
Cattle tax check point	4	2	50
Camel tax check point	4	1	25
Sheep/goat tax check point	4	0	0
Record office	4	0	0
Veterinary post	4	2	50
Sheep/goat water trough	4	0	0
Cattle/camel water trough	4	0	0
Sheep/goat feed trough	4	0	0
Cattle/camel trough	4	0	0
Detention pen	4	0	0
Crush for cattle	4	0	0
Loading and unloading ramp	8	4	50
Public toilet (men and women)	8	0	0
Water tanker	4	0	0
Information board	4	0	0
Market shade	6	5	83.3
<i>Total</i>	<i>98</i>	<i>21</i>	<i>21.4</i>

The open markets visited were Eluha, Chifra, Aysayta and Logia.

- Bokoloboma - the volume of livestock transactions was far too low for the size and type of market which was constructed; the market handles only about 30 to 50 small ruminants and up to 10 cattle per market day.
- Finchewa - the camel compartment was abandoned due to a preference for the nearby bush market called Surupa (that was developing into a major camel market); the cattle compartment was used mainly for tax collection purposes as cattle sales actually took place about four kilometres away from the market compound, well before the militias start driving animals into the yard at noon.
- Harobake - cattle, camel and equines were all sold outside the market compound before the militias start driving animals into the yard at around 11: 30 am; purchase of small ruminant took place early in the morning and the biggest complaint from small ruminant buyers was that the tax collectors do not show up before 11:30 am.
- Lefa Issa - there are no camel supplies to the market; the supply of both cattle and small ruminants is too low to make use of the new facilities.
- Hartisheikh – few animals were offered for sale on the day of the assessment visit and producers were trying to sell these animals in town rather than at the new market. Tax was not collected at the market site in Harisheikh and the assessment team was told that tax is collected in the town later from buyers.

Table 9. Construction and use of new market infrastructure in Oromia Region (number of open markets assessed = 6)

Type of infrastructure	Installed	In use	Utilized (%)
Cattle compartment	6	4	66.7
Camel compartment	6	3	50
Sheep/goat compartment	6	6	100
Cattle health check point	6	0	0
Camel health check point	6	0	0
Sheep/goat health check point	6	0	0
Cattle tax check point	6	6	100
Camel tax check point	6	3	50
Sheep/goat tax check point	6	6	100
Record office	6	0	0
Veterinary post	6	5	83.3
Cattle/camel weighing scale	3	0	0
Sheep/goat weighing scale hanging post	21	11	52.4
Sheep/goat water trough	6	0	0
Cattle/camel water trough	6	0	0
Sheep/goat feed trough	6	0	0
Cattle/camel feed trough	6	0	0
Detention pen	6	0	0
Crush for cattle	6	0	0
Loading and unloading ramp	12	4	33.3
Public toilet for men and women	12	4	33.3
Water tanker	6	3	50
Information board	4	0	0
Market shade	3	3	100
<i>Total</i>	<i>163</i>	<i>58</i>	<i>35.6</i>

The open markets visited were Negele, Dubuluk, Teltele, Harobake, Finchewa and Bokoloboma.

- Hudet - there were only three cattle in the yard on the date of the assessment visit; the woreda veterinary office had moved its office to the veterinary post at the market yard.
- Dubuluk - the record office was used for tax collection.

In the previous impact assessment in August 2008, some modifications were suggested for the more important secondary markets including:

- relocating water and feed troughs inside the market yard;
- partition for purchased animals within the market compartments;
- construction of collection and guiding crush pens for the loading and unloading ramps;
- extension of shades in the yards for protection against sun and rain.

None of the above recommendations were implemented.

The 2008 impact assessment also reported that marketing activity took place outside seven out of the 10 new markets which were assessed. The same assessment also noted the use of force to move people and livestock inside the markets, largely for the purpose of tax collection.

