



**INDIRA GANDHI NATIONAL OPEN UNIVERSITY**

**SCHOOL OF CONTINUING EDUCATION**

**A STUDY ON LIVESTOCK MARKETING IN BORENA ZONE  
PASTORAL DISTRICTS OROMIA REGIONAL STATE,  
ETHIOPIA**

**BY HUSSEIN GALGALO BORU**

**ENROLMENT NO. : 099122232**

**MAY 2015**

**ADDIS ABABA, ETHIOPIA**

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PASTORAL DISTRICTS OROMIA REGIONAL STATE, ETHIOPIA**

**A THESIS SUBMITTED TO INDIRA GANDHI NATIONAL OPEN UNIVERSITY  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE OF  
MASTER OF ARTS IN RURAL DEVELOPMENT**

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**MAY 2015**

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## DECLARATION

I hereby declare that the Thesis entitled A *STUDY ON LIVESTOCK MARKETING IN BORANA ZONE PASTORAL DISTRICTS OROMIA REGIONAL STATE, ETHIOPIA* submitted by me for the partial fulfilment of an M.A. Degree in Rural Development to Indira Gandhi National Open University (IGNOU) New Delhi is my own original work and has not been submitted earlier to IGNOU or to any other institution for the fulfilment of the requirement for any course of study. I also declare that no chapter of this manuscript in whole or in part is lifted and incorporated in this report from any earlier work done by me or others.

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## **CERTIFICATION**

This is to certify that Mr. Hussein Galgalo Boru student of M.A. in Rural Development (RD) from Indira Gandhi National Open University, New Delhi was working under my supervision and guidance for his project work for the course MRDP-001. His project work entitled, a research project on A ***STUDY ON LIVESTOCK MARKETING IN BORANA ZONE PASTORAL DISTRICTS OROMIA REGIONAL STATE, ETHIOPIA***, that he is submitting, his genuine and original work.

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## List of Abbreviation and Acronyms

ACDI/VOCA	Agricultural Cooperative Development International/ Volunteers in Overseas Co-operative Assistance
BZMEO	Borena Zone Report, Monitoring and Evaluation Office
CSA	Central Statistics Authority
DA	Development Agent
ECX	Ethiopia Commodity Exchange
EPA	Environmental Protection Authority
FAO	Food and Agricultural Organization
FGD	Focus Group Discussion
GDP	Gross Domestic Product
GNP	Gross National Product
HPR	Houses of People Representative
ILRI	International Livestock Research Institutes
KI	Key informant interview
LMA	Livestock Marketing Agency
MoE	Ministry of Agriculture
MoFED	Ministry of Finance and Economic Development
NGO	Non-Governmental Organization
PCI	Pastoralist Concern Initiatives
PFE	Pastoral Forum Ethiopia
RRC	Relief and Rehabilitation Commission
SPSS	Statistical Package for Social Science
UNDP	United Nation Development Programme
URRAP	Universal Rural Road Access Program

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## **ABSTRACT**

*The livestock sector in Ethiopia is the largest in Africa. Livestock production and marketing is a major livelihood in the pastoral areas of Ethiopia. Therefore, for the pastoralist community like Borana, livestock marketing development covers enormous scope for their development. Although few studies are available in the areas of livestock marketing, in-depth analysis on the constraints and opportunities in livestock marketing is found to be scanty for Borana Zone. Therefore, this research is aimed at identifying constraints and opportunities in livestock marketing in Borana zone. To achieve the major objective, the study specifically focuses on finding out how the existing livestock marketing function, identifying the major opportunities available to pastoralist and local traders and assessing the major constraints faced by local traders in livestock marketing. The research was conducted by taking 93 sample traders from pastoralist area traders of Borana zone. Primary and secondary data were used for analysis. Data collected through semi structured interview were analyzed quantitatively using descriptive statistics with the help of SPSS version 20. Moreover, data collected through focus group discussion, key informant interview and case study were organized and analyzed qualitatively. The study identifies major opportunities and constraints. 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 were identified as top constraints which limit pastoralist traders' efficiency and effective market engagement. 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. On the basis of these findings, recommendations are forwarded.*

# CHAPTER ONE

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## 1. Introduction

### 1.1 Background of the Study

Globally, agriculture provides a livelihood for more people than any other industry. Growth in agriculture production and productivity is of utmost importance to raise rural income to support the increasing number of people who are dependent on the industry and to meet the food and raw material needs of the fastest growing urban population. Enhancing agricultural productivity contributes to industrial growth by providing cheap labour, capital investment, foreign exchange and markets for manufactured consumer goods.

Livestock, as a subsector of agriculture, provides over half the value of global agriculture output and one third in developing countries. Rapid growth in demand for livestock products, in the developing countries is now a situation that requires a global effort to promote it in the 'food revolution' concept. Livestock products contribute to rural livelihoods, employment and poverty relief, integrate with and complement crop-production, embody saving as a reserve against risk and sometimes play a special role in traditional culture (Metaferia, 2013).

Ethiopia is largely a rural country with an agrarian economy. Agriculture directly support, 85% of the populations' livelihood, provide 46% of GDP and contribute to 80% export revenue (CSA, 2009). Livestock production is an integral part of the Ethiopian agricultural system that has economic and social importance both at the household and national level. Livestock contributes 12% and 33% to the total GDP

and agricultural GDP respectively, provides 65% for livelihood of the population and 12–15% of the total export earnings (LMA, 2009). The sector also provide multiple uses aside from income generation, including cash storage for those beyond the reach of the banking system, draft and pack service, milk and meat for household consumption, and manure for fuel and fertilizer. Therefore, livestock can serve as a vehicle for improving food security and better livelihood, and contribute significantly to agricultural and rural development. The topographic and geographical feature of the country is favourable for livestock production. According to the estimate of animal population census of 2004, Ethiopia has the leading livestock population in African continent (CSA, 2004). Despite these huge resources, the income derived from the sector and the benefits accruing to the country and pastoralist communities is apparently small. Although herd building is apriority motivation for pastoral survival, pastoralists traditionally have sold animals and animal products to obtain modest amount of cash income (Cossins and Upton, 1987; Holden and Coppock, 1992). Such transactions often occur in dry seasons and other stress periods when milk yields decline and people need to purchase grain and other commodities for their sustenance.

According to 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.

## **1.2 Statement of the problem**

Pastoralism is a source of livelihood to millions of people in the Horn and East African nations. In Ethiopia, an estimated 10–12% of the populations are pastoralists (CSA 2004). Livestock is the basis of livelihood of both smallholder producers and pastoralists. The whole of Ethiopia agriculture is based on livestock which is either used for farm related activities or livelihood. Nevertheless, the sector has not developed as much and has not helped the country to gain the required economic growth in general and for pastoralist communities in particular in line with other countries where smaller numbers of livestock have benefited a lot. Issues with regard to improving the efficiency of the sector and its contribution to the economic development were raised at various platform and forums of government and partner organizations at different times. The government of Ethiopia currently established State Ministry of Livestock under Ministry of Agriculture to improve sector efficiency and contribution to national economy (MoA, 2013). Various constraints related to financial, human resource allocation and structural problems were cited. One of the major constraints in increasing the welfare of the pastoral and agro-pastoral households is their inability to access market.

Marketing is so essential to pastoralists not only as a mechanism whereby pastoralists exchange their livestock and livestock products for cash (Bekure and Tilahun, 1983)

but also facilitates destocking of animals during drought (Turner and Williams, 2002; Barrett et al., 2004). The extent to which pastoral livestock are being marketed depends on the availability and access to markets (Barton et al, 2001). 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).

In the last few years several factors have altered the livestock-marketing landscape in Ethiopia. There has been considerable development in the private livestock export industry. The number of modern livestock export firms established in the Ethiopian highlands has been on the rise. There has also been a growing demand and expanding export market for livestock products. The primary destinations include Middle Eastern and Gulf State nations (Desta et. al, 2006).

The growth in the live animal and chilled meat market for the export and, the high value markets for urban areas raise the question of whether it is predominantly large-scale traders and buyers who are benefiting from these efforts as compared to the producers. Still, there is no sufficient information on how the pastoralists and small-scale traders are engaging in these markets, whether these markets offer reduced risks and increased incomes for smaller market participants or small scale traders and producers have been crowded out or by-passed by larger buyers and processors (McPeak, et. al., 2006). Access to markets will profoundly affect the abilities of all members of Borana lowland society to make good living and contribute to national wealth.

However, without having favourable marketing conditions, the possible increment in output, rural incomes, and foreign exchange resulting from the introduction of improved production technologies could not be effective which in turn has an impact upon the incomes of herders, traders, butchers, exporters and other market participants in particulars and the national economy in general. Therefore, improving producers' access to market for the rapid growing demand for livestock and livestock products is one of the options that policy makers must consider. However, all these require relevant information on each aspect of the system for the policy makers to base on.

Livestock marketing seems to be hampered by high level of variability and risk from environmental, socio-economic and institutional variables. Moreover, one of the serious problems in livestock marketing distortion in the pastoralist districts is limited access to livestock market which enforce pastoralist traders to enter into informal contract credit selling with market actors in supply chain where terms of agreement are not usually respected in due time. Thus, informal contract credit selling may result in complete defaulting and has far negative socio – economic consequences on livestock traders and herders in the areas.

Studies conducted on this area were not in - depth and did not consider the constraints of livestock marketing especially in the study area that resulted in information gap. Therefore, this study aimed at identifying the opportunities and constraints in livestock marketing in pastoral districts of Borana zone.

### **1.3. Objectives of the Study**

#### **1.3.1. General Objectives of the study**

The general objective of the study was to examine the opportunities and constraints of livestock marketing in selected districts of Borana Zone, Oromia Regional State.

#### **1.3.2. Specific objectives**

The specific objectives of this study are summarized as follows:

- To find out how the existing livestock marketing functions;
- To identify the major opportunities available to pastoralist and local traders;

- To assess the major constraints faced by local traders in livestock marketing.

## **1.4 Research Questions**

The study was attempted to address the following research questions to achieve the intended objectives;

1. How does the prevailing livestock marketing function?
2. What are the major opportunities prevailing in livestock marketing?
3. What are the major constraints faced by local traders in the study area?

## **1.5 Significance of the study**

The study addresses the opportunities and constraints of livestock marketing in pastoral districts of Borana zone. The issues related to livestock marketing had not been fully appreciated for a long period of time as a major challenge that hinder the contributions of livestock resource to the country in general and to the pastoralist communities of Borana zone in particular. Therefore, this study will enable policy makers, local administrative, pastoralists, market actors and different stakeholders working for the well-being of the country and pastoralists to identify the opportunities and constraints of livestock marketing in pastoral areas of Borana zone. It is also believed that the results of this study will help as an input for further study and developing appropriate livestock marketing system of pastoral area.

### **1.5.1 Scope of the Study**

To make the research manageable in the given time frame and cost effective the research limits the scope to examine the opportunities and constraints of livestock

marketing in Borana zone for local traders. Moreover, the study had been delimited spatially to Borana zone pastoral districts, particularly to Dire and Yabello livestock market.

### **1.5.2 Limitations of the Study**

While carrying out the research work, the researcher faced the following limitations, such as shortage of time and resource, difficulty to access livestock traders for interview and unwillingness of sample respondents to conduct interviews and problem to access quantitative information on informal credit selling due to shortage of recorded information by traders.

## CHAPTER TWO

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### Review of Related Literature

#### 2.1. Some Basic Concepts

**Pastoralist:-** Pastoralists defined as People who are primarily raising and depending on livestock and their products as their source of food and income (Elliot, 2005).

**Pastoralism:-** Is a mode of production and way of life for many people who derive most of their income or sustenance from keeping domestic livestock. These livestock are reared in conditions where most of the feed is natural rather than cultivated or closely managed (Sanford, 1983). In most cases pastoralists devote their time and energy to looking after livestock (Sandford 1983, Galaty and Johnson 1990, Galaty and Banta, 1991). Pastoralists thus exist in relatively low-density, low intensity system based on extensive land use. These systems also exhibit an absence of capital improvements and a relatively intensive use of labor (Galaty and Johnson, 1990).

The arid and semiarid areas of the earth constitute 50-million km<sup>2</sup> or about 35% of the land surface (Mundlak and Singer, 1975). These areas support 500-600 million people. About 40 million have animal based economic, with the majority of these being referred to as pastoralists (Sandford, 1983). Fifty to 60% of Pastoralists are found in Africa, 25 to 30% in Asia, 15% in the Americas, and less than 1% in Australia. In terms of number of pastoralists the most important single countries are Ethiopia, Kenya, Somalia, Sudan, Chad, Mali, Mauritania, India, and China, each with about 1 Million or more pastoralists (Sandford, 1983). In pastoral systems,

livestock are regarded as income generators, stores of wealth, and producers of milk and meat (Doran et. al. 1979, Low, 1981, Sanford, 1983).

Traditional African pastoral systems have been characterized by vast areas of land occupied by sparsely distributed human and livestock populations. Pastoralism makes a very significant contribution to the national income, employment, agricultural production, and food demand of people in Africa.

Ethiopia, with a land mass of 1.2 Million km<sup>2</sup>, is home to 5 to 6 million pastoralists, or 10% of the national population (UNDP/RRC, 1984, Hogg, 1995). Elevation ranges from below sea level in the Afar region to the northwest to 4,620m above sea level on the mountain peak of Ras -Dashen to the northeast. The Great Rift Valley separates the western highlands and the south-eastern highlands, and highlands on each side give way to an apron of vast semiarid lowland areas as in the east, west, and south of the country (EMA, 1988). The rangelands of Ethiopia are home for millions of pastoralist. The rangelands cover 61% of the land areas of Ethiopia and are located at <1,500m elevation (Hogg, 1996).

The Borana pastoral system of Southern Ethiopia, traditionally based on cattle husbandry for wealth storage and milk production, is one of Ethiopia's most important pastoral systems in economic terms. It has apparently functioned very well for hundreds of years to mitigate risks inherent to pastoral production (Pratt, 1982; Cossins and upton 1987, 1988a; Helland, 1997).

**Market:** - The concept of market is linked to meeting, the degree of communication among buyers and sellers, and the degree of substitutability among goods. A place where sellers and buyers meet and exchange takes place, an area where price

determining forces (supply and demand) operate, and an area where there is a demand for goods (Andargachew, 1990). It is a mechanism or an institution through which buyers and sellers exchange information and transact.

**Marketing Systems:** - A marketing system is a collection of channels, intermediaries, and business activities, which facilitate the physical distribution and economic exchange of goods (Kohls and Uhl, 1985). A channel of distribution may be defined as a path traced in the direct or indirect transfer of the title to a product as it moves from a producer to ultimate consumer or industrial users. Every channel of distribution contains one or more of “transfer points” where there is always either an institution or a final buyer of the product.

**Marketing:** Is the performance of all business activities involved in the flow of goods and services from the point of initial production until they are in the hands of ultimate consumers. The movement of agricultural or livestock products in a market can be compared with the flow of a river. Innumerable producers at the one end are forming the source of flow and many consumers at the other extreme are forming destinations. Marketing middlemen on the other hand act as a link between the two extremes and form course of a river and giving organization to the stream. Price differences among geographical locations or spatially separated markets are like variation in altitude and sources of force of gravity in initiating and giving direction to the flow in the marketing channel (Gizachew, 2005).

