# Practices, Problems and Opportunities of Livestock Marketing in Ethiopia with Special Reference to Borana Zone, Oromia Regional State

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# ABSTRACT

Livestock production and marketing is a major livelihood in the pastoral areas of Ethiopia. Livestock marketing development covers enormous scope for the socio economic development of pastoralist community in Borana. Although few studies are available in the areas of livestock marketing, an indepth analysis on the marketing practice, problems and opportunities in livestock marketing is found to be scanty in Borana Zone. Therefore, the research was conducted to assess the livestock marketing practices, examining the factors/problems affecting livestock marketing and to identifying the opportunities in livestock marketing in Borana zone. The research was conducted by taking 112 sample traders from pastoralist area of Borana zone on simple random basis. Primary and secondary data were collected and used for analysis. Data collected through semi structured interview were analyzed quantitatively using descriptive and inferential statistics. Moreover, data collected through focus group discussion and key informant interview were organized and analyzed qualitatively to supplement/substantiate with survey data. Besides, multiple linear regression analysis was used to examine the factors affecting livestock marketing. The finding of the study shows that the existing market for livestock in the study area is unregulated since majority of the traders operate their business without license. A vast majority of pastoralist traders sell their livestock to nearest local markets due to proximity to market. Large traders and abattoirs were the predominant stakeholders in livestock sales. More than half of the respondents determines price of livestock through negotiation whereas nearly one third of the respondents stated that buyer dominates in price determination. Social networking was found to be predominant mode of livestock trading. It was found that cattle, camel and shoats are the types of animals mostly traded. Nonetheless, cattle are the most dominant traded species of animal in the study area. Most of the traders trek their livestock to bush, primary and secondary markets and had access to market information by visiting directly to the market. Market information is available to the traders both on weekly and fortnightly basis. The major factors affecting livestock marketing are credit sale due to few cash buyers, poor access to credit, and poor linkage with high land and export markets, drought and weak institutional support since all these factors have positive significant influence statistically. On the other hand, highly demanded Borana breed of cattle, high livestock population, and increased number of livestock market centres, improved veterinary service and favourable government policy were identified as major opportunities for pastoralist traders' efficiency and of Borana.

Keywords: Livestock, marketing; Practices; Problems; Opportunities.

## 1.0 Introduction

Ethiopia is a centre for many livestock species and suitable for livestock production in Africa.

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Livestock productions are of significant importance to the economies of Ethiopia and to local livelihood systems. According to the national accounts estimates of Ethiopia, the livestock sub-sector contributes a significant proportion to value added of agriculture and allied activities. Next to coffee, though smaller compared to the potential, livestock exports constitute a major source of foreign exchange earnings (Million Tadese, 2003). It is believed to have as the country with the largest livestock population in Africa (CSA 2013; Solomon et al. 2003; Tilahun and Schmidt 2012). The Central Statistical Agency (CSA) survey of 2011/12 showed that the total cattle population of Ethiopia is about 52 million. Moreover, about 24.2 million sheep and 22.6 million goats are estimated to be found in the country, while the total poultry population is estimated to be about 45 million chickens (CSA 2011/12). The direct contribution of livestock to GDP is estimated by LSIPT at ETB 150.7 billion per year, which amounts to 17% of GDP and 39% of the agricultural GDP. This rises to about 21% of the national GDP and 49% of the agricultural GDP, if the contribution of processing and marketing (35.6 billion) is taken into account. If the indirect contribution in organic fertilizer and traction (37.8 billion) is taken into account the contribution of livestock to the GDP will rise to 25.3% (Barry I Shapiro et.al., 2017). It also contributes 15% of export earnings and 30% of agricultural employment (Behnke, 2010). Borana Zone Report Monitoring and Evaluation Office (BZRMEO, 2010) the semi-arid Borana Plateau in Southern Ethiopia is home to 1,113,538 Borana pastoralists and supports over one million head of cattle as well as large number of goats, sheep, and camels. The Borana pastoralists have traditionally been viewed by development experts as unwilling, or unable, to significantly engage in commercial livestock trade. It has also been observed in the last several decades that animal sales have little or no role in regulating the cattle population on the Borana Plateau (Desta and Coppock, 2002). Various meeting and forums of pastoralists were undertaken in Borana zone to discuss on issues of pastoralists and had indicated that there is limited access for pastoralist traders to engage in domestic and export livestock market. Thus, this study is rather designed to investigate key issues surrounding livestock marketing in selected pastoral districts of Borana Zone.