Table 10. Construction and use of new market infrastructure in Somali Region (number of open markets assessed = 5)

Type of infrastructure	Installed	In use	Utilized (%)
Cattle compartment	5	2	40
Camel compartment	4	2	50
Sheep/goat compartment	5	5	100
Cattle health check point	5	0	0
Camel health check point	4	0	0
Sheep/goat health check point	5	0	0
Cattle tax check point	5	2	40
Camel tax check point	4	2	50
Sheep/goat tax check point	5	2	40
Record office	5	0	0
Veterinary post	5	3	60
Cattle/camel weighing scale	3	0	0
Sheep/goat weighing scale hanging post	6	4	66.7
Sheep/goat water trough	5	0	0
Cattle/camel water trough	5	0	0
Sheep/goat feed trough	5	0	0
Cattle/camel feed trough	5	0	0
Detention pen	5	0	0
Crush for cattle	5	0	0
Loading and unloading ramp	10	0	0
Public toilet for men and women	10	3	30
Water tanker	5	1	20
Information board	5	0	0
Market shade	6	4	66.7
<i>Total</i>	<i>127</i>	<i>30</i>	<i>23.6</i>

The open markets visited were Jijiga, Hartisheikh, Lefa Issa, Hudet and Moyale.

In June 2010 some trading activity took place outside six out of nine of the more active markets; details are provided in Table 11.

Table 11. Livestock sales inside and outside the more active livestock markets

Market location	Livestock sold inside the new markets	Livestock sold outside the new markets
Finchewa	Cattle, equines, small ruminants	Cattle, equines ³
Harobake	Camel, cattle, equines, small ruminants	Camel, cattle, equines ³
Dubuluk	Camel ¹ , cattle, small ruminants	Cattle, camels
Aysayta	Cattle, camels, small ruminants	Small ruminants ⁴
Moyale	Cattle, camels, small ruminants ²	Small ruminants, cattle, camels ⁵
Negele	Cattle, camels, small ruminants	None
Chifra	Cattle, camels, small ruminants	None
Teltele	Cattle, small ruminants	Small ruminants

¹ Only six camels were brought to the market on the day of the visit.

² Small ruminants were not on sale on two consecutive visiting days in 2010.

³ For equines the tax was collected outside the market.

⁴ For these sales the animals do not go into the market at all and tax is collected only from the traders who truck at loading time.

⁵ Sheep and goats were sold at around 3 km from the market on the Oromia side of the town; cattle and camels were sold outside the market when the market was closed.

This finding, together with the increase in bush markets, reinforces the notion that market infrastructure is not necessary for livestock trade to take place. This is an

important point in terms of impact assessment and explains the flaw in the ‘causal pathway’ for the project – there is no cause and effect in terms of new market infrastructure resulting in more livestock trade in pastoralist areas.

As in August 2008, in June 2010 the use of force was needed to move people into markets for the payment of taxes.

3.6 Service provision around the new markets

Services provided in and around the markets were assessed and included:

- sales of tea, soft drinks and food by women and girls in all markets; sales of alcoholic drinks, particularly in Harobake, Finchewa and Teltele markets in Borana;
- sales of cold water by children, particularly in the Aysayta market in Afar; sales of soft drinks, cigarettes and rope in all other markets by children;
- looking after trade herds and *gesso/mora*¹⁴ renting service provided by boys in Eliwoha and Harobake markets.

Due to the issues described in the previous sections of the report, it was difficult to determine the specific impact of the market construction on these groups. For example, in sites where there had previously been a market (such as Moyale and Jijiga), there were already various local service providers before the project started. Also, the service providers in and around a given market will be affected by the level of livestock trade taking place, with less trade leading to fewer potential customers. The situation is dynamic and varies by market. In some markets the trade is vibrant and in others, declining. In both cases, trade activity is not attributable to the physical presence of new market infrastructure but to other, non-project factors.

Despite these caveats there were examples of project activity which seemed to benefit women service providers. For example, in Moyale the project assisted women to operate closer to the market yard and sell food. The income of these women increased by around 36% between 2009 and 2010, though it was difficult to determine what proportion of this increase was directly attributable to the project. The project also organized women into cooperatives and was to provide EB 15,000 (US\$ 1,050) seed money to each one. The use of the seed money was not assessed, but as explained above, the profits from service provision around the markets would partly depend on the levels of livestock trade activity and the number of buyers and sellers.