**Transaction Costs:** Are costs of arranging a contract ex ante and monitoring and enforcing it ex post (Matthews, 1986). More generally, they are the costs of running the economic system (Arrow, 1969) or figuratively, the economic equivalent of friction in physical systems (Williamson, 1985).

They include the costs of searching for a partner with whom to exchange, screening potential trading partners to ascertain their trustworthiness, bargaining with potential trading partners (and officials) to reach an agreement, transferring the product, monitoring the agreement to see that its conditions are fulfilled and enforcing the exchange agreement (Holloway et al., 2002). Transaction costs are measured in terms of opportunity cost of labour involved and cost of holding inventory during search for market information and trading partner (Gebremedhin, 2001). Differential transaction costs among households stem from asymmetries in access to assets, information, services and remunerative markets (Delgado, 1999). Pastoralists may require support in information management. Access to services is often unequally distributed within communities. Poor infrastructure, low population density and low effective demand necessitate institutions for risk sharing and economies of scale in provision of services especially in remote areas. Institutions by providing bulking and bargaining reduce transactions cost of individual pastoralist and ultimately increase market access.

## **2.2 Economic Importance of Livestock in Ethiopia**

The Livestock subsector has an enormous contribution to Ethiopia's national economy and livelihoods of many Ethiopians. According to very recent calculations, the subsector contributes about 16.5% of the national Gross Domestic Product (GDP) and 35.6% of agricultural GDP. It also contributes 15% export earnings 30% of agricultural employment. The livestock sub sector currently support and sustain livelihoods for 80% of all rural population. The GDP of livestock related activities valued at 59 billion birr (CSA), agricultural census (2001/02) and annual CSA agricultural sample survey (1995 to 2013). Livestock have multiple uses aside from income generation, including cash storage for those beyond the reach of the banking

system, draught and pack services, milk and meat for household consumption, and manure for fuel and fertilizer. In addition to these non-market values, a thriving informal export trade in live animals further emphasizes the significance, albeit unrecognized by official statistics, of livestock (and particularly cattle) in the Ethiopian economy. This importance is pronounced in pastoral regions, and women's crucial role is widely acknowledged: both directly in primary production, and indirectly through the contribution of livestock to household assets and food security.

Estimates of the livestock herd size for cattle and other species in Ethiopia vary widely. Ethiopia's estimated cattle population at approximately 49 million, with 25 million sheep, and nearly 22 million goats. Estimates from the International Livestock Research Institute (ILRI) show a similar number of cattle but other source put the estimate as high as 58 million. The FAO ranks Ethiopia ninth in the world in terms of total number of ruminants; however, local experts suggest that comparable statistics for Sudan and Nigeria (both with large herds) are inflated, which would give Ethiopia the largest livestock herd in Africa, with seventh place globally. CSA estimates for 2006/2007 suggest numbers as high as 58 million cattle. (Sintayehu et.al., 2010).

## **2.3. Livestock markets in Ethiopia**

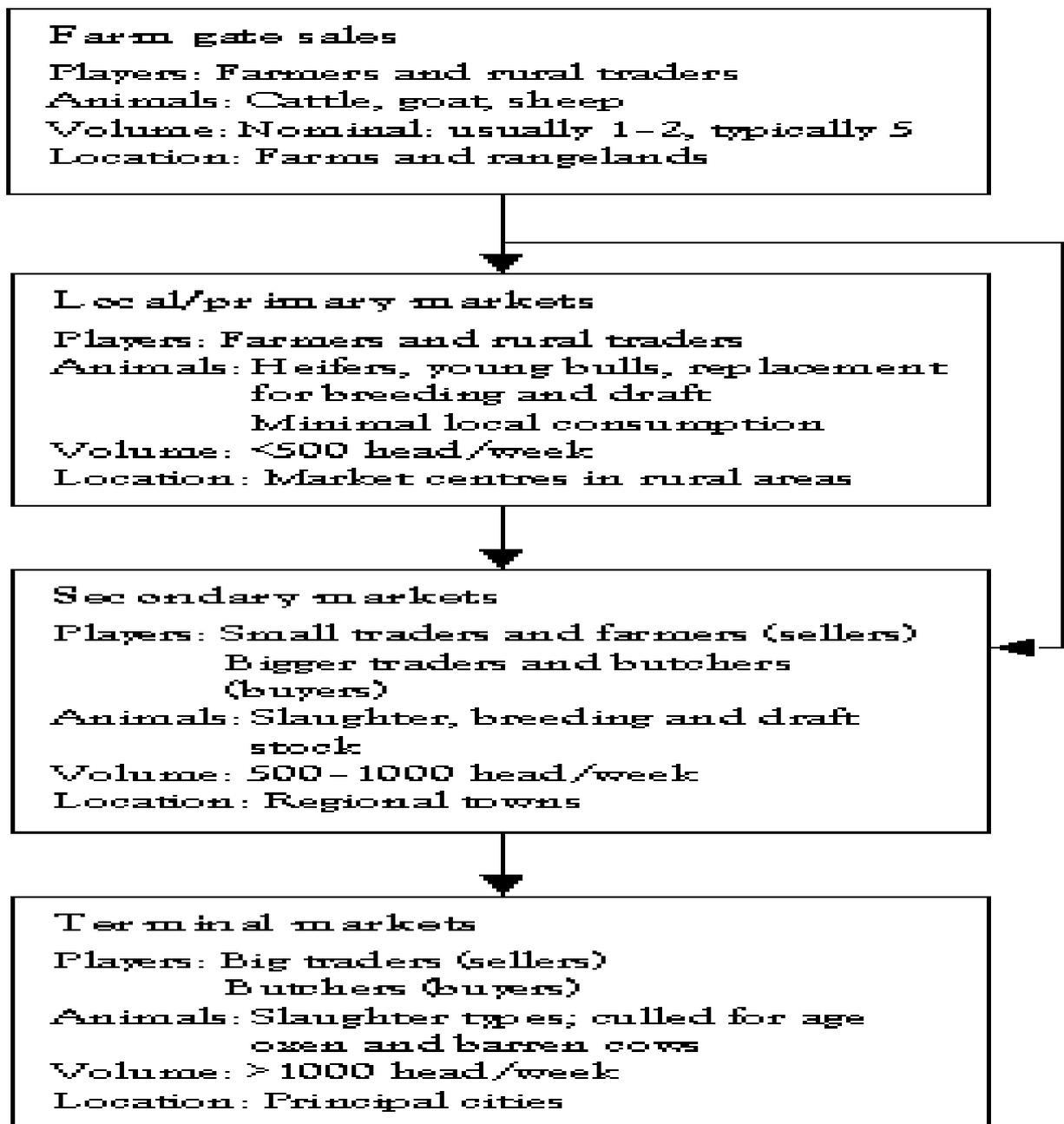
### **2.3.1. Characteristics of Livestock Market in Ethiopia**

According to the results of a baseline survey report by ACDI/VOCA (2006), location advantage, proximity to the strategic livestock markets and sea ports; ethnic similarities, same languages, social and cultural relationships with the people across the borders have created conducive situations for market links across the borders.

According to the same source the neighbouring countries bordering these areas either consume locally or re-export to other countries mainly to Middle East countries.

### **2.3.2. Livestock Market structure**

Generally, the livestock marketing structure in the pastoralist areas follows four tiers (Ayele *et al.*, 2003; ACDI/VOCA, 2006b; Avery, 2004). These are bush, primary, secondary and terminal markets. The basis of such classifications is mainly number of animals supplied and market participants per market day. Bush markets are markets where animals are exchanged weekly between the pastoralists and small scale traders for breeding purpose or sells in the primary markets. Primary markets are Woredatown markets where the sells volume does not exceed 500 animals per week. The major sellers are pastoralists and small scale traders, whereas the major buyers are assemblers (agents) and medium scale traders. Secondary markets are major towns markets where the weekly supply volume is between 501 and 1,000 animals. Here, the major market participants are medium scale traders acting as sellers and the big traders as buyers. Tertiary/terminal markets are those markets located at the big cities of the country where weekly over 1,000 animals are supplied. Big traders are major sellers whereas butchers and consumers are the major buyers.



*Typical Ethiopian livestock market structure.*

Source: Beyene and Lambourne (1985)

Livestock are generally traded by visual judgement and weighing livestock is uncommon though auctions were used to be practiced in some of the southern (Borana) markets where weighing was also practiced (MoA, 1976) Prices are usually fixed by individual bargaining. Prices depend mainly on supply and demand, which is heavily influenced by the season of the year and the occurrence of religious and cultural festivals.

According to Belachew and Jemberu (2003) in the low lands, where pastoral management system is practiced, livestock are considered as wealth accumulation and manifestation of status in the societal hierarchy. So, marketing of their animals is basically a function of their basic principal source of subsistence providing milk and needs such as food grains, clothing, health care and a period of drought. A report by ACDI/VOCA (2006b) stated that in times of drought, market terms of trade for pastoralists sharply decline. Thus, lack of drought mitigation and coping mechanisms adversely affect the livelihoods of the community. Fodder and pasture shortages during drought forces higher livestock supply to market.

### **2.3.3. Livestock marketing in pastoralist Area**

In pastoral areas, asset wealth is often high and volatile, but markets do not enable pastoralists to convert that wealth at times of stress. Food entitlement failure in this case can also be considered market failure, high transaction costs, poor information flow to producers, and lack of competition in supply of goods and services and inability to choose the time of sale, because of an absence of alternatives for investment of the wealth generated (FAO, 2004).

Increased livestock productivity on its own, however, does not address the bigger issue of market failure. This failure can be overcome in a number of ways, including investing in markets and infrastructure and raising bargaining power by reducing transaction costs. Raising the economic potential of the dry lands also requires the provision of enabling incentives, including security over land and other resources, appropriate service provision, credit and banking facilities, access to government and relevant research and extension services. The competitive advantage of dry lands in producing livestock is also undermined by the exclusion of many developing countries from world markets for livestock and livestock products, although whether the solution is to invest heavily in meeting export standards, or to orientate efforts towards more localized markets remains an issue of debate. Regardless of whether a country prefers to exploit domestic or global markets, there remains a challenge of developing national market chains (Davies, 2006).

Many countries with pastoral population are not self-sufficient in animal products and it is safe to say that, given the great underinvestment in the pastoral system, there is scope to increase the supply to national markets through appropriate investment in production and marketing. Indeed, securing domestic market share may be a great deal less risky than investing in global markets, where competition is fierce and consumer standards can be both costly to attain.

In many countries, the best returns are obtained by home consumption. For example, across Southern Africa, the general lack of involvement in selling livestock: people keep livestock not to make money, but to save money. The main determinant of this strategy is high retail food prices, itself a function of remoteness, high transport costs and poor marketing systems (Behnke, 2006).

Livestock is mainly sold at Woreda level markets to livestock traders through brokers or middlemen as well as direct to livestock traders. They sell their animals mainly during the dry seasons to pay for their personal needs e.g. school fees for their children. The major concerns on marketing are poor roads which hinder transportation of the animals to the markets and livestock diseases. When it rains, some parts of the Woreda are completely cut off from the rest of the country. The animals have to travel long distances to the markets and in the process lose weight by the time they reach the markets. The incidence of livestock diseases leads to quarantines, and restricted movement of animals hence the animals cannot be sold. Some of the traders do not pay the livestock owners promptly hence the owners take time to realize the proceeds from the sale of the animals (Murithi, 2006).

#### **2.4. Unique features of pastoral marketing system**

Pastoral marketing system varies in a number of ways than other marketing systems and traditional supply chains. Most importantly: 1) Exchange process is secondary since production is usually subsistence aimed at producing foods for household members (Frat kin et al. 1994), 2) Direct marketing of live livestock rather than slaughtered animals 3) The product (livestock) is moving from place to place as a result of pastoral mobility, 4) Marketing information asymmetry because of less formalized marketing information systems, 5) Marketing activity closely aligned with personal benefits of the pastoralists (products stay with pastoralists until the moment of marketing exchange), 6) Products (livestock) have some unique features as commodities in such a way that they are individually identifiable and are living animals which hold greater cultural and social meaning than other major commodities (Turner and Williams, 2002). These features could have a number of marketing

implications to a light and effectively integrate the pastoral economy into the broader global exchange system. The level of alignment and integration in turn is highly conditioned by lack of marketing skills in the pastoral area (Beranu et al,2007) which eventually undermined the competitive advantage of pastoralists at the global livestock marketing chain (Hatfield & Davies, 2006).

When direct marketing and processing can be carried out effectively, pastoralists can fill specialized market niches (Hatfield and Davies, 2006) that may not be served by other systems. The importance of this marketing system may continue given the growth in global demand for livestock products fuelled by higher disposable incomes (the so-called livestock revolution), combined with the communications revolution (Hatfield and Davies, 2006). But, despite of the growing pastoral links to the global economy (McAllister,2006),many pastoralists still face constraints in realizing the economic potential of their system owing to high transaction costs, such as distances to processing plants, absence of formal markets, poor access to information and fair contracts (Hatfield and Davies, 2006). Because of these, pastoralists are currently producing what they like to produce and hence product is just a commodity. On the other hand, because of differentiated; hence there exists marketing miss-match on the demand and supply side. As a result, further change is inevitable (McAllister, 2006) to pastoralist as a marketing system by aligning itself to the wider global consumer concerns and preferences. Reliable alignments and partnerships among pastoralists and chain actors could promote a more sustainable liver stock supply over long term (Desta et. al. 2006).

## **2.5. Livestock Sector Market Challenges and Opportunities**

Livestock is the principal and most productive investment of the pastoralists but the inefficiency and ineffectiveness of livestock marketing has contributed to pastoral food insecurity and poverty situation. In addition, lack of access to livestock marketing result in loss of livestock resources during prolonged dry season and drought. Moreover, ban of livestock import by Middle Eastern countries (like Saudi Arabia) aggravates pastoralists' livestock marketing. Thus, promotion of livestock marketing is a crucial link in pastoral development (PFE, 2002).

Ethiopia's varied agro-ecological zones have put the country at an advantageous position in possessing relatively huge number of different livestock species as compared to other African countries. Ethiopia's lowland cattle breed, sheep, goats and camels are highly demanded in neighbouring countries as well as the strategic livestock markets of the Middle East. Overall, relatively huge number of livestock resources, proximity to the export markets, favourable investment policies, the liberalization of the economy and the supports and attentions given by the government to export trade gives the country comparative advantages in livestock trade. However, inadequate market infrastructure, virtual absence of market information system, absence of market oriented livestock production system, inadequate number of exporting firms with low level of capacities, inadequate knowledge of international trade, low level of quarantine facilities and procedures, prevalence of various diseases, repeated bans, excessive cross-border illegal trade and stiff competitions etc are the major challenges that hinder the smooth livestock trade of Ethiopia (Belachew, 2003).