### 2.0 Statement of the Problem

Ethiopian pastoralists have traditionally been characterized by less involvement in commercial and formal contractual livestock trade (Desta and Coppock, 2002). Especially, pastoralists in southern Ethiopia in general, had a very limited knowledge of emerging livestock export market as well as limited knowledge of the potential role of the livestock production and marketing which could play vital role in improving their livelihoods. Many social, economic, ecological, and policy factors have been cited as constraints that limit livestock commercialization and formalization. However, as human population grew and per capita milk supply declines in rangeland areas, the traditional pastoral production system will be increasingly unable to fully support growing human populations, and hence pastoralists will be forced to engage in more commercial activity simply to increase human carrying capacity of the rangelands through the exchange of animals for grain via market transactions (Desta and Coppock, 2004). Enhancing the access for the poor smallholder farmers and pastoralists to markets and actively engaged, is one of the most pressing development challenges in the area. Remoteness in location from urban centres and infrastructure results in lower farm gate price and lower returns to labour and capital and increased input costs as compared to the nearer rural areas. This in turn reduces the incentives to participate in economic transactions and results in subsistence rather than market oriented production systems (Holloway D. and Ehui S., 2002). Access to markets is profoundly affecting the abilities of all members of Borana lowland society to make better living and contribute to national wealth. Studies conducted on this area were not in - depth and did not consider the factors affecting livestock marketing practices especially in the study area that resulted in information and knowledge gap.

# 3.0 Objectives of the Study

The following are the specific objectives of the study

- To assess the livestock marketing practices in the selected pastoral districts of the study area;
- To examine the factors/problems affecting livestock marketing practices: and
- To identify the opportunities for better livestock marketing practices in selected pastoral districts of Borana zone.

#### 4.0 Materials and Methods

As the study is descriptive in nature, field survey method was adopted. Borana Zone of Oromia Regional State, Ethiopia was selected purposively as the study area owing to the main pastoralist Zone in Ethiopia. Yabelo and Elwaye pastoral Woredas (districts) of the Borana Zone were selected purposively due to high concentration of livestock, pastoralist community and local traders. Primary data was collected from livestock traders, pastoralists and officials, through semistructured interview schedule, focus group discussion and key informant interview respectively. Out of 258 local traders, samples of 112 were selected on simple random sampling technique.

Semi-structured interview schedule was used to gather data from pastoralist traders who are involved in livestock marketing. Questions included in the semi structured interview schedule were demographic, social and economic characteristics of local traders, marketing practices and factors affecting livestock marketing and opportunities for better livestock marketing. Both closed and openended questions were prepared and translated into Afan Oromo language in order to ease the data collection work. Focus group discussions (FGDs) were conducted with four groups each comprised of 8-10 participants, two FGDs each with pastoralist and officials. Data was analysed using descriptive statistical tools such as tabulation, simple percentage, mean and ranking. Inferential statistics viz., Multiple Linear Regression model was used to examine the factors affecting livestock marketing since the dependent variable is continuous in nature. Sales volume of livestock was considered as dependent variable for the model.

#### 5.0 Results

Table 1: Demographic, Social and Economic Characteristics of the Respondents

Variables	No. of Respondents (N=112)		
variables	Category	Frequency 109 03 14 81 17 54 40 11 07 05	Percentage
Sex	Male	109	97.3
Sex	Female	109 03 14 81 17 54 40 11 07	02.7
	18-30	14	12.5
Age	30-64	81	72.3
	Above 64	Above 64 17	15.2
	Illiterate	54	48.2
Level of Education	Grade 1-8	40	35.7
	Grade 9-12	11	09.8
	Diploma & Above	07	06.3
Marital status	Single	05	04.5
	Married	107	95.5

Source: Field survey, 2018

A cursory look at the Table 1 reveals that a high majority (97.3%) of the sample traders were male while the remaining 2.7% were female. As for age, 72.3 percent of the traders were in the age group of 30-64 whereas young and old age group forms insignificant proportion. Nearly half of the subjects were illiterate and one third of the respondents had grade 1-8 as their education. A high majority of the respondents were married.