3.7 Unexpected impacts

Some of the unexpected impacts of constructing the markets were as follows:

- Taxation in bush markets – taxation has now been introduced to bush markets in Borana, including for unsold animals, whereas previously there was no taxation in these markets. The kebeles also collected about EB 10 to 15 from each service provider selling food, drinks and other consumables, and no receipts were issued.
- Human sanitation – most of the new markets visited were in a poor state of hygiene. Human excreta was seen everywhere. In Hartisheikh, water was

¹⁴ *Geeso* (Afar) and *mora* (Oromiffa) are fences constructed by local people, especially young boys, who then rent the areas as yards for purchased cattle and small ruminants.

stagnating in the troughs and would act as breeding sites for mosquitoes. The issue was raised to the woreda cabinet by the assessment team and they stated that this particular problem was the result of the troughs having no drainage holes.

- Market construction by regional governments - encouraged by higher authorities during the national Pastoral Day celebration in Jijiga, regional governments were constructing additional livestock market infrastructure in areas where such facilities do not exist; four markets had already been completed in Afar Region and there were similar plans in Somali and Oromia regions. These facilities are unlikely to provide benefits to market actors, given the minimal usage and the destruction of some market facilities already installed by the project. The sites where such facilities are being constructed may not have the required volume of livestock supplies to make use of the facilities. It is also likely that some of the design faults which were evident in the project markets would be replicated in the new sites. As with the project markets, the local capacity to manage new markets remains questionable.

4. Lessons and Recommendations

4.1 Project design issues: pastoralist marketing behaviour and market access

The design of the ACDI/VOCA project assumed that pastoralists were not market-orientated, but would sell more animals if new market infrastructure was provided. An evaluation of the ACDI/VOCA project in March 2008 concluded that the underlying logic of the project was flawed:

*'... the project design was founded on assumptions about how pastoralists marketed their animals. These assumptions are mostly several decades out of date, having been revised by development and research evidence about Ethiopian and other African pastoralists'*¹⁵.

This statement by the evaluators drew on USAID-funded research in east Africa which demonstrated that the livestock marketing behaviour of pastoralists varies by wealth group, and that an understanding of this behaviour is central to the design of pastoral development initiatives. The same body of research also challenged persistent myths on pastoral livestock marketing. For example:

- In Afar, Borana and Somali pastoralist areas, household economies are characterized by high, direct consumption of livestock milk and the sale of livestock to acquire cereals¹⁶. This means that almost every pastoralist household has access to traders, who enable the livestock-cereal exchange. In other words, all pastoralists already have market access in one way or another.
- Livestock marketing behaviour varies by household wealth. The main strategy for economic growth pursued by poorer households is to build financial capital and this means building livestock herds. In the absence of alternative economic opportunities this is a highly rational strategy. It also means that poorer households only sell livestock when they need to acquire cereals or have other

¹⁵ Behnke, R., Kerven, C. and Teshome, A. (2008). Evaluation of USAID Pastoral Development Projects in Ethiopia. USAID, Addis Ababa.

¹⁶ E.g. see livelihoods baselines of LIU.

acute needs for cash. Such households have had market access for decades and the creation of new markets in urban centres will not affect the marketing behaviour of such households. They will continue to sell a minimum number of animals in order to maximise herd growth, and by so doing, develop their financial assets¹⁷.

- Middle wealth and higher wealth group households depend more on livestock sales to meet annual cash and cereal demands, and sell relatively more animals. These groups will respond to increased market demands (e.g. growing export markets), but simple bush markets can adapt to handle any increased trade. As the export trade grows, the main beneficiaries are the various traders and service providers around the business, and relatively wealthy and middle-wealth group pastoralists.¹⁸

Despite the large volume of research and evaluations to demonstrate the above points, there is still a common misperception about pastoralists - that they will sell more livestock with improved market infrastructure and access to market information. This perception has led to investments in infrastructure since the early 1970s by bilateral and multilateral agencies with no effective outcomes.