Ethiopia is endowed not only with large but diverse livestock resources. However, Ethiopia is using its rich endowment to little advantage. For many years' livestock production in Ethiopian and indeed agriculture more generally was seen as a poor investment for development. But after years of being ignored, livestock issues are beginning to be put back on Ethiopia's development agenda. Livestock are being recognized as essential assets for livelihoods; as key to moving out of poverty; as a way into lucrative markets; as a source of foreign exchange; as well as it serves as an important cultural resources, social safety nets and means of saving. Today, however, a new 'livestock revolution', fuelled by a massive growth in global demand for food of animal origin (milk, meat, eggs), is being hailed, with important development implications for developing world including Ethiopia. Market is in the centre of this new revolution as it is demand driven (Workalemahu, 2000).

## **CHAPTER THREE**

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### **Research Methodology**

#### **3.1. Description of study and orientation**

##### **3.1.1 Description of study**

A study was undertaken in Yabelo and Dirre pastoral Woredas (districts) of the Borana zone of Oromia Regional State. The pastoral rangeland of Borana is found in the southern part of Ethiopia, lying between 3036' 600 38' N and 36043'- 410 40' E geographical grids in the Southern part of the Regional State of Oromia, it has a spatial area of 69,373.3 km<sup>2</sup> (about 7.6-12.3% and 19.5% of the total land area of Ethiopia and Oromia, respectively (ORDPEDB, 2000). Borana zone is one of the seventeen administrative zones of Oromia Regional State, located at about 570 kilometers south of Addis Ababa on the way to Kenya. According to Borana Zone Report Monitoring and Evaluation Office (BZRMEO, 2010), Borana zone covers total land area of 63,939 km square with the total population of 1,113,538 (male 563,540 and female 549,998) of which 881,121(91%) and 232,417 were residing in rural and urban areas, respectively.

Borana Zone is found in the southern part of the country and has a total of thirteen districts, namely, Yabelo, Arero, Moyale, Miyo, Dire, Dhas, Dillo, Duda-Dawa, Malka-Soda Gelana, Abaya, Bule-Hora, and Teltele with Yabelo being the Zonal capital. The Zone is dominated by semi-arid climate. The area has a bi-modal type of rainfall regime ranging on average from 400 mm in the South to 600 mm in the North annually. About 59% of the precipitation occurs from March to May and 27% from

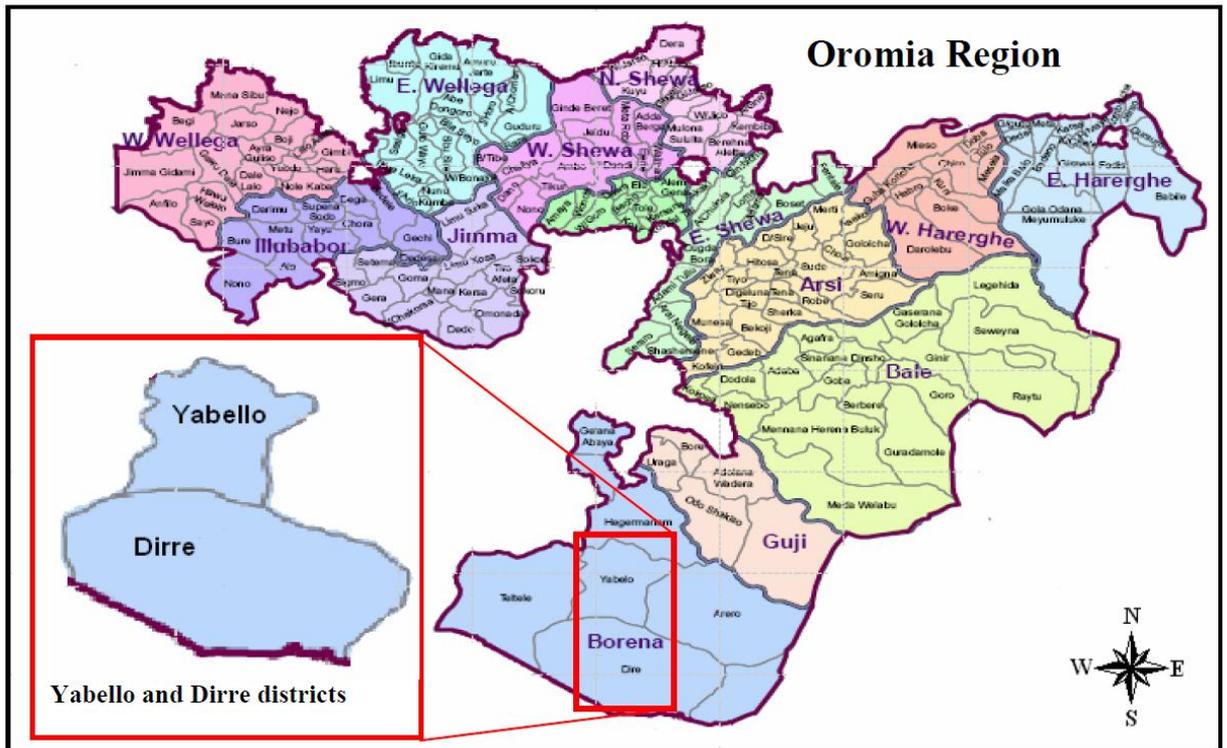
September to November. A "dry" year is the one in which annual rainfall is less than 75% of average and this may occur every five years (Baker, 1989) but nowadays this may occur more frequently. The hottest months are December, January, February and March. Several water wells locally called "Ellas" are available in the area. Borana Zone has three agro-climatic conditions namely 'Kola', 'Woina Dega' and 'Dega', which make 70%, 20% and 10%, of the zone respectively (BZRMEO, 2010).

The target populations for this study were formal and informal livestock traders who engage in market transaction of two Districts (Dire - Dubluk, Yabello - Bake) market place.

### **3.1.2 Approach and Orientation of study**

For the study to be conducted two enumerators were selected from Oromia Pastoralist Research Centre Yabello Branch Office. Two university graduates which had knowledge of pastoralist livelihood was hired in data Collection. Due care was taken to ensure that they are experienced enough in administrating the survey questionnaires among rural traders.

Prior to the field trip, the enumerators were given training on handling the questionnaires. Each question was elaborated with adequate clarity, and they were given sufficient opportunities to make comments, to raise questions and also to make any suggestion they might think useful to improve the questionnaire. On the basis of discussion, a few modifications were made on some questions and some new questions posed were included in some parts. After a day session the questionnaires were tested at each market centre on marketing days and the necessary modification was made on the basis of findings.



Map of study area

## 3.2. Research methods

### 3.2.1. Sampling Techniques

The study was employed both probability and non-probability sampling techniques. Probability sampling had used to minimize biases and to ensure representativeness of the study. Simple random sampling had adopted to select traders. Purposive sampling techniques were used for the selection of two districts among 13 districts of Borana zone. Purposive sampling was utilized due to large volume livestock trading transaction. At Woreda level, two major Market places, Haro-Bake from Yabello and Dubluk from Dire was selected purposively. Purposive sampling was employed in selecting key informants from government officials, expert, a live animal exporters and traders to increase the validity of the study.

### 3.2.1.1. Sample Size

Identifying and knowing the traders was the major challenge for researcher. The Borana zone trade office provided the list of licensed traders of Yabello and Dire districts, but it was not complete. Therefore, the only option for the researcher is to develop the list of traders in the area. Hence, the researcher with the assistance of local officials, known traders, clan leaders, livestock marketing experts and key informants has generated list of livestock traders operating in the livestock markets of the district. The total number of livestock traders developed is 228.

Among those pastoralist traders 122 belongs to Yabello Woreda and the remaining 106 belongs to Dire district. To get necessary data from target population, sampling method was selected over census because of time and financial constraints. Therefore, sample size was determined using a simplified formula provided by Cochran's (1977) as follows:-

$$n = \frac{N}{1 + N(e)^2}$$

Where 'n' is the sample size, N is the population size and 'e' is the level of precision. The conventional confident level of 92% was used to ensure a more accurate result from the sample. Based on this, the error term would equal to 0.08. Using the total population of 228 and error margin of 0.08, the sample size was calculated as follows.

$$n = \frac{228}{1 + 228(0.08)^2} = 93$$

Proportional sample was used to get proportional number of pastoralist traders for both Yabello and Dire districts by using the following formula:

$$n_i = \frac{n * N_i}{N}$$

Where:  $n$  is the sample for each district;  $N_i$  is the total number in each district;  $n$  is the total sample size and  $N$  is the total population. Accordingly, the following table depicts the number of sample size selected from their respective district. The respondents to complete interview schedule and that the only option available for the researcher was to conduct interview with pastoralist traders found around market centers.

**Table 3. 1. Sample Size**

S.No	Districts	Target Population	Total population	Sample size
1	Yabello	Pastoralist traders	122	50
2	Dire	Pastoralist traders	106	43
<b>Total</b>			228	93

**Source:** Principal Researcher, 2014

### 3.2.2. Sources of Data

The research used both primary and secondary sources of data.

#### 3.2.2.1. Primary Data Sources

The data collection technique for the study was based more on primary data, which was collected from livestock traders, pastoralists and officials, through semi-structured interview schedules, focus group discussion and observations.

### **3.2.2.2. Secondary Data Sources**

The secondary data sources had gathered from relevant books, working papers, previous researches, reports, websites, journals, unpublished materials and other related documents.

### **3.2.3. Data Presentation**

After data was collected, cleaned and entered in to SPSS version 20, the outcome had presented by using bar graphs with text description to facilitate the interpretation of the results for data analysis. While qualitative data was presented in a qualitative form.

### **3.2.4. Data Analysis and Interpretation**

The raw data, which had collected through semi structured interview schedule, focus group discussion and observation, was analyzed critically. The quantitative data was analyzed by using Ms-excel or SPSS version 20 based on the descriptive methods such as frequency and percentage.

## **3.3. Data collection techniques**

As each research method has its own data collection technique for the accomplishment of its activities, this study employed instruments such as Semi-structured interview schedule; focus group discussion, key informant interview, case studies and observation techniques for data collection.

### **3.3.1. Semi structured interview schedule**

Semi-structured interview schedule were used to gather data from pastoralist traders who are involved in livestock marketing. Semi-structured interview schedule is prepared to collect first-hand information about opportunities and constraints in

livestock marketing for pastoralist traders who were selected by using convenient sampling technique. The closed and open-ended questions were prepared and translated into Afan Oromo language to collect primary data from respondents.

### **3.3.2. Focus Group Discussion**

Focused group discussions (FGDs) were conducted with four groups of 8-10 participants in the target population of study areas (two FGDs of pastoralist traders and officials). The check lists were prepared and focus group discussions were conducted mainly to identify major opportunities and constraints in livestock marketing for pastoralist local traders to know areas of intervention for improvement of livestock marketing.

### **3.3.3. Case studies**

The case studies were conducted with pastoral areas traders on major constraints they faced in livestock trading. These were conducted with four traders to get required information.

### **3.3.4 Observation**

Observation were undertaken in Yabello and Dire Woredas during the whole period of field work by observing different activities carried out by pastoralists and livestock traders at market level during market days. The observations were supported by photographs and videos.

## CHAPTER FOUR

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### 4.1 Results and Discussion

#### 4.2. Demographic Characteristics of the traders

Traders from two pastoral Districts of Borana Zone, from Yabello and Dire were consulted to gather required information for the study. As shown in Table 4.1; majority (97.8%) of the sample traders were male while the remaining 2.2% of them were female. This implies that male dominated Livestock trading in Borana pastoralist area which in turn made the participation of female insignificant.

According to the Central Statistics Agency (CSA, 1996), economically active age groups lie between 15 to 64 years. To this effect, Table 4.1 reveals that 16.1%, 73.1% and 10.8% of the respondents were between the ages of 15-30 years, 31-64 years and above 64 years respectively. This entails that majority, which is 89.2% of the livestock traders in two-sampled Districts of Borana Zone are in economically active age group. With respect to marital status, majority (95.7%) of sample livestock traders were married, while the rest 4.3% were single.

Concerning the educational level, what needs to be recognized is that having better educational status could help traders to acquire knowledge that enables them to increase their entrepreneurial capability. With regard to educational background, Table. 4.1 also shows 48.4% of the sample livestock traders were illiterate, 35.5% attended grade 1-8, 9.7% attended grade 9-12 and the remains 6.5% completed diploma and above. This implies that almost half of the sample livestock traders were illiterate who cannot read and write. As a result, they face difficulties to undertake their business properly.

Moreover, table. 4.1 also show the survey data of major occupation of traders in the area. According to the data, greater part, 47.3% of traders undertake the livestock trading as their major occupation and the remaining (20.4%), agro- pastoralist (9.7%), pastoralists, and broking (22.6%) as their major occupation other than livestock trading.

**Table 4.1: Demographic Characteristics of the traders**

S. No	Description	Total sample traders (n=93)		
		Categories	Frequency	Percentage
1	Sex	Male	91	97.8
		Female	2	2.2
2	Age	15-30 years	15	16.1
		30-64 years	68	73.1
		above 64 year	10	10.5
3	Education level	Illiterate	45	48.4
		Grade 1-8	33	35.5
		Grade 9-12	9	9.7
		Diploma and above	6	6.5
4	Marital status	Single	4	4.3
		Married	89	95.7
5	Occupation	Livestock trading	44	47.3
		Farming	19	20.4
		Pastoralist	9	9.7
		Livestock Broking	21	22.6

Source: survey data 2014/15

## **4.2. Livestock marketing in Borana pastoralist area**

### **4.2.1. Livestock Markets**

Different scholars classified livestock markets into primary, secondary, and terminal markets based on types of major market participants, volume of supply per unit of time and the purpose of buying (Yacob, 2002).

Accordingly, 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. 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. These markets are mainly located in regional capitals. Terminal markets are characterized by their consumption as the main purpose of buying and these markets are located in large urban centres like Addis Ababa, Dire Dawa, Dessie, Nazreth, Moyale and the coffee growing regions of Sidama and Gedeo zones. In these markets, medium to large-scale traders and butchers dominate the market and on average over 1000 heads of livestock were brought to these markets per week (Solomon, 2004).

The survey data 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.

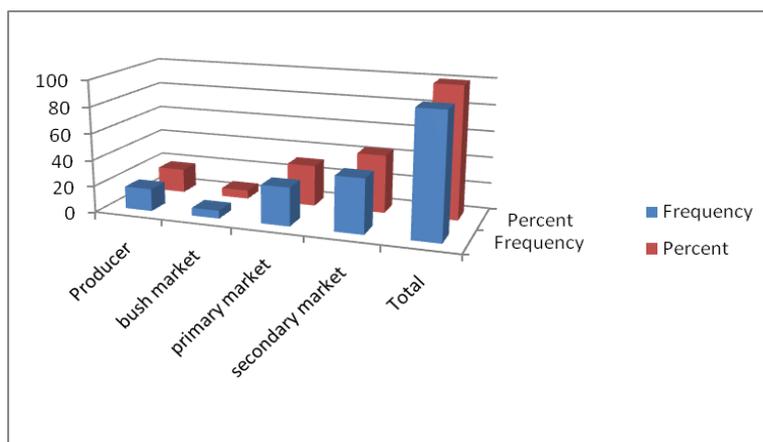


Fig.4.1: Sources of Livestock purchase for resale

#### 4.2.2. Legality of traders

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. Focus group discussion undertaken with Woreda Officials indicates that livestock trading without License is illegal. And also has 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.