**Table 2: Livestock Marketing Practices** 

Marketing Practices	Category	Percentage
	Primary market	31.2
C	Secondary market	44.1
Sources of Livestock purchase for resale	Bush market	06.5
	Producer	18.3
Taranta a Cara Lara	Licensed	26.9
Legality of traders	No license	73.1
	Near distance local market	93.5
Market areas for livestock sales	Far distance local market	05.4
	Informal cross border market	01.1
	Better price	61.3
Choice for preference of market areas	Proximity to market	38.7
	Large trader	48.4
N	Abattoir	36.6
Main purchasers of livestock	Butcher	08.6
	Exporters	06.5
	Buyer	29.6
	Seller	09.8
Livestock market price determination	Broker	09.4
	Negotiation	51.2
N. 1. 6	Weight basis (small stocks)	95.8
Mode of price determination	Visual appraisal (Large ruminants)	98.7
Malatakan	Regulated	08.6
Market structure	Unregulated	91.4
Mada after din a	Social networking	92.3
Mode of trading	Contract basis	07.7
	Cattle	67.7
Types of livestock traded	Camel	15.5
	Shoats	17.2
T	Trucking	07.5
Transportation system	Trekking	78.5
	Both	14.0
A	Yes	79.6
Access to market information	No	20.4
	Relatives	17.1
Source of market information (N=74)	Neighbours	11.6
	Visit to market directly	71.3
Emagnapay of montret in farmentian	Weekly	66.7
Frequency of market information	Fortnightly	33.3
	High	34.4
Accuracy of market information	Medium	49.5
	Low	16.1

Source: Field survey, 2018

The survey data as depicted in Table 2 shows that, majority 44.1% and 31.2% of traders purchase livestock from secondary and primary markets respectively and the remaining 18.3% and 6.5% purchased livestock from producer and bush markets respectively. Regarding the legality of livestock trading, the survey data shows that, greater part of traders (73.1%) undertakes livestock trading without license and only 26.9% of traders undertake livestock trading with license. Greater part, 93.5% of pastoralist traders sell their livestock to nearest local markets while only 5.4% of traders indicated selling their animals at far distant livestock markets. Proximity to the market is the major preferred factor for livestock sale. Large traders (48.4%) and abattoirs (36.6%) were the predominant stakeholders in livestock sales. More than half of the respondents determines price of livestock through negotiation whereas nearly one third of the respondents stated that buyer dominates in price determination. Livestock market in the study area was found to be unregulated. Social networking was found to be predominant mode of livestock trading. It was found that cattle, camel and shoats are the types of animals mostly traded. Nonetheless, cattle are the most dominant traded species of animal in the study area. Most of the traders trek their livestock to bush, primary and secondary markets which is the major mode of transportation. Majority (79.6%) of the traders had access to market information by visiting directly to the market. Market information is available to the traders both on weekly and fortnightly basis. Majority of the traders accepted about the accuracy of market information.

Table 3 depicts the factors affecting livestock marketing in the study area. The results of multiple linear regression analysis show that independent variables such as credit sales, lack of capital, poor linkage with high land and exporters, drought and lack of institutional support were the predominant factors since these variables have positive significant influence on the dependent variable livestock marketing (P < 0.01). Further, variables such as conflict between buyers and sellers, lack of entrepreneurial capacity and poor infrastructure were also found to be the factors since these variables have positive significant influence on the dependent variable livestock marketing (P < 0.05).

Table 3: Factors Affecting of Livestock Marketing – Multiple Linear Regression

Independent variables	Unstandardized Coefficient	Sig.
	β	0.12
Constant	477	.013
Credit sales	1.127	0.000***
Lack of capital	1.038	0.000***
Poor linkage with highland area & export marketers	0.071	0.000***
Drought	2.823	0.026***
Lack of institutional support	4.954	0.003***
Conflict between buyers and sellers	2.498	0.038**
Lack of entrepreneurial capacity	0.085	0.022**
Lack of market information	0.080	0.132
Seasonal demand	0.022	0.533
Livestock disease	0.182	0.481
Lack of grading and standardization	0.105	0.274
Poor infrastructure (Market, road)	2.493	0.035**
Seasonal supply	0.060	0.171
$\mathbb{R}^2$	0.994	