More recently there has been a focus on the promotion of livestock exports, based on a belief that increased demand for livestock provides an opportunity for pastoralists to benefit by selling more livestock and at a better price. The flaw in this assumption is the notion that all pastoralists own surplus livestock available for sale at an opportune time. This assumption ignores two fundamental facts. The pastoral system is dependent on continuous 're-building of herd sizes' in normal times in preparation for lean years. As such, what is considered as *surplus* by outsiders is regarded as *survival stock* by pastoralists. Regardless of the prevailing market demand, the system, therefore, limits the number and species of livestock each pastoralist can sell in a given year. Secondly, the number of animals pastoralists can sell in a given year is determined primarily by their wealth status (in terms of stock ownership) followed by the level of dependence on livestock for annual household income. The two factors are directly co-related.

Better-off and middle income groups depend more on livestock for annual food and cash requirements. They therefore have the need and the capacity to sell more animals and even to respond positively to increased market demand, such as exports. Conversely, poor and very poor households to a varying degree depend on livestock and non livestock sources to meet their annual household needs. These two groups can only sell limited number of animals in a given year regardless of the market demand because they own fewer animals to begin with. The fact is that so many pastoralists are in poorer wealth categories limits the extent to which increased export demands, market infrastructure or market information will reduce poverty. In southern Ethiopia in 2008, the middle and better-off pastoral wealth groups sold respectively six and 18 times more small ruminants than the very poor. Similarly, in Guji areas, the

¹⁷ These issues are well described in research studies funded by USAID e.g. McPeak, J.G. and Little, P.D. (2006). *Pastoral Livestock Marketing in Africa: Research and Policy Challenges*. IT Publications, Rugby

¹⁸ Aklilu, Y. and Catley, A., (2009). *Livestock Exports from Pastoralist Areas: An analysis of benefits by wealth group and policy implications*. Report for the Intergovernmental Authority for Development and the Food and Agriculture Organization. Tufts University, Addis Ababa.
<https://wikis.uit.tufts.edu/confluence/display/FIC/Livestock+Exports+from+the+Horn+of+Africa>

middle and better off-income groups sold respectively six and twelve times more small ruminants than the very poor (Table 12).

While in both cases, middle income and better-off groups raised all their cash income from livestock sales, the poor and the very poor generated their annual cash income by complementing livestock sales with charcoal production, labor and safety net programmes to varying degrees.

Table 12. Annual household income and number of livestock sold by wealth group, southern Ethiopia

Area	Pastoral wealth group income			
	Very poor	Poor	Middle income	Better-off
Teltele, Dilo and Dier	US\$114	US\$202	US\$714	US\$2,100
Equivalent sheep or goats sold	5	8.5	31	92
Guji – Borana	US\$132	US\$231	US\$768	US\$1,500
Equivalent sheep or goats sold	5.5	10	34	66

Source: Livelihoods Information Unit, Ethiopia, (2008).

Table 12 implies that the real problem in pastoral areas is the widening wealth gap between the better-off and the poor groups. In other words, while wealthy and middle-wealth groups seem to retain their livestock, poorer groups are characterized by decreasing livestock holdings and as human population grows, more households fall into the poorer categories. These trends were either described or predicted in pastoral areas of Ethiopia from the 1970s, and were explained by a combination of human population growth, reduced access to grazing land, commercialization of livestock production and marketing, and a result of these factors, the increasing negative impact of dry seasons and droughts on livelihoods.

Recommendation 1

Attempts to intervene in pastoral livestock marketing systems should document local marketing behaviours by wealth group and carefully examine any proposed causal pathway that associates more market infrastructure with more sales. Such pathways are unlikely in pastoralist areas. Policy engagement and economic analysis with government partners is needed to raise understanding of these issues at federal and regional levels.