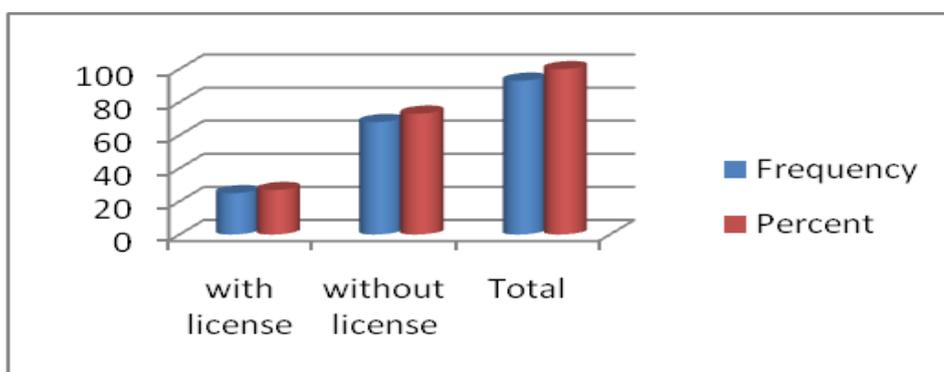


Fig. 4.2: Legality of conducting livestock trading

### 4.2.3. Areas for Livestock sale

Areas for livestock market are a crucial matter with the traders. However, when there is no attractive and conducive domestic market, it is important to resort to an alternative livestock market. To this effect, Fig. 4.3 shows that, 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. It is not the choice of the traders to support informal cross border livestock market as their alternative markets since only 1.1% of the traders indicate that this is their final option for livestock sale. This shows that, there is limited access to other livestock markets, like any other terminal markets including those markets situated at the border areas of Moyale.

When asked their preference for their choice of livestock marketing areas, as shown in Fig 4.4, they indicated as their main reason that *proximity* to the market is a major factor when livestock sale is considered. Taking into consideration cross border trade, focus group discussion results show that the traders resented the fact that they could not access 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. In addition, one of the key informants from Yabello Woreda pointed out that, there has been a total disarray of livestock marketing due to the emergence of loan defaults on those traders taking animals on a credit basis on the Kenyan side.

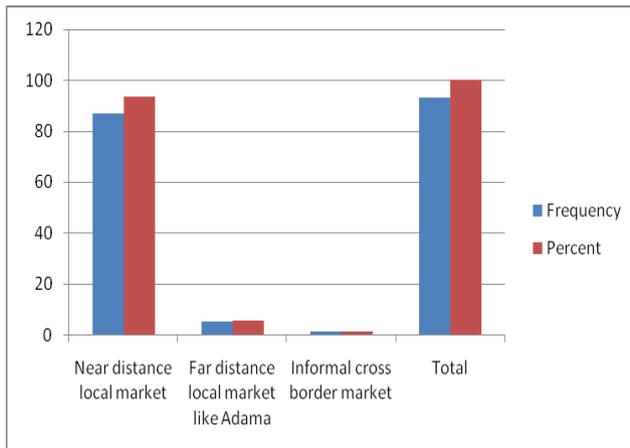


Fig.4.3 Market areas for livestock sales

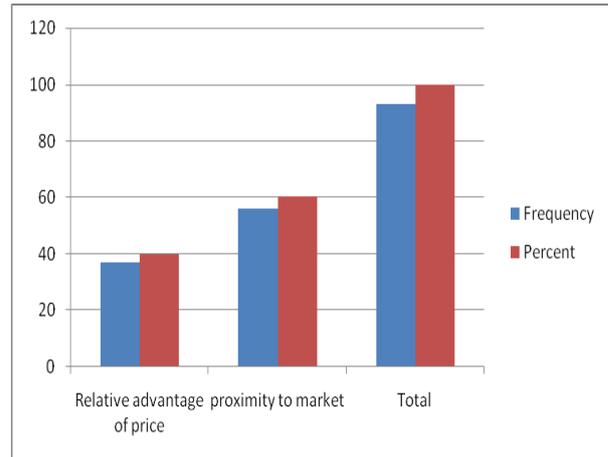


Fig. 4.4 Preference of traders to sell their animals

#### 4.2.4 Main Livestock Purchasers

Fig. 4.5 reveals that 48.4%, 36.6%, 8.6%, 6.5% sale of livestock is mainly carried out by larger traders, abattoirs, local butchers, and exporters respectively. Moreover, focus group discussion conducted with several other partners including pastoralist traders, local government officials at District, Zonal levels, and traditional institutional leaders confirmed that livestock marketing in pastoral areas faces multiple challenges coupled with a series of cognitive risks which forced the traders and the pastoralists to sell their animals on credit basis.

They do not have a well-streamlined livestock marketing system even though it is a paradoxical situation that we the livestock producers (pastoralists) own the livestock but lack appropriate marketing channels. 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. Currently, it is observed that there are many livestock suppliers but few buyers who come down from the highlands and the central market places. Despite

the appreciable number of livestock supply coming to the market places, there is lack of competition among buyers.

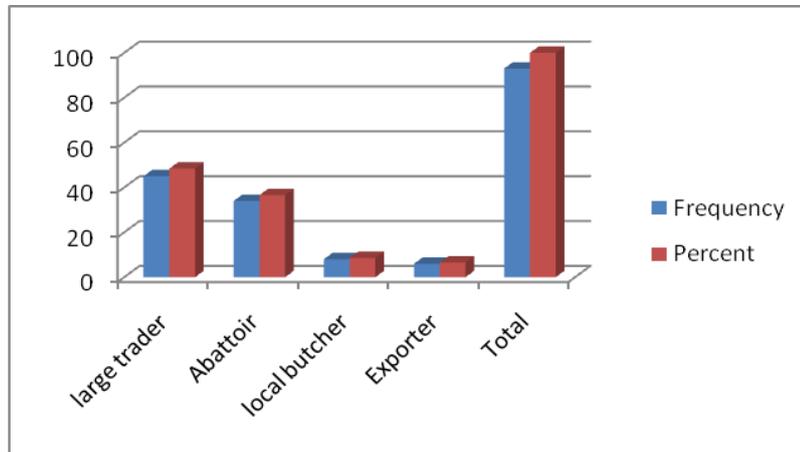


Fig. 4.5: Percentage of livestock purchasers

#### 4.2.5 Livestock market price determination

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.

As indicated in the fig.4.6, the traders' price determination at their purchase market and sales market are mainly influenced by the negotiation between buyers and sellers and the buyers own determination based on the expected prices and costs of animals. At the traders purchase market, the traders own determination and joint decision is higher than their sales market. However, the 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. Fig. 4.6 below indicates that when the frequency of price determination is examined for

the different market operators the frequency for the negotiation between the buyer and the sellers' category is 54.8%.

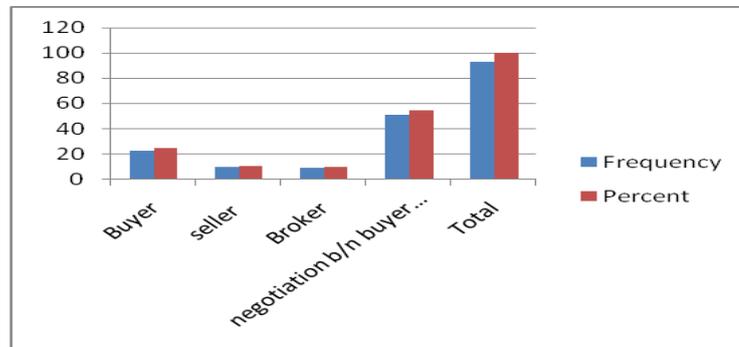


Fig 4.6 Price determining groups

#### 4.2.6 Methods of selling livestock

As this study was carried out in the Borana pastoral area, 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.

#### 4.2.7. Livestock marketing rules and regulations

Regarding livestock marketing rules and regulations, the survey data shows that large part (93.5%) of pastoralist traders state that there are no rules and regulations guiding livestock trading. The remaining 6.5% of the respondents state that there are rules and regulations that guide livestock trading. (See Fig. 4.7 below). 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. Thus, this scenario calls for awareness creation work for those majority groups who said there no rules and regulations. These are considered to be potential constraints capable of limiting pastoralist traders from getting access to improved marketing channels.

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 lotters. The current livestock marketing rules and regulations open room for pastoralist producers who engage in export market on individual and through formation of co-operative- all these require capacity and need empowerment. This can alleviate access to improved market.

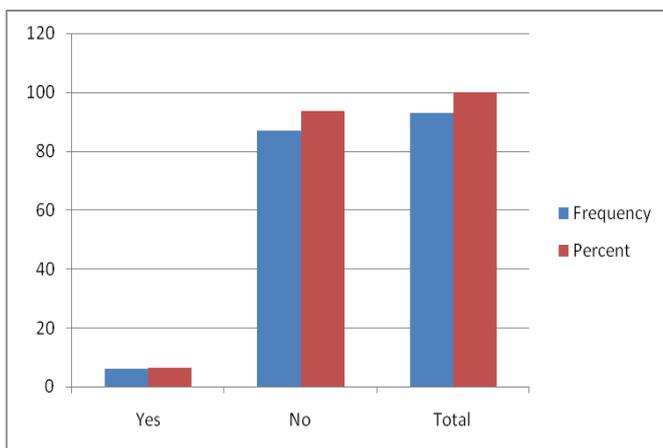


Fig 4.7: Response of pastoralist traders to existence of rules and regulations

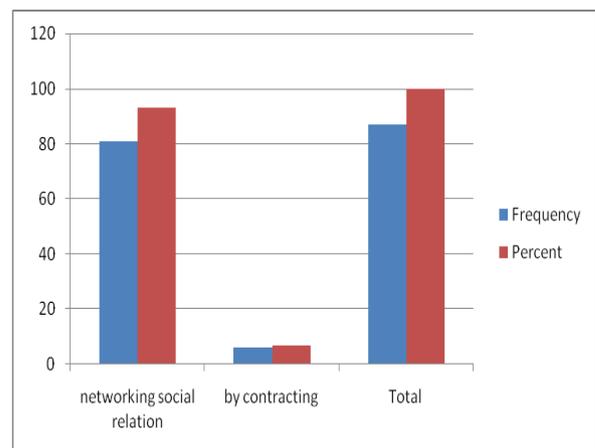


Fig. 4.8 Business undertaking

#### 4.2.8 Type of major livestock traded

As shown in Fig. 4.9, 67.7%, 15.5% and 17.2% of pastoralist traders state that cattle, camel and shoats are the types of animals mostly traded respectively. However, 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.

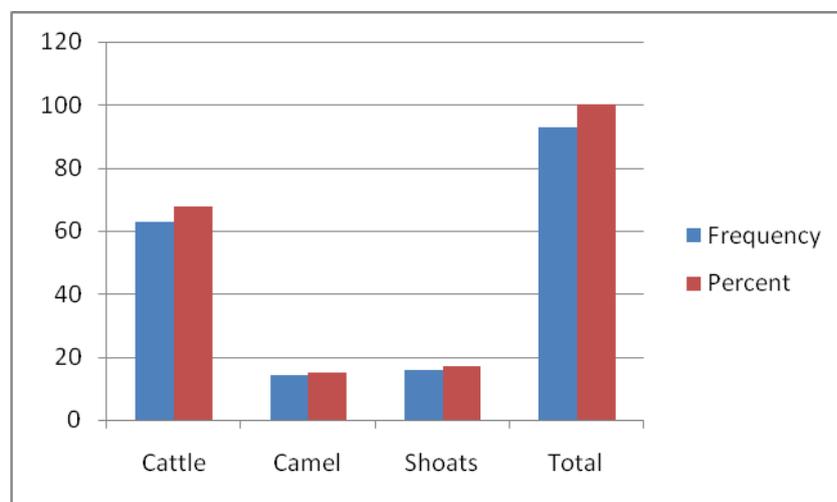


Fig. 4.9: Types of livestock traded

#### 4.2.9 Transportation system

In Ethiopia, the supply of livestock to the primary, secondary and terminal markets is mostly done through trekking (Yacob, 2002). Hence, livestock trekking was the most important mode of transportation in Borana rangeland because trekking was inexpensive than trucking. Accordingly, the results of this study revealed that 78.5% of the sample respondents trek their livestock to bush, primary and secondary markets. The remaining 7.5% and 14% use trucking and both trekking and trucking as the system of livestock transport, respectively. 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. Focus group discussion with traders and officials indicate that the mode of transport utilized for trucking livestock is inappropriate and ignore animal right.

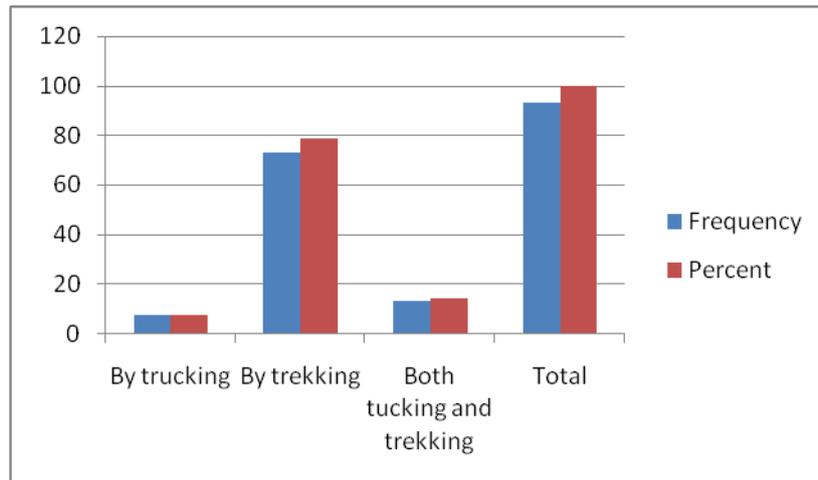


Fig. 4.10 Mode of transportation system

#### 4.2.10 Alternative markets for traders

During the interview with the traders, they were asked if there is an alternative option when they find that the prices of the local market are very poor except to sell the animals on a credit basis. During the analysis of the data, fig. 4.11 shows that 65.59% of pastoralist traders indicate that there is alternative. The remaining 34.41% confirmed that there is no alternative when the local market is poor. Moreover, the Fig. 4.12 also depicted that 75.4% of pastoralist trader's alternative is herding livestock until they will get good price for the livestock. Herding at their home cannot be considered as alternative for livestock markets. Cross border trading when local market poor is not supported by pastoralist traders since only 11.5% of traders state cross border as alternative market.

Furthermore, regarding reason for cross border trading, the survey data also revealed that out of few pastoralist traders those used cross border trading as the alternative, majority (57.1%) high price (as shown in fig.13. below) and 28.6% proximity to border town as their main reasons.

Focus group discussions with government officials indicate that one of the major problems in livestock marketing is cross border trade, which makes the country to lose revenue and foreign exchange earnings from the sector. Focus group discussion (FGD) with livestock traders indicate that according to regulation of the government cross border trade is illegal and tribal conflict in Southern Kenya border contribute to loss of Kenya market; because of such factor the majority of pastoral traders, they do not take cross border trade as an alternative.