Source: Field survey, 2018

Note: \*\*\* denotes 1% significance level; \*\* denotes 5% significance level

**Table 4: Opportunities of Livestock Marketing** 

Opportunities	Mean (N=112)	Rank
High demanded breed	4.52	1
Large livestock population	4.23	2
Increased number of livestock markets	3.96	3
Improved veterinary service	3.74	4
Supportive government policy	3.53	5
Road and communication infrastructure development	3.12	6
Establishment of support institutions	2.91	7
Cross border trade	2.59	8

Source: Field survey, 2018

A perusal of Table 4 shows that the local traders in the study area have identified some opportunities to improve the livestock marketing practices. High demanded breed, large livestock population, increased number of livestock markets, improved veterinary services and supportive government policy were the opportunities available to enhance the livestock marketing system in the study area.

## 6.0 Discussion

Livestock marketing practices: Primary markets have been identified as village level markets with a supply of less than 500 head of livestock per week where primarily producers (farmers and pastorals) sell small number of animals to small traders, other farmers (for replacement), farmer/pastoralist traders and in some cases to consumers and local butchers. In these markets, reproduction and resale are the main purposes of buying. Similar finding also found in Ayele et.al, (2003). Secondary markets are characterized by their resale and consumption as the most important objective of buying. These markets are trader and to some extent butcher dominated markets with an average offer of 500-1000 heads of livestock per week. This finding is supported by Yacob, (2002). These markets are mainly located in regional capitals. Focus group discussion held with Woreda Officials indicates that livestock trading without License is illegal. And also has an adverse impact on traders by limiting their participation in various livestock oriented bids. This is considered as a major constraint which can limit pastoralist traders in accessing domestic and export livestock markets. Traders have limited access to other livestock markets, like any other terminal markets including those markets situated at the border areas of Moyale.

The study result shows that pastoralist traders have limited access to central and to the export markets. They buy livestock from the local areas and sell them in local markets. Only few of them enter the terminal markets. Taking into consideration cross border trade, focus group discussion results show that the traders resented the fact that they could not have access to an alternative marketing outlet due to the legal restriction by the Ethiopian government on cross border livestock trade as well as due to the prevalence of tribal conflict in Northern Kenya. The traders' price decision at their purchase market and sales market can be influenced by the demand condition of each market used for purchase and sale. The majority of sample traders interviewed are found to be small and medium scale traders operating in Bush, primary, and secondary markets.

Majority of the traders have influenced the market price by their side at their purchase market but at their sales market, mostly price tends to be decided by traders from the highland and central market places. It is imperative to note that method of sale of livestock is not based on the

conventional style of weighing and fixing prices on weight basis. However, in this region livestock in particular the small stocks are sold on scale basis whereas the larger ruminants are sold on the spot negotiation or visual appraisal between the buyer and the seller. There is no auction market taking place.

Cattle are the most dominant species of animal traded by the majority of pastoralist traders. The phenomena are attributable to the traditional breeding style of the Borana pastoral societies as well as the commanding demand of the Borana breed of cattle both for domestic and foreign consumption. Focus group discussion with Woreda Trade and Market Agency, at a Woreda and Zonal levels show that there is a new livestock marketing rules and regulations, which guide livestock trading. Even though the smaller numbers of the respondents accept and recognize the existence of the government's livestock marketing rules and regulations while the majority numbers of the respondents do not take up this fact, there appears to be a gap of misunderstanding.

Regarding livestock Business undertakings, majority of pastoralist traders identified social networking as their main system of trading to create linkage with low-land and highland traders. This social networking strategy is preferred because of inadequate formal institutional support to link pastoral traders with exporters, abattoirs and feed letters. Majority of the sample respondents trek their livestock to bush, primary and secondary markets. This finding is consistent with Habtamu (2008) which state that transportation of livestock was difficult when compared to other agricultural products and the truck owners asked more costs for livestock transportation. This led the traders to choose trekking transportation in areas where there were inadequate infrastructures. The lack of easily accessible and formal market information, such as end market quality and quantity requirements, prices and delivery timing needs might be available to limited market participants. However, for those at the lower levels, particularly for the pastoralist traders, lack of the formal market information could result in mistrust and weak relationships along the chain and might be a contributing factor in decreasing the efficiency of the livestock marketing in pastoralist area of Borana Zone. Focus group discussion result indicate that there is variation among livestock traders in accessing market information those traders which have customer from central market and also in better status in their business financing has more access to market information. Availability of mobile telephone has contributed in accessing information although there are problems like quality of service and net work coverage.