4.2 Project design issues: hard versus soft inputs

The findings in this report on new bush markets in Oromia are consistent with experiences from various countries dating back to the 1970s. For example, when describing how Somalia's pastoral economy was responding to profitable export opportunities in the 1970s, in terms of bush markets it was noted that:

‘The basic requirements, so far as market facilities are concerned, appear to be ample space for transactions and the provision of drinking water for market users. Little justification for investment in fencing, pens, scales or

*auction rings can be established since the system appears to work well in its present simple, highly flexible form*¹⁹.

Similarly, when describing pastoralist livestock marketing more generally in Africa in 1982:

‘Existing traditional livestock marketing systems are perceived to suffer from inefficiencies, abuses in market conduct and technical imperfections the relief of which would benefit the pastoral system. But, studies of traditional marketing systems show that, in spite of being complex and traditionally based, they generally perform well their function of distributing livestock and meat products at reasonably low costs.

Efforts to develop pastoral production systems via marketing therefore have to take into account

- *that the structure and performance of existing traditional marketing is generally satisfactory;*
- *that the existing system does not appear to discourage production and supply of livestock from the dry areas.*²⁰

In 2008, policy makers from the AU, COMESA, IGAD and member states visited Garissa in Kenya, one of the largest and most active livestock markets in east Africa, and situated in a pastoralist area. This is an efficient market, but has no perimeter wall, no compartments, and very limited shade. The only infrastructure of note is a series of loading ramps, and a few concrete water troughs. The market is surrounded by small shops selling tea and other items, and private suppliers provide livestock fodder. Between 1989 and 2007, the number of cattle sold at this market increased from 24,395 to 105,667, with no substantial investment in market infrastructure. A presentation by the local government was titled “*Garissa Livestock Market – A Treasure for Meeting the Millenium Development Goals in a Pastoral based Millenium Municipality*”.

Regarding basic maintenance of most of the markets which were visited during this assessment, it seems unlikely that sufficient funds will become available. In the more active markets income has not been reserved for maintenance needs whereas in the less active markets, the volume of trade is unlikely to yield enough revenue for running costs. It also seems likely that more bush markets will open, and this trend would further reduce the revenue generated from the current markets. After the cost extension to the project, we see a general scenario in which rehabilitation work will not be carried out, and, the draft marketing guidelines will not be implemented. Regardless, and more importantly, livestock transactions will carry on with or without the new market facilities.

Future support to infrastructure development in pastoralist areas could consider the wider context, in which infrastructure inputs are seen as solutions to a range of problems but with varied impacts. Some general experiences include a focus on the

¹⁹ Reusse, E. (1982), Somalia’s Nomadic Livestock Economy: Its response to profitable export opportunity. *World Animal Review* 43, 2-11.

²⁰ Jahnke, H.E. (1982), *Livestock Production Systems and Livestock Development in Tropical Africa*. Kieler Wissenschaftsverlag Vauk, Kiel, p90.

“hard inputs” such as buildings (e.g. health, education, veterinary) with less attention to the long-term management of facilities, and unclear capacities and commitments of government to cover staff and operational costs. Partly for these reasons, alternative systems of service delivery are being tested in pastoralist areas. To some extent, the simple bush markets that are set up and operated by local traders fit the philosophy of alternative but locally-acceptable approaches. Weaknesses in government management and administrative capacities in pastoralist areas are widespread, cross-sectoral and not specific to livestock markets. When a facility has potential to generate income, there will be tendencies for individuals to develop informal systems to appropriate some or all of this income for private benefit; accountability mechanisms are weak (e.g. veterinary clinics, health posts, markets).

The assessment team recognised the effort made by the implementer to introduce local management systems for the new markets, with a view to enhancing use of the facilities and sustaining the inputs. However, there has been limited success. Of the 15 markets visited, progress towards local management was limited to only two markets, in Harobake and Finchewa. Even in these two markets, there were still a number of outstanding management issues to be resolved. This level of progress can also be viewed from the perspective of the start date of the project, in October 2005 and the construction of a total of 25 markets.