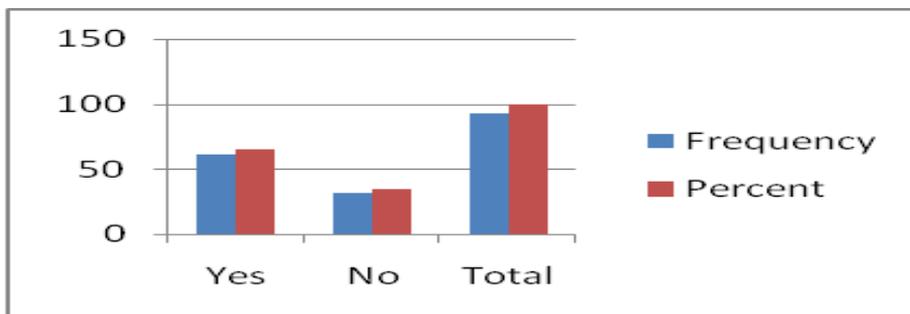


Fig. 4.11 Responses of pastoralist traders for existence of alternatives

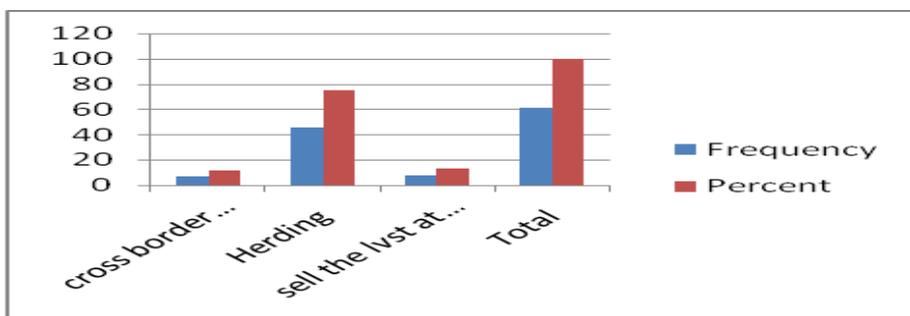


Fig. 4.12 Response of pastoral traders to available alternative

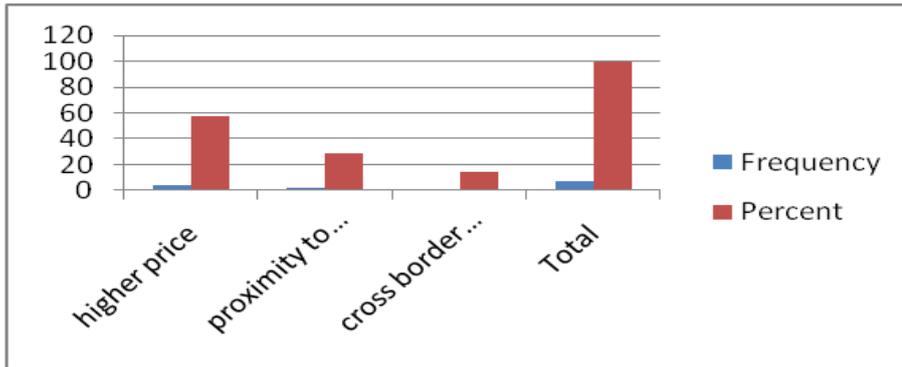


Fig.13 Reasons for engaging in the cross border trade

#### 4.2.11. Grade and standard

There are four grades of animals: grade 1 represents large mature animals for export quality. Grade 2 represents medium size export quality. Grade 3 represents young animals having good body condition used by export abattoirs. Grade 4 represents animals greater than immature and having average body condition mainly used for local consumption (Tesfaye, 2008). In spite of this information, there appears to be no well established grading and standard procedure. However sheep and goats are sold on scale. The rest of the animals are subjected to visual appraisal and bargaining to strike a balance between the buyers and seller needs.

### 4.3. Constraints and opportunities in livestock marketing

#### 4.3.1. Credit Sale as a major constraint

The result of this study revealed that the majority, 86% of the pastoralist traders sell their livestock on credit basis while only 14% of the traders deliver their livestock on cash and in advance sale. This shows that credit sale dominates livestock marketing transaction in Borana pastoral area.

Similar study conducted by Tiki Waktole, 2013, on Borna *Climate Change and Livestock Marketing Risk* indicate that livestock marketing chain from Borana to the

Middle East is partly characterized by informal credit operation has pushed many actors in lower level of the value chain out of business due to credit defaults.

Regarding reasons for selling on credit, out of 81 traders, those who sold their livestock on credit basis, 51.85% stated there are only fewer cash buyers, 32.1% said that every one sells on credit. The remaining 9.9 % & 6.2 % of the trader’s stated that there is absence of market and excess supply of livestock respectively. This implies that the pastoralist traders were obliged to sale livestock on credit basis because of fewer cash buyers and also selling on credit basis is regarded as institution. See fig.14 and fig.15 below.

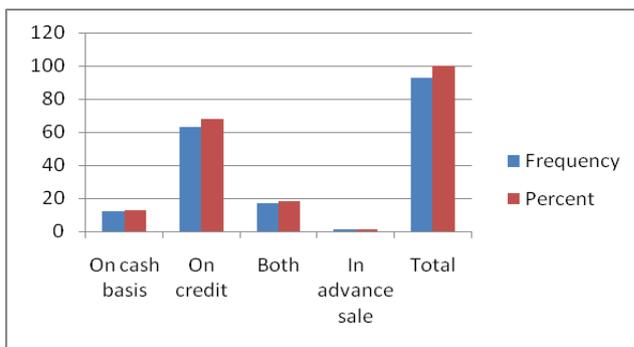


Fig. 4.14 Mode of sales

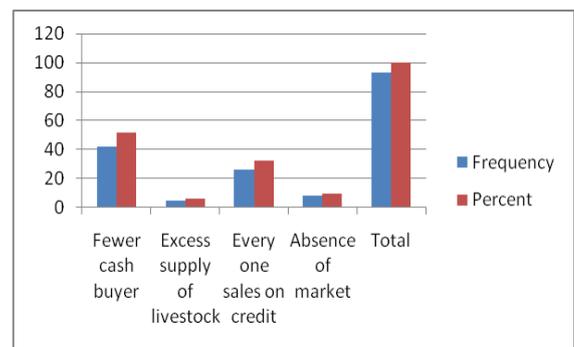


Fig. 4.15 Major reasons for credit sales

### 4.3.2 Contract Agreement arising from credit sale

The trader’s response concerning contract agreement showed in Fig. 4.16 that out of 81 traders who sell their livestock on credit basis, only 10.8% of pastoralist traders enter written contract agreement and the majority, 87.65% do not enter written contract agreement with the buyers.

In addition, Fig. 4.17 shows the types of contract agreement entered by traders. Out of 81 trades, those who sell their livestock on credit, only 1.24% (1 trader) sign formal contract during livestock delivery on credit. The implication is that, there is no

formal contact agreement. Since informal verbal agreement is not legally binding, the pastoralist traders were severed from loan default. This is evidenced by the result of focus group discussion and pastoral traders expressed that they are under serious risk and seeking solution from government and from almighty God. Lack of alternative option force them to sell on credit. For example, feeding and herding require expenses. Moreover at worst fear of drought causes them to sell their animals on credit basis. Key informant from Ethiopian Commodity Exchange (ECX) explained that merchants faced loan default regarding coffee market before. Nowadays after ECX has been established, transactional and financial problems have been addressed. During the FGD discussion, it was revealed that there appears to be no linkage with such a modern marketing agency that brings both buyers and sellers under one roof. Thus it is imperative that institution like ECX also bring on board those buyers and sellers of livestock. When pastoralists were asked about this situation, all they said was that it is only the Government and Almighty God that could bring about a suitable solution to this kind of problem.

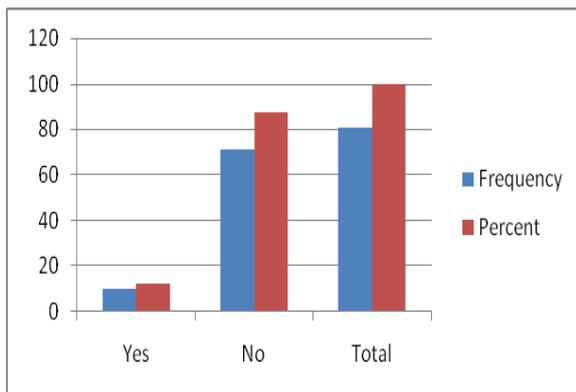


Fig. 4.16: Response to contractual agreement

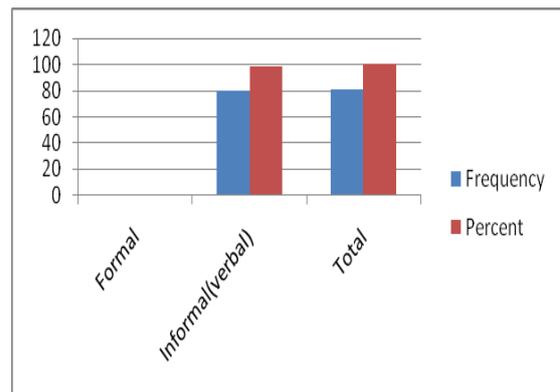


Fig 17. Types of contract

### 4.3.3 Loan Default, Mechanism and Problems

The survey data shows that, out of 81 pastoralist traders, those who sold on credit basis were significant in numbers i.e. 27 traders or 33.33% said they faced loan default and the others 66.67 % indicated that they didn't face loan default. This implies that in general there is a deficiency of credit taking and repayment system within the livestock marketing system in the region. In addition, the outcome of this survey shows that majority 92.60% of pastoralist traders preferred traditional way of settling disputes while only 7.40% resorted to court system as their alternative solution to the disputes of repayment issues. Even though traditional mechanism is not legally recognized and hence, considered to be a weak system to address the resolving of the conflicts over repayment of loans. The reason stated for preferring traditional mechanism, however, included lack of formal contract, which is supposed to give them protection against such loan defaults. In the final analysis, the loan default on the part of the loan giver is causes rather a disastrous situation as indicated in Fig4.20 where 74.5% and 25.5% of pastoralist traders lose profit and capital respectively. In addition, the loan giver faces a serious social impact such as conflict with customers and family members.

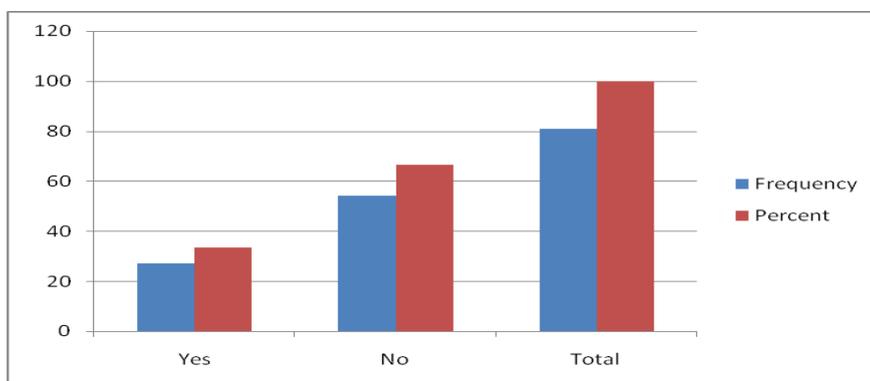


Fig. 4.18 Response of traders to facing loan default

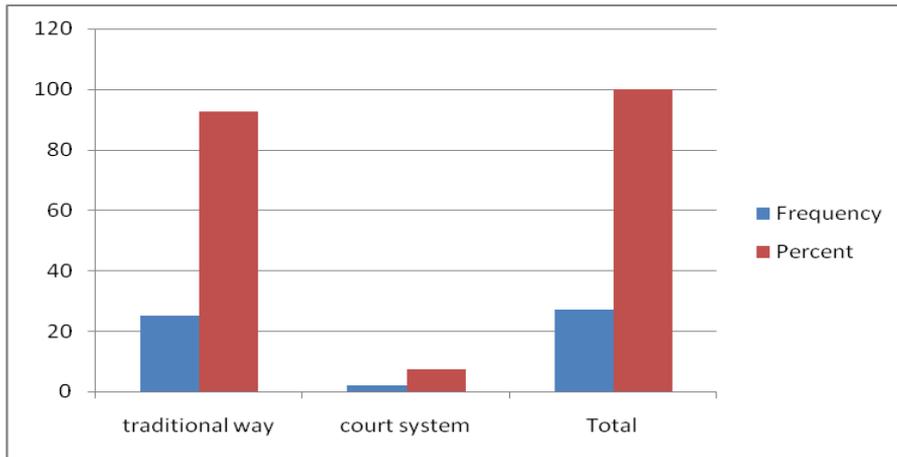


Fig.4.19 Mechanisms to tackle loan default problems

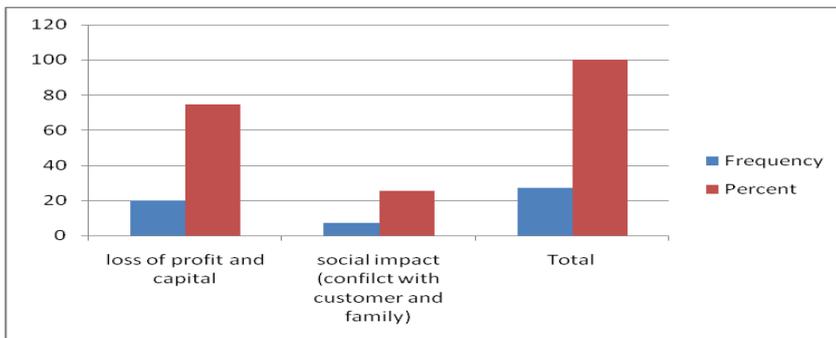


Fig.4.20 Type of problems encountered due to loan default

#### 4.3.4 Time to collect credit and interest payment

As indicated in Fig. 4.21, majority (46.91%) of pastoralist traders state 3-6 months and the others 35.80% state above 6 months as the time period to collect their credit. These 3 months and above, and sometimes unknown period is very long time for pastoralist traders which have limited capital. In addition, according to survey data, 100% of traders prove, as there were no any interests paid for delayed loan.