**Factors affecting livestock marketing:** Credit sales are the most important factors affecting livestock marketing. This implies that the pastoralist traders were obliged to sell livestock on credit basis because of fewer cash buyers and also selling on credit basis is regarded as institution. During the FGD discussion, it was understood that there appears to be no linkage with modern marketing agency that brings both buyers and sellers under one roof. Drought is considered as the highly affecting factor in the many pastoralist areas of Ethiopia. Particularly in the Borana pastoralist area, the effect of drought is very high due to its occurrence on recurring basis. Various factors contribute for occurrence of drought pastoralist traders expressed that increased number of livestock and lack of rain are among major contributors for drought. The widely prevalent livestock diseases are major constraints to Ethiopian livestock export (LMA, 2001). Livestock export from Ethiopia is jeopardized by repeated bans, in particular from the countries in the Arabian Peninsula, as they are perceived to carrying the risk of introducing a number of trans-boundary livestock diseases. Lack of institutional support led poor linkage with highland and exporters. Also for involvement in large trading activities, local traders lack with capital which affects the livestock marketing.

## 7.0 Conclusion

To conclude, the existing livestock marketing practices in the study area is highly unregulated

which causes serious problems to the local traders and pastoralists. Most of the traders involved in the marketing without license which does have repercussions on the purchase and sale proceeds. Although livestock marketing cooperatives are found in the study area, their role in regulating the livestock marketing is not appreciable owing to operational and functional deficiencies. Major opportunities identified by study include: high livestock population in the area, highly demanded Borana breed domestically and overseas, increased number of livestock market centres, improved veterinary service, and favourable government policy liberalization, road infrastructure development and communication. Livestock traders in pastoral Woreda operate their business under various constraints. Among the major constraints, the main ones include: Pervasive sale on credit due to few cash buyers, poor access to finance to capitalize their business, poor linkage with central and export markets, poor access to market information and transportation problem, weak institutional support, lack of entrepreneurial capacity, limited access to cross border trade, recurrent drought, animal disease which impact livestock marketing and others.

# 8.0 Implications and Recommendations

Livestock traders in pastoral areas are highly dependent on income from sale of their livestock. Access to market will profoundly affect the abilities of all members of Borana lowland society and to improve their livelihoods. Pastoralists and traders need to access local, central and export markets, market will be a major source of revenue, growth and employment. The success of pastoral system from small producers, traders in rural areas to large international traders requires addressing first and foremost those factors that limit market access. To tackle those limiting factors of livestock marketing in Borena pastoral Districts, joint actions of community, government and development partners required. Based on this study the following are recommended:

- Facilitate simplified contract law agreement and effective implementation of existing livestock marketing rules and regulations.
- Increasing access for formal and informal access to credit.
- Government has to create conducive and stimulate competitive marketing strategy to address market failures in the area.
- Create awareness on the existence of rules and regulation for guiding livestock marketing.
- Orientation needs to be given to traders by relevant institution on the sale of livestock accompanied by a written agreement.
- Strengthen formal Institutional Support for linking pastoralists with highland and central markets. Enhance access to market information.
- Enhance livestock transaction modality in terms of establishing grade and standards.
- Facilitate capital injection in pastoral areas and develop livestock marketing infrastructure.
- Promote ways and means for cross border trade.
- Facilitate livestock auction and livestock marketing cooperatives. Strengthen physical infrastructure development.
- Encourage pastoralist traders to design their own risk minimization strategy like forming traders association to undertake livestock business.
- Empower female participation in livestock marketing.
- The marketing system needs to avoid any kind of abuse by either the middlemen or uncertified brokers.
- Market promotion and search for further destination.
- Capacity building for value chain actors (training, financial support, etc.).
- Conduct further research work on value chains in order to promote trading and commercialization.