The assessment team concluded that the issues surrounding the management of the new markets are in most cases, too complex to resolve. Many of the facilities were inactive and the non-operational markets are vandalized beyond repair. This implies a lack of interest by local officials and communities in the facilities. In the more active markets (relatively speaking) there appeared to be more interest in what the markets generated for the respective revenue offices and in a number of cases, for private groups or individuals who monopolized certain services. The crumbling condition of some of the facilities in the nine more active markets also underlines that it will not be an easy task to set up proper management systems for the maintenance of the facilities.

Recommendation 2

Livestock markets in pastoralist areas require basic facilities, such as loading ramps and water troughs. Investment in more elaborate infrastructure is only warranted if a positive pre-project benefit-cost analysis shows an appropriate return on investment. In addition, a pre-project assessment of local government management and administrative capacities is needed, including analysis of the actual capacity of government to deliver versus their stated capacity e.g. as expressed in project agreements. In many cases, the key constraints to pastoral livestock markets will be policy and institutional (e.g. inappropriate taxation; restrictive livestock movement regulations), rather than hardware. Support to government to improve understanding of these issues and build capacity for benefit-cost analysis and organizational capacity analysis is warranted.

4.3 Project design issues: community participation

The emergence of bush markets in southern Ethiopia indicates that local actors can set up and run markets in the absence of external support, other than roads and mobile

phone networks. In contrast, the mis-positioning of new government markets was a common cause of conflict in pastoralist areas.

The experiences from the ACIDI/VOCA project show that local analysis with a limited range of actors can lead to misdiagnosis of problems, and inappropriate advice on what types of markets and infrastructure are needed, and where. Implementers need to be aware of the incentives behind certain requests, including political incentives and opportunities for individuals to profit from construction contracts. This type of awareness requires experience, and a willingness and capacity to engage local communities in meaningful participatory dialogue and analysis. Part of the dialogue should include ways to manage systems in the long term, and appropriate locations for new infrastructure. In general, NGOs with long-term presence in pastoralist areas are far better able to conduct this kind of analysis with communities and other stakeholders, relative to new implementers.

Recommendation 3

In addition to a capacity to conduct economic analyses and understand local marketing behaviours, implementers also need to understand local cultural, social and conflict dynamics, and recognize the need to consult a range of local actors and stakeholders. In conflict-affected or conflict-prone areas, ‘Do No Harm’ approaches are needed, as already recommended and used by other USAID implementers in pastoralist areas. When selecting implementers, USAID needs to consider past experience specifically in pastoralist areas, and understanding and capacity to conduct conflict analysis and implement conflict-sensitive programming.

4.4 Project design issues: a framework for analysis

Under the PLI project, a set of key information needs have been identified if new approaches are to be scaled-up (Table 13), and these generic questions apply to livestock markets. Further analytical tools are available, such as the *Emergency Market Mapping and Analysis Toolkit*²¹.

Recommendation 4

USAID supports ‘scaling-up’ of new approaches based on evidence. In the case of livestock markets in pastoralist areas, a substantial body of evidence already exists. Future needs include building the capacity of government and implementers to conduct appropriate, comprehensive pre-project analysis using mainly existing information, but supported by rapid applied assessments as needed.

²¹ Albu, M. (2010) *Emergency Market Mapping and Analysis Toolkit*. Practical Action Publishing, Rugby.