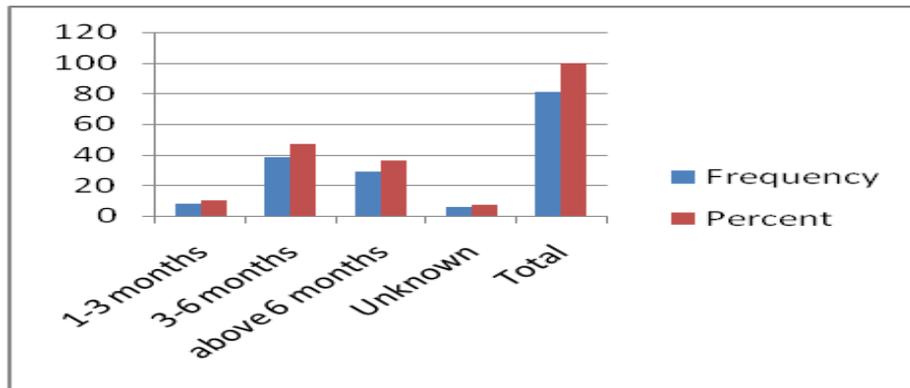


Fig. 4.21 Duration of Credit Collection

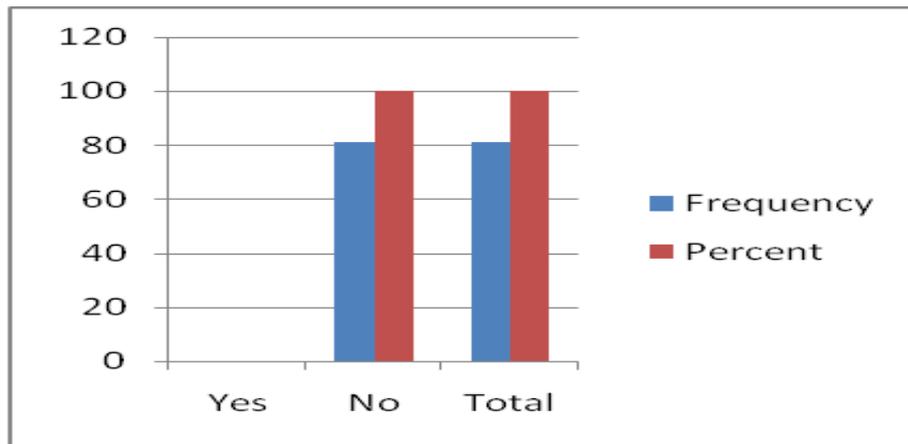


Fig. 4.22 Interest payment for delayed loan

### 4.3.5 Sample case studies on Loan Default and causes for unexpected Credit issuance

#### 4.3.5.1 Case No.1- Accident Death of loan taker

A man who resides in Yabello town gave out credit to a man who lives in Adama 256 camels and sheep in kind. Unfortunately this man who took the credit died after taking the loan. He did not leave a word behind to his family about the loan he took. In fact, he had already taken a loan amounting to 82 million Birr from the bank which made the case even more complicated regarding the repayment of the loan. Thus, the loan giver went to his family to collect the loan he gave out in kind. The family denied him because they do not know about this situation. So the loan giver wanted to use elderly people to mediate the case; but unfortunately, the mediation was not

successful and hence the loan giver lost the case entirely. This is a case where a credit given out can unnecessarily get lost as a result of not making a written agreement at the time when the two parties are negotiating to do such a business.

#### **4.3.5.2 Case No 2. Credit taken from a number of pastoralist community members**

A big local trader used a middleman to go around and collect 100 bulls and 150 camels from a number of pastoral community members on a credit basis. This middleman managed to collect these many numbers of animals and handed over to a livestock trader from the central highland. This trader in turn took over the animals and handed over to the exporters who made profits out of the business in the end. When the time of claiming the loan repayment comes, the credit taker only gave back 150,000 Birr and failed to pay the remaining 550,000 Birr that remained as a default payment. The representatives of the pastoralists went to Addis having used their own fund for transport and hotel expenses during their stay in Addis. This livestock trader from the highland also declined to settle the repayment. His reason was that he had also passed over the animals to exporters who also in turn denied the highland livestock trader to collect his loan from these exporters. This situation had infuriated the pastoralists and ultimately created socio-economic implications.

#### **4.3.5.3 Case No.3. Contractual Agreement - the ultimate remedy for both parties**

A well distinguished livestock trader in the area gave out 164 steers for feedlot operators after having entered 'Contractual Agreement' with them. The feed lotters used the animals for their export markets to make a profit. When the time comes for collecting the credit given on the animals in kind, the feed lotters came up with unacceptable reasons and started to delay the repayment process. It is at this juncture

that the credit giver went to the court to file his case by saying that the credit taker has failed to give him back the loan. Based on the previous contractual agreement both parties signed, the court gave a verdict that the feedlot establishment has to be frozen and to stop their operation until they make their full repayment to the livestock trader. During the following up of the court matter, there is always time and financial costs involved in suing the defaulters. Despite these phenomena, a credit giver had to incur these additional costs to win his case. At the end, there appears to be a favourable situation where the credit giver will bound to win the case and collect his dues from the loan takers. This indicates that, it would always pay to enter contractual agreement when such the two parties get involved in livestock trading.

#### **4.3.5.4 Energetic female livestock trader devoted herself to encourage good values and culture of saving**

Energetic female cattle traders living in Dire District, Madacho locality started her business of cattle trading by clothing her small liquor bar before two years at the time Borana community decided to ban the local drink known as “Araki’ for the sake of promoting and to encourage culture of saving and to promote ethical values. She expressed that lack of market and poor linkage with central market traders which result on credit sell is the main problem which is challenging her business. She said that, **Almighty Lord save us “waqa nu baas”** we shall give out credit .We want to be contacted directly with traders from centre for this to happen the role of the middlemen has to be limited.

### 4.3.6 Livestock purchase

According to survey data, the average number of livestock purchased by pastoralist traders per week is around thirteen. This is small number when we compare with the number of livestock brought to a market centre. Moreover, the Fig. 4.23 shows the factors that constrain pastoralist traders to buy more than this average number (i.e. 13). Accordingly, the traders identify financial problem (61.3%), lack of market (demand) (17.2%) and high livestock price as the main constraining factors to buy more livestock. This implies that financial problem is the factors that limit trader's purchasing power in pastoralist area of Borana. This finding is consistent with the finding of MC. peak and D. little 2006, which states that lack of access to fund to capitalize trading and insufficient connections with livestock buyers had both been mentioned by pastoralist traders as key bottle neck in livestock markets.

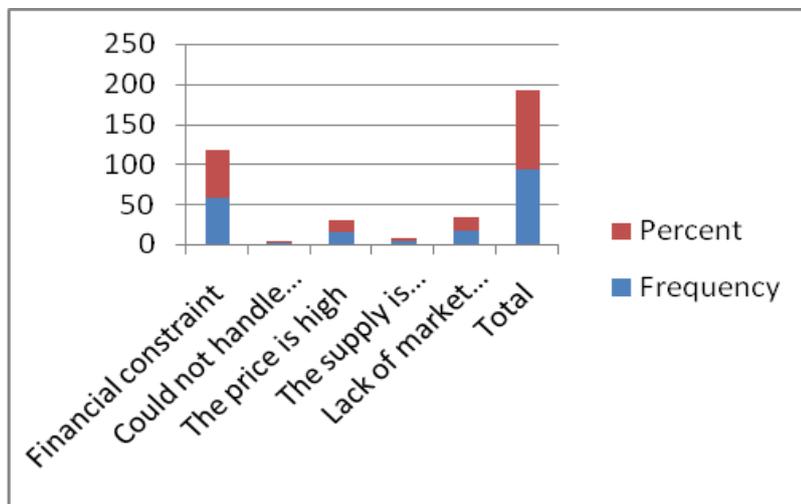


Fig. 4.23: Livestock purchase and constraining factors

### 4.3.7 Transportation Problem

Marketing also involves the movement of goods from the point of exchange to their final destination. This movement involves such operations as transportation, storage and processing (physical functions), grading, the provision of finance, risk-bearing

and the dissemination of market information (facilitating functions). (Kohls & Uhi, 1985)

Since transportation is backbone for every developmental activities including livestock marketing, this study considers transportation problems and distance from the market centres for pastoralist traders of Borana Zone. Therefore, the result of this study shows that around half (48.39%) of respondents agreed as there is transportation problem and the other 51.61% of respondents state as there were no transportation problem. This implies that transportation is the moderate problems in the pastoralist area of Borana.

The survey data also depicts the distance from market centres. Accordingly, majority (64.52%) of pastoralist traders indicates that the market centres have medium distances from their residences and the remaining 18.28% and 17.20% of pastoralist traders states as the market centres are very far and short distances from their residencies, respectively.

Moreover, the Fig. 4.26 also shows the state of road and large parts (63.44%) of the respondents indicate as the road is fairly maintained and the remaining 11.8% and 24.73% of the pastoralist traders states that the road is properly maintained poorly maintained. This implies that the state of road is at fair position.

Discussion with key informant from Borana Zonal agency of transport indicate that despite efforts undertaken by Regional and Local government to link farmers/pastoralist producers with market through universal rural road access program(URRAP) majority of the rural road are dry weather roads which have limited accessibility during rainy season.

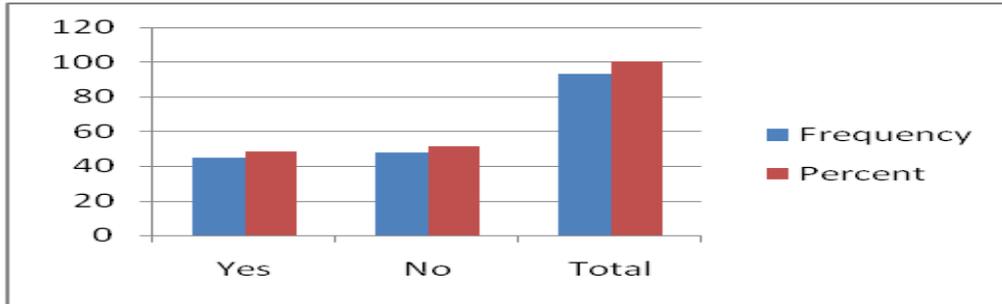


Fig. 4.24: Different responses of pastoralist traders to availability of transport,

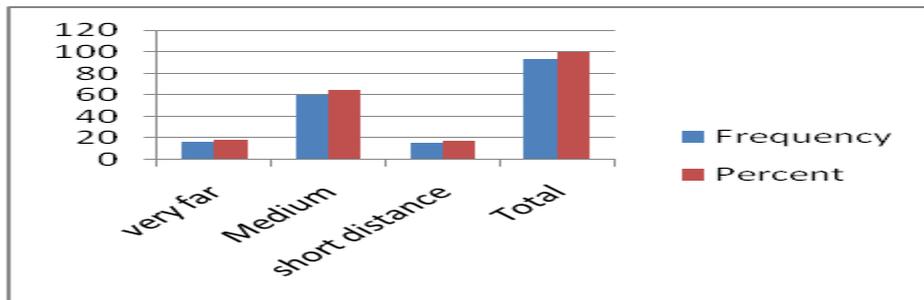


Fig. 4.25 Proximity to market

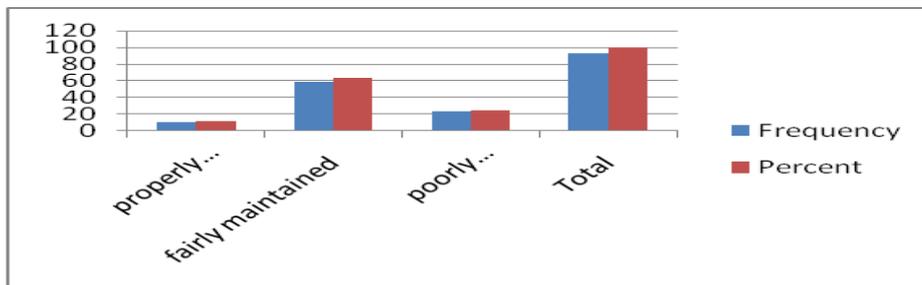


Fig. 4.26 Road condition

### 4.3.8 Market information

Market information is vital to minimize information gaps and uncertainties that exist in the pastoralist community. Producers impose it in their planning of production and marketing. On the other hand, other market participants in arriving at optimal trading decisions identically require it. According to the results of this study on market information access, majority of the respondents (80.64%) got market information before they went out to sell their livestock. Regarding sources of market information,

the Fig. 4.28 shows that 59.14% of the sample respondents indicate own market visit, while the others 24.73%, 8.60% and 7.53% mentioned Relatives, Neighbours and Other as source of market information, respectively.

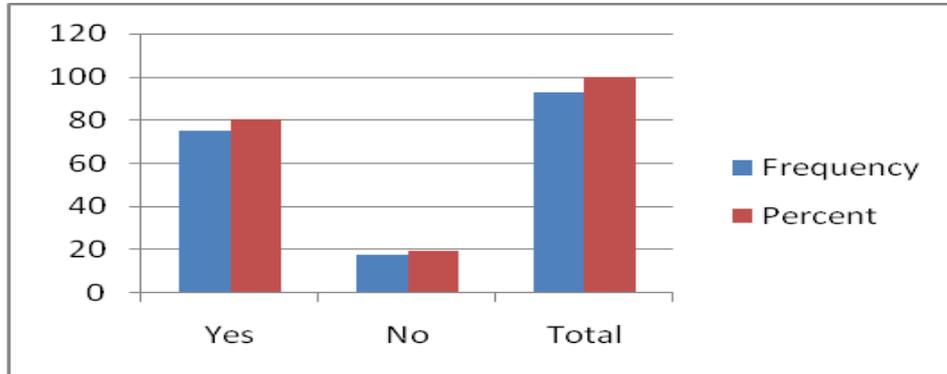


Fig. 4.27 Responses of pastoral traders to access market information before sale

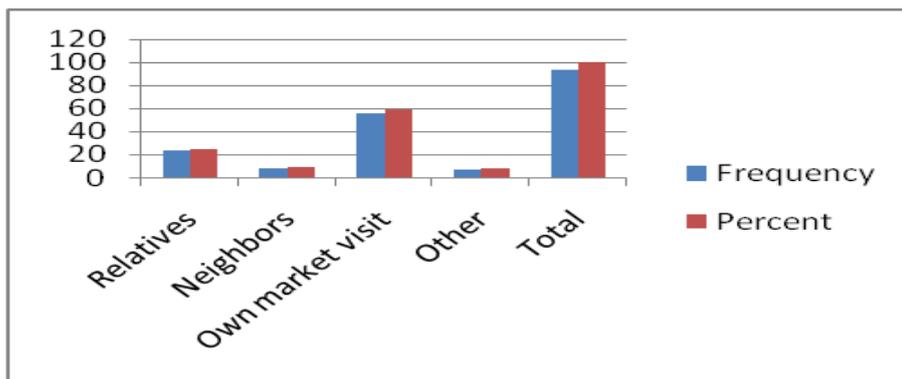


Fig 4.28 Sources of market information before sale

#### 4.3. 9 Market information preference

On the information preference side, Fig. 4.29 shows that, 58.06% of respondents preferred own market visits, 23.66% of them preferred market information from relatives, and the remaining 18.38% preferred neighbours as the source of market information. The main reasons for selecting the specified source(s) of market information are reliability (53.76%) and (46.24%) accessibility. 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.