## References

- Ayele Solomon, Assiegid Workalemahu, Jabar M.A, Ahmed M.M and BelachewHurissa, 2003. Livestock Marketing in Ethiopia: A review of structural, Performance and development initiatives. Socio-economic and Population.
- Barry I Shapiro, Getachew Gebru, Solomon Desta, Asfaw Negassa, Kidus Nigussie, Gezahegn Aboset and Henok Mechale, 2017. Ethiopia livestock sector analysis, Ethiopia Ministry of Livestock and Fisheries and the International Livestock Research Institute Livestock master plan team, International Livestock Research Institute (ILRI), Ethiopia.
- Behnke R., 2010. The Contribution of Livestock to the Economies of IGAD Member States: 3. Study Findings, Application of the Methodology in Ethiopia and Recommendations for Further Work. UK: Odessa Centre, IGAD Livestock Policy Initiative, Great Wolford; 2010. IGAD LPI Working Paper 02-10.
- 4. Borena Zone Report, 2010. Monitoring and Evaluation (BZRMEO, 2010).
- 5. Central Statistical Agency (CSA), 2013. Federal Democratic Republic of Ethiopia. Agricultural Sample Survey, 2012/13, Volume II: Report on Livestock and livestock characteristics (Private peasant holdings). Statistical Bulletin 570. Addis Ababa.
- CSA and the World Bank (database). 2011/12. Living standards measurement study- Integrated 6. surveys on agriculture (LSMS-ISA): Ethiopia Rural Socioeconomic Survey (ERSS).
- 7. Desta, S., and Coppock, D.L. 2002. "Cattle Population Dynamics in the Southern Ethiopian Rangelands, 1980-97." Journal of Range Management 55: 439-451.
- Desta, S., and Coppock, D.L. 2004. "Pastoralism under pressure: Tracking system change in 8. southern Ethiopia." Human Ecology 32(4): 465-486.
- 9. Habtamu, B. 2008. Factors Affecting Livestock Marketing, Acase Study. In Geda Pastoralists Cooperative Union, Borana, Zone, Oromia Regional State, Ethiopia. M.A. thesis, Ambo University
- 10. Holloway, G. and S. Ehui, 2002. Expanding Market Participation Among Smallholder Livestock Producers. Socio-Economics and Policy Working Paper 48. ILRI (International Livestock Research Institute), Nairobi, Kenya. 35pp.
- 11. Livestock Marketing Authority (LMA), 2009. Study on Causes of Cross-Border Illegal Trades in South, Southwest and Eastern Ethiopia, Market Research and Promotion Department, Addis Ababa, Ethiopia.
- 12. Million Tadesse, 2003. Challenges and opportunities to livestock and livestock products marketing in Southern Nations, Nationalities and Peoples Region: A case study of Wolaita Zone.
- 13. MoA (Ministry of Agriculture). 2012. 2011/12 (2004 E.C) Performance assessment report on the growth and transformation agenda in the spheres of agriculture.
- 14. Mohamed, A., Ahmed, M., Ehui, S. and Assefa, Y. 2004. Dairy development in Ethiopia. EPTD Discussion Paper No. 123. Environment and Production Technology Division, International Food Policy Research Institute, Washington, DC 20006 U.S.A.
- 15. Solomon A, Workalemahu A, Jabbar MA, Ahmed MM, Hurissa B. Socio-economics and Policy Research, 2003. Working Paper 52. Nairobi: Kenya, ILRI (International Livestock Research Institute).

- 16. Solomon Tilahun, 2004. Performance of Cattle Marketing System in Southern Ethiopia with Special Emphasis on Borena Zone. A Thesis Submitted to School of Graduate Studies. Alemaya University, Alemaya.
- 17. Tilahun H, Schmidt E. Spatial Analysis of Livestock Production Patterns in Ethiopia, 2012. ESSP II Working Paper 44. Addis Ababa, Ethiopia: International Food Policy Research Institute/Ethiopia Strategy Support Program II.
- World Bank, 2016. Empowering Ethiopia's Pastoral and Agro-pastoral Communities, Retrieved from http://www.worldbank.org/en/news/feature/2016/10/11/empowering- ethiopias-pastoraland-agro-pastoral-communities.
- 19. Yakob Aklilu. 2002. An Audit of the Livestock Marketing States in Ethiopia, Kenya and Sudan. Nairobi, Kenya.