Table 13: Information needed for scaling-up development approaches in pastoralist areas

Type of information and analysis	Key questions
Local impact on livelihoods <i>Quantitative and qualitative</i>	Has the approach achieved its expected impact in terms of livelihoods benefits? For example, did a community-based health project achieve health outcomes (improved human capital)? Did a livestock marketing group increase the financial capital of group members? Other questions include the sustainability of the benefits, especially if the main external financial or technical support is withdrawn.
Cost-benefit analysis <i>Quantitative</i>	Community-based approaches often require considerable technical or financial support from NGOs during the pilot phase. Cost-benefit analysis helps to examine economic efficiency and the feasibility and economic rationale for scaling-up. A challenge here is that benefits related to social capital can be difficult to quantify or value in economic terms.
Policy and institutional issues <i>Qualitative</i>	To what extent does the approach complement or contradict government policy or legislation, whether formal or informal? Is the approach legal? Would formal procedures or laws need to be adapted for scaling-up, and if so, are such changes realistic? What is the risk of conflict undermining the approach?
Area-based economic potential <i>Quantitative</i>	For approaches which depend mainly on private sector activity, what volume of economic activity is likely to be supported in a given area? For example, how many private community-based workers can an area support? How many livestock marketing groups are needed? These types of questions assume that not everyone can be a small trader, run a teashop, or sell hides and skins, and that, in pastoralist areas, the key financial asset is livestock, not cash.
Technical capacities <i>Quantitative and qualitative</i>	Good community-based systems and services often depend on skilled and experienced development workers who are familiar with participatory approaches. Scaling-up requires these capacities to be institutionalized, with associated incentives. Are such changes feasible, and if so, what are the costs and level of technical assistance needed, and for how long?

Annex 1: Question checklist for the impact assessment

1. Infrastructure status
 - Infrastructure still in use (type and number)
 - Dilapidated infrastructure that needs repair
 - Repaired infrastructure and /or repair plans
 - Additional infrastructure since last survey (built by?)
2. Taxes and fees
 - Taxation rate for sold/unsold animals by species
 - Changes in taxation rate from last survey
 - Fees for use of facilities and services
 - Changes in fee rates from last survey
 - New taxes and service fees introduced since last survey
3. List agencies, associations and individuals collecting taxes and fees (by type)
4. Has a Marketing Management Board been established for the specific market?
 - Composition of members / structure of the Board
 - Main mandates of the Board including responsibilities
 - Is the specific market being managed by the Board?
 - Initiatives taken by the Board, so far
 - a) In setting up a proper management system in place
 - b) Resource collection and allocation
 - c) Proportion of taxes and fees allotted for improvement / maintenance of infrastructure
 - d) Additional amenities planned (e.g. water points, shops, tea rooms and restaurants, veterinary facilities, etc)
 - e) How does the board intend to get resources for d above?
6. Or, is the market still run by the local Council?
7. Perceptions of pastoralists, traders and middlemen
 - Changes they see since the last survey
 - In terms of service provision (list)
 - In the maintenance of infrastructure
 - In orderliness of transactions
 - In the use of facilities (scales, loading ramps..etc)
 - In the provision of veterinary services / inspection
 - In protection / security
 - In additional amenities / facilities set up by the council or individual initiative
 - In taxation rates and fees
 - Other improvements, please list
 - Drawbacks they perceive in terms of importance (please list)
 - Suggestions for further improvements
8. Perceptions of other service providers (shop owners, tea sellers, drug vendors..etc)
 - Positive attributes
 - Negative attributes
 - Suggestions for improvements
9. Sales volume
 - Changes in the number of species brought to the market - quantify and attribute
 - Changes in the number of species sold - quantify and attribute
 - Changes in livestock prices - attribute

8. Records

Does the Board or the Council keep records of transactions?

If yes, what types of records?

Reliability of record keeping

9. Veterinary services

Is there any veterinary service provision close to the market center?

Who provides the services (public or private?)

In the case of private service providers, please state their professional level

What are the main types of services provided?

Rate of payment for services

Are pastoralists/traders satisfied with the services provided?

10. Environmental impacts (list if any including proposed remedies)

11. Does the new management system put in place ensure the sustainability of the specific market compared to the system during the last survey?

Please provide details.

12. Comments on the Regional livestock marketing guideline

13. Lessons

Important lessons drawn to be replicated elsewhere

Main drawbacks to be avoided elsewhere

14. Specific to Shinile Market

Assess the impacts brought about by the agreement entered between the project and livestock exporters for the exclusive use of the market facility in Shinile by the latter.