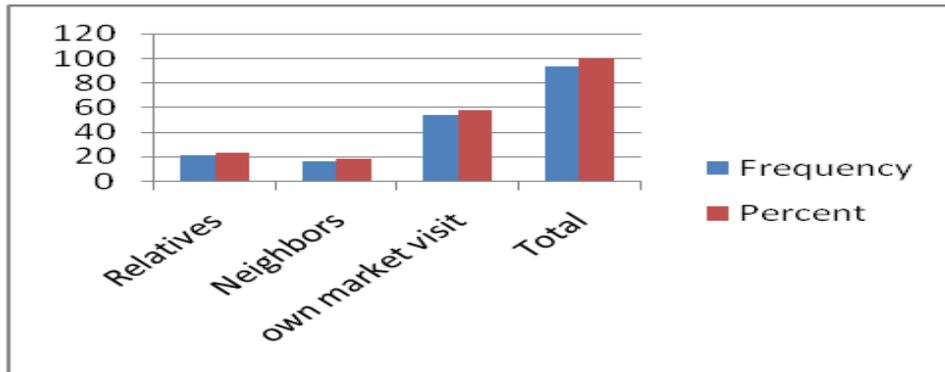


Fig. 4.29 Market information preference

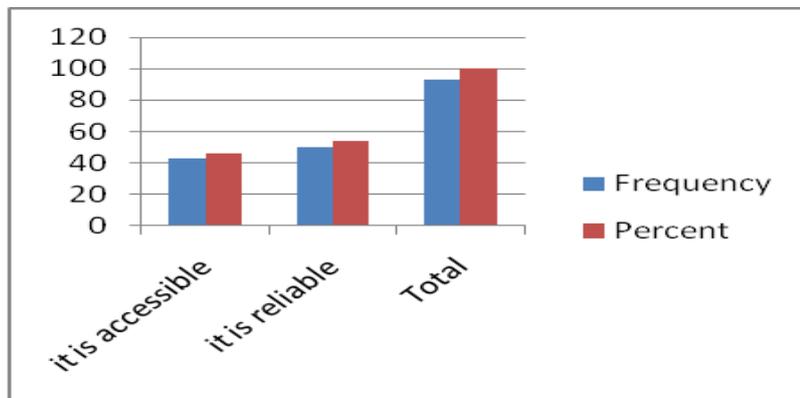


Fig.4.30 Reasons for preference

#### 4.3.10 Market information frequency and accuracy

Market information frequency and accuracy are very critical for all marketing activities. Therefore, it is highly valuable for marketers (both buyers and sellers) to get enough market information before they go to the market centres. Additionally, accuracy of the information they got is paramount importance for both buyers and

sellers. According to survey data, 60.21%, 27.96% and 11.83% of the respondents indicates they get market information weekly, fortnightly and sometimes respectively.

Moreover, regarding accuracy of market information, the pastoralist trader's rate as the market information accuracy is medium (43.01%), High (25.81%), very high (20.43%) and very low (10.75%).

Over all 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. There limitation in quality of service and net work coverage.

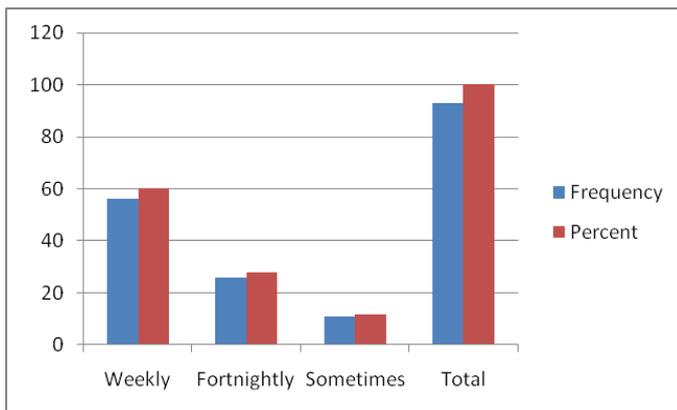


Fig.4.31: Frequency of market information

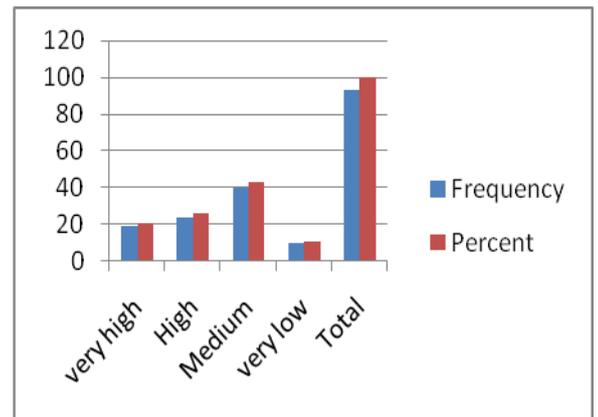


Fig. 4.32: Level of accuracy

#### 4.3.11. Access to and source of credit

As indicated in Fig. 4.33, 23.66% of respondent availed credit from different sources and 76.34% of respondents did not get credit for the last few years. Out of this 23.66% avail credit from different sources, 36.36%, 9.09%, 9.09% and 45.45% indicated Banks, micro finance institutions, saving and credit associations, and friends and relatives as their source of credit, respectively. Her friends and relatives were indicated as the main source of credit for the pastoralist traders of Borana pastoralist

area, followed by banks. Therefore, in the study area the contribution of financial institutions in providing credit to pastoralist traders was found to be insignificant. The Borana pastoralist's traders select friends and relatives as their main source of credit because of different reasons (fig.4.35); - such as easier to get loan and less collateral required by their friends and relatives. Focus group discussion and key informant interview with traditional leaders indicate that access to credit to pastoralist and their traders limited due-to livestock not taken as collateral by banks. And discussion under taken with Yabello Woreda Commercial Bank manager indicate that livestock not taken as collateral due-to its risk of death from drought and disease. Lack cash to capitalize trading indicated as one of constraining factor in livestock trading.

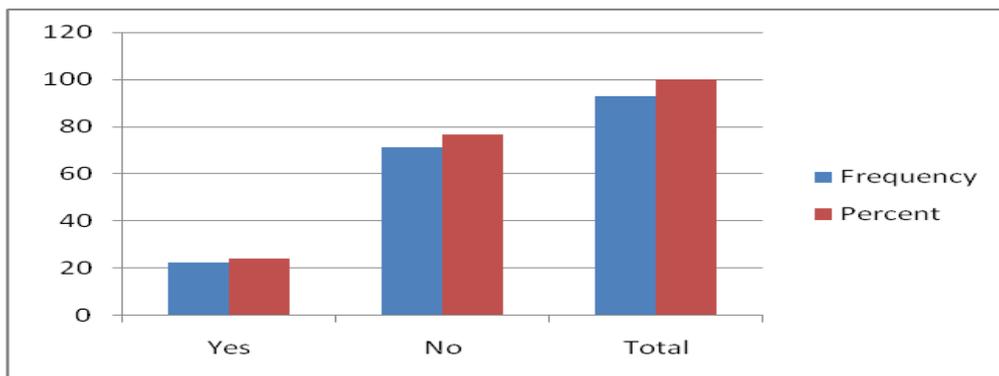


Fig. 4.33: Responses of traders to access credit

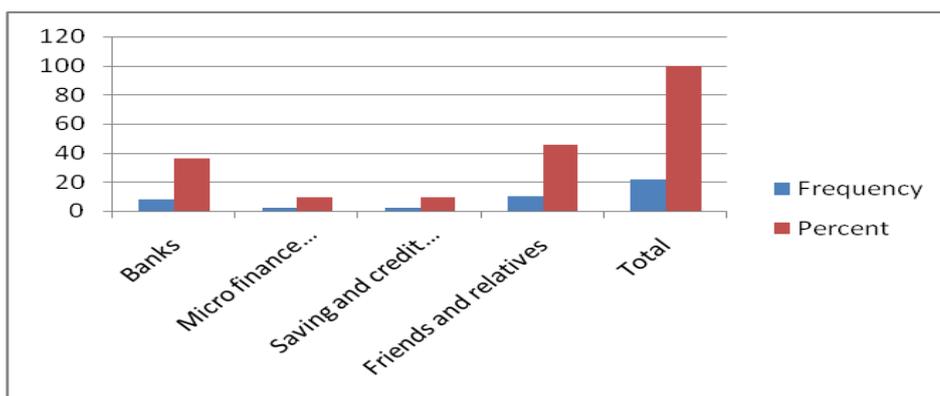


Fig. 4.34: Responses of traders to the source and availability of credit

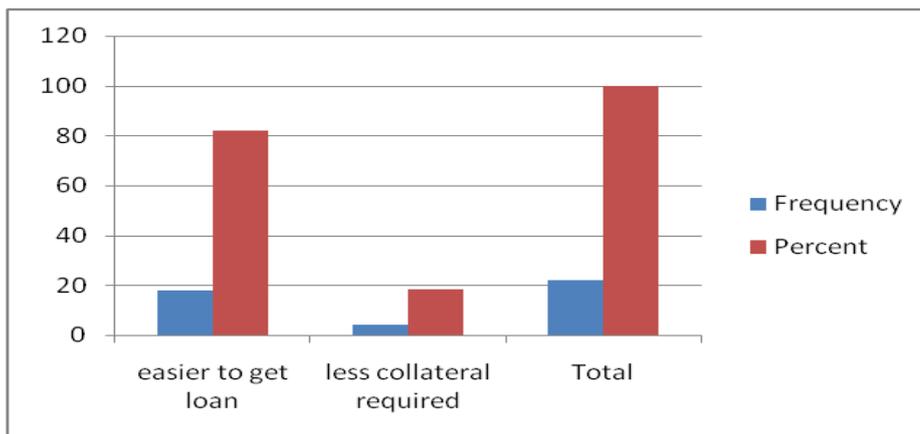


Fig 4.35 Reasons for preference of specific sources of credit

#### 4.3.12. Market participants and intermediaries

In any of the marketing system, all the market participants have their own role in determining the marketing behaviour of the specific market. More over marketing provides economic benefits to the entire local livelihood in creating alternative economic opportunities. Every livestock marketing actors has their own role and exists similarly in each market over the Zone. The large numbers of market participants in all livestock market centres of the area are livestock sellers and buyers. These sellers and buyers are also divided according to their scale and purpose of operation. There are different groups of sellers and buyers who are linked at all levels of market chains. The first groups are pastoralists who come to sale their animal instigated by immediate cash need, the rise in demand or the drought condition. The second groups are local traders. These traders are mainly used to collect animals from pastoralists at farm gate and sale to other assembler traders by adding their own margin at their main trading location and sometimes they transport animals to other central markets when they take for granted higher demand. The third groups are wholesale traders who are small in numbers at all markets compared to the first and

second groups. These traders are operating at large scale at all levels of market yards in the Zone. In using the economics of scale especially at transportation cost, they take the largest market share of animals supplied and highest share from retail price at the expense of pastoralists.

Mainly they collect animals from zonal markets and sell at terminal markets in other regions. But sometimes they assemble animals from local markets when the demand is high at terminals by considering the marginal costs they add and the price they expect at terminal markets. The fourth groups are buying agents of live animal exporters and export abattoirs.

The other market participants are market intermediaries that consist of brokers, sales agents and commission agents (Tesfaye, 2008).

Therefore, as indicated in Fig. 4.36, greater part 78.5% of pastoralist traders agreed the use of intermediaries and only 21.5% of pastoralist traders state as the didn't use intermediaries.

In focus group discussion pastoral traders expressed their resent and deep concern about broker's role which limited their opportunity and access to communicate with the traders from highland and terminal markets for livestock sale even though the new livestock regulation acts support and favour the producers.

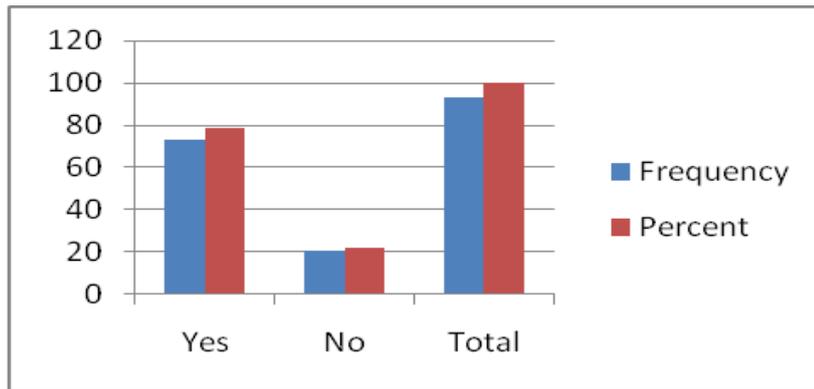


Fig. 4:36 Responses of pastoralists to use intermediaries

#### 4.3.13. Drought

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. Accordingly, in this study majority 88.2% of sample respondents mentioned that drought is the main problem. Regarding the causes of drought, 48.39% 4.30% and 47.31% of sample respondents indicate lack of rain, overpopulation of livestock and both lack of rain and over population of livestock as the main causes of drought, respectively (fig.4.38). Therefore, lack of rain is indicated as the main cause of drought in pastoralist area of Borana. Habtamu (2008) stated that the cumulative effect of several years of drought has severely affected pastoral production and marketing. Water scarcity, general range degradation due to a variety of factors, poor veterinary services and lack of effective pastoral extension services are the underlying causes of this problem, the finding of this study coincide with what said. Drought deteriorates animal body condition and emaciated

animal take long time to recover weight and can result in death of animal. In last two decades Borana pastoralist had lost livestock estimated in hundred million dollars.

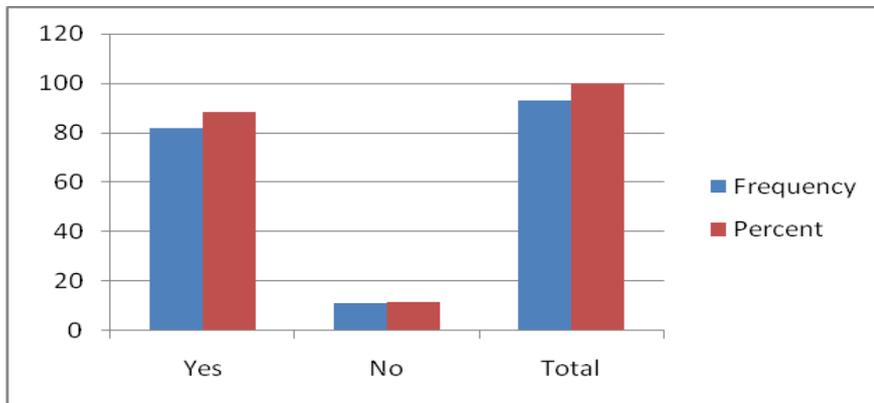


Fig. 4.37: Responses of pastoralist towards drought as major problem

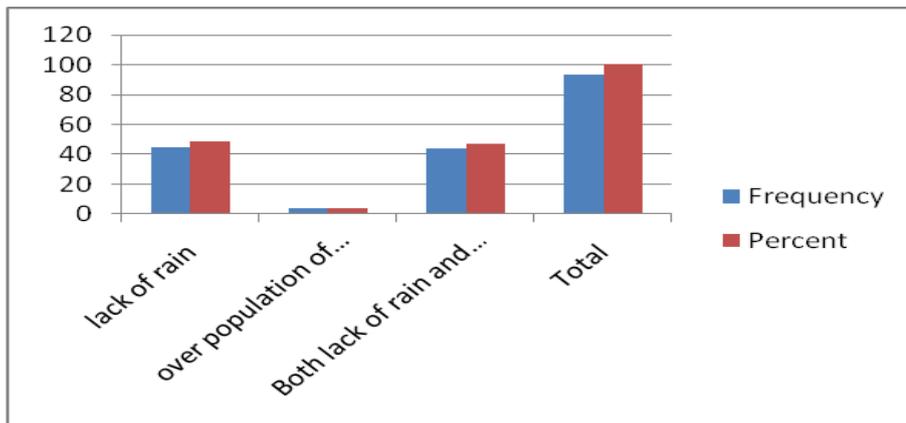


Fig. 4.38 Main reasons for causes of drought

#### 4.3.14 Livestock Disease

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 (Wondwosen, 2003). According to this study, 78.49% of sample respondents identified, as disease is constraint in livestock marketing in the study area and the remaining 21.51% of pastoralist traders oppose the prevalence of livestock disease as

constraint in livestock marketing of Borana pastoralist area. Here, the majority of respondents confirm that the prevalence of livestock disease is a constraining factor in livestock marketing in of Borana pastoral area.

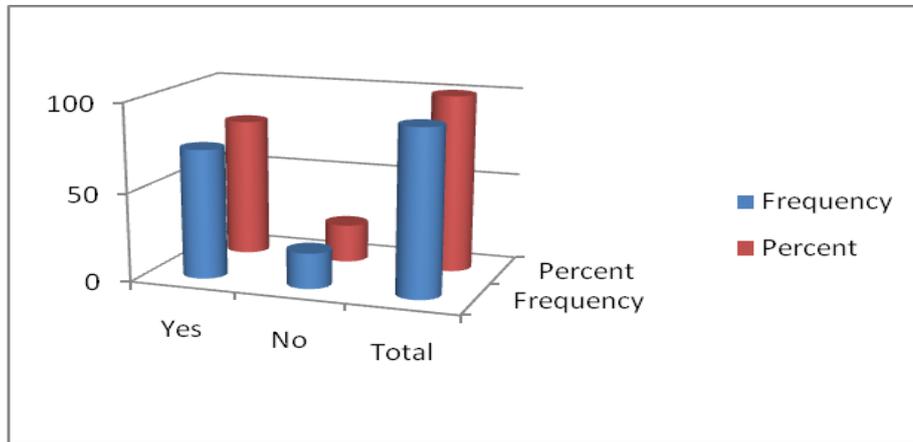


Fig. 4.39 Responses of pastoralist trader to livestock Disease as a constraint factor

#### 4.3.15. Livestock Suppliers

Borana pastoralist traders are interviewed whether they have a regular suppliers when they buy animals; and the result indicates that the majority, 77.42% of the respondents, have no regular suppliers and the other 22.58% of traders agreed that they have regular suppliers at livestock purchase.

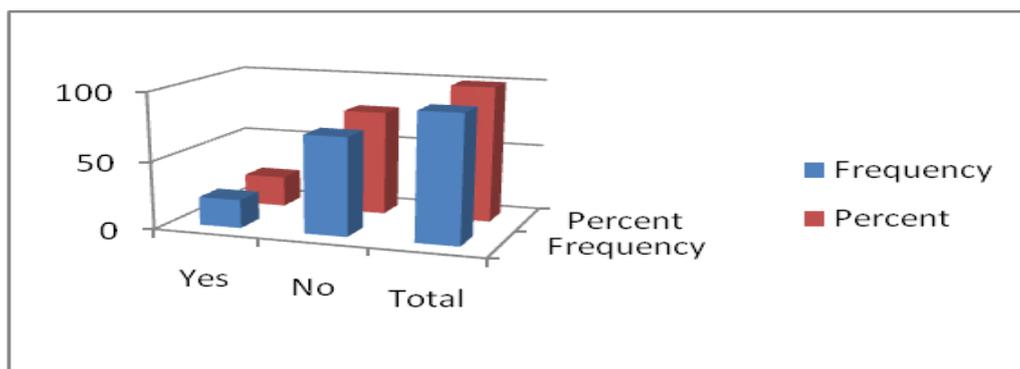


Fig. 4.40: Responses of pastoralist traders to presence of regular suppliers.

### 4.3.16 Customers

In this study, traders are asked whether they have a regular customers when they want to sell livestock; and the result indicates that the majority, 59.14% of the respondents, have no regular customers and the other 40.86% of traders agreed as they have regular customers during livestock sale.

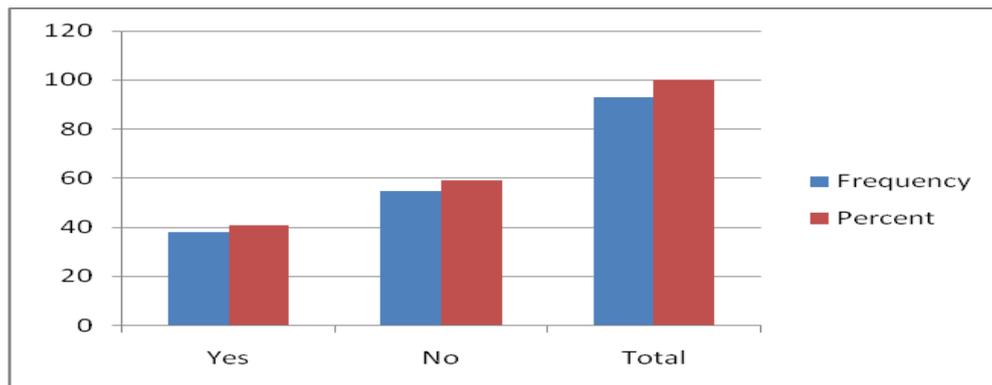


Fig. 4.41: Responses of pastoralist traders to the availability of regular customers

### 4.3.17 Seasonality of livestock marketing

Focus group discussion undertaken with pastoral traders, government officials and key informant interview indicate that livestock market in Borena pastoral area vulnerable to the seasonality of demand and price fluctuation. Price of animal may rise and fall. Price fluctuations were mainly attributed socio-economic and political situation of importing countries and changing demands depending on the Ethiopian and Middle Eastern religious calendars'. Pastoralists and their traders express their deep concern due to lack of well organized market for their livestock .Livestock marketing in the areas full of risk and uncertainties to pastoralists and local traders at lower level of value chain.

### 4.3.18 Constraints in livestock marketing

In order to know the top constraints, which limit pastoralist traders from accessing improved markets, traders were asked to rank constraints by using Likert scale. In view of that, constraints were ranked from top to down based on their effects as shown in the Table 4.2.below. Hence, the top ten affecting constraints were identified as being Credit sale, Lack of capital, Poor linkage with high land and export marketing, Drought, Lack of institution to support the system, Conflict, Lack of entrepreneur capacity, Lack of market information, Seasonality in demand and Livestock disease.

**Table 4.2. Constraints ranked by pastoralist traders**

By using Likert scale (0 – no effect, 1 – Low effect, 2 – medium effect, 3 – High effect)					
	N	Minimum	Maximum	Mean	Rank
Credit sale	93	0	3	2.86	1
Lack of capital	93	1	3	2.73	2
Poor linkage with high land and export marketing	93	0	3	2.61	3
Drought	93	0	3	2.6	4
Lack of institution for support	93	1	3	2.55	5
Conflict	83	0	3	2.45	6
Lack of Entrepreneur capacity	93	0	3	2.43	7
Lack of market information	93	0	3	2.34	8
Seasonality in demand	93	0	3	2.16	9
Livestock disease	93	0	3	2.13	10
Lack of grade and standard	93	0	3	2.08	11
Poor infrastructure	93	0	3	1.83	12
Poor road condition	93	0	3	1.66	13
Seasonality in supply	93	0	3	1.58	14
Inadequate market infrastructure	93	0	3	1.53	15
High transaction cost	93	0	3	1.46	16
High tax imposed	93	0	3	1.44	17

**Source:** Survey data 2014/15

#### 4.3.19. Opportunity in Livestock marketing

Despite identifying a number of constraints, the pastoralist traders also identify and rank opportunities for livestock marketing. Accordingly, the pastoralist traders identifies and ranks major opportunities of livestock marketing:- Highly demanded Borana breed, High livestock population, Increased number of livestock markets, Improved veterinary service, Favourable government policy, Road infrastructure development and communication, Establishment of supporting institution and Cross border trade as shown in table 4.3 bellow. Moreover, the results of FGD with the government officials, Key informant interview supported the views of pastoral traders.

**Table 4.3. Opportunities ranked by pastoralist traders**

Rank of opportunity by using ordinal level data (1 <sup>st</sup> rank– 1, 2 <sup>nd</sup> rank – 2, 3 <sup>rd</sup> rank - 3, 4 <sup>th</sup> rank -4, 5 <sup>th</sup> rank -5, 6 <sup>th</sup> rank - 6, 7 <sup>th</sup> rank – 7 and 8 <sup>th</sup> rank – 8)					
Opportunities	N	Minimum	Maximum	Mean	Rank
Highly demanded Borana breed	93	1	6	2.13	1
High livestock population	93	1	7	2.76	2
Increased number of livestock markets	93	1	8	3.25	3
Improved veterinary service	93	1	8	4.33	4
Favourable government policy	93	1	8	4.4	5
Road infrastructure development and communication	93	1	8	5.01	6
Establishment of supporting institution	93	1	8	7.01	7
Cross border trade	93	1	8	7.05	8

**Source:** Survey data 2014/15

## CHAPTER FIVE

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### 5. Conclusion and Recommendation

#### 5.1 Conclusion

The major objectives of this study were to examine constraints and opportunities of livestock marketing for pastoralist traders in two pastoral Districts (Dire and Yabello) of Borena Zones, Oromia Regional state, Ethiopia.

This study also tried to assess how the existing livestock marketing system function and efforts undertaken to solve livestock marketing problems in these areas. To gather relevant information for this study the researcher used different data collection tools such as semi structured interview schedule, focus group discussion (FGD), case studies and observation. The research respondents were livestock traders and Key Informant (KI) from relevant institutions of governmental working in the area for the wellbeing of pastoralists.

These data collection tools used to support one another and to triangulate the information gained from different respondents so that relevant and working conclusion arrived at.

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.

With regard to major constraints, despite all potentials and opportunities, the research results show that 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. The livestock marketing system in the area is not well functioning. This is evidenced by the fact that there is no well organized standard as well formalized credit system put in place. Accordingly, the livestock sale is being conducted solely on trust basis which brings up socio-economic impacts on the livelihoods of the pastoralists. Thus, livestock marketing in Borana pastoral area needs to be streamlined in such a way that the pastoral producers, local traders and the country ought to benefit from the potential existing in the area. This implies that the government has to empower the pastoralists' traders to access local and export market by capitalizing and encouraging formal contractual agreement to operate efficiently in all market places.

In addition, the government has to facilitate and organize a value chain system whereby positive linkage is strengthened between the pastoralists and livestock traders from centres, feedlot operators, abattoirs, and exporters. For this situation to operate efficiently, the linkage has to be encouraged and facilitated by the government institutions at various levels.

## 5.2. Recommendation

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
- Essential awareness creation/education 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.

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## Annexure

### Annexure-1: Tools for Data collection

#### Semi structured interview schedule for livestock traders

Dear respondents' Please be informed that I am a post graduate student of Indira Gandhi National Open University under taking a research paper on opportunities and constraints of livestock market in Borena Zone's pastoral districts. The Semi structured interview schedule is used solely for the purpose of this research so your answer should be confidential and there is no need of writing your name here. Thank you in advance for your cooperation

Name of respondent \_\_\_\_\_

Woreda \_\_\_\_\_

Kebele \_\_\_\_\_

#### Part I

#### Demographic characteristic of the respondents

1. Sex of respondent

1. Male  2. Female

2. Age of respondent

1. Less than 15 years  b.15-30 years  c. 30-64 years  d. above 64 years

3. Level of education?

a. Illiterate  b. Grade 1-8  c. Grade 9-12 complete  d. Diploma and above

4. Marital status?

a. single  b. married  c. divorced  d. Widowed

5. What is your major occupation?

a. Livestock trading  b. Farming  c. Pastoralism  d. Broking

e. others (specify) \_\_\_\_\_

6. Do you have another occupation other than your major occupation?

A. Yes  B. No

7. If your answer for question No. 6 is yes, what is your occupation?

\_\_\_\_\_

## PART II

### Existing livestock marketing function in Borana pastoralist area

1. Where did you purchase livestock for resale most of the time?

a. Producer  b. Bush market  c. Primary market  d. secondary   
market. Others (specify) \_\_\_\_\_

2. How you undertake livestock trading

a. with license  b. without license

3. Where do you mostly sell your livestock?

1. near distance local market  2. Far distance local market like Adama

3. Informal cross border market  4. Other (specify) \_\_\_\_\_

4. What is your reason of preference while you decide to sell your livestock at a Particular market?

1. Relative advantage of price  2. Proximity to the market

3. Other (specify) \_\_\_\_\_

5. To whom do you sell your livestock?

1. Large trader  2. Abattoir  3. Local butcher

4. Exporter  5. Other (specify) \_\_\_\_\_

6. Who determine the price at the market place?

1. Seller  2. Buyer  3. Broker

4. Negotiation b/n seller and buyer  5. Other (specify) -----

7. On what basis you sale livestock majority of the time?

1. By weight bases

2. By heart girth

3. By following prevailing market price

4. Other (specify) \_\_\_\_\_

8. Do you have any rule and regulations guiding livestock trading?

1. Yes  2. No

9. If no, how do you undertake livestock trading?

1. Networking Social relation

2. By Contracting

3. Others(specify) \_\_\_\_\_

10. Which were the most important animals that you trade in the last few years?

a. Cattle  B. Camel  C. Shots

11. What kind of transportation system do you use for livestock in order to reach the market place?

1. By trucking

2. By trekking

3. Both

4. Other(specify) \_\_\_\_\_

12. When the domestic market are extremely poor, do you have any alternative to sell your livestock other than credit selling?

1. Yes  2. No

13. If your answer to No. 12 is yes, what is/are the alternative?

a. Cross-border trading  b. Herding  c. Sell the cattle at lower price   
d. other (specify) \_\_\_\_\_

14. If your answer is a, what are the reason behind, for you to engage in cross-border trading?  
a. Higher price  b. Proximity to border town

c. Cross-border offer consumers goods at lower price

d. other (specify) \_\_\_\_\_

15. Is cross-border trading sustainable as compare to the domestic one?

a. Yes  b. No

16. If your answer to No. 15 is No, then what are the constraining factors?

a. Cross-border legal restriction

b. Institutional cross-border trade ban due to disease outbreak

c. Tribal conflict  d. other (specify) \_\_\_\_\_

### Part III

#### Major opportunities and constraints

17. How could you deliver sale of your livestock mostly?

1. On cash basis  2) Oncredit  3) Both  4. In advance sale

5. Other specify\_\_\_\_\_

18. If on credit do you enter in to contractual agreement?

1. Yes  2. No

19. If your answer to question no, 18 is yes, what type of contractual agreement you enter?

a) Formal  b. informal other (specify) \_\_\_\_\_

20. What is your reason for selling livestock on credit basis in your area?

1. Fewer cash buyer  2. Excess supply of livestock

3. Every one sells on credit  4. Means of higher price

5. Absence of market  6. Other

(specify)\_\_\_\_\_

21. When selling on credit could you face loan default?

1. Yes  2.No

22. What enforcement mechanism do you employ to tackle the problem if your Answer is yes?

a) Traditional way  b) Court system

c) Others (specify) \_\_\_\_\_

23. What is the reason of your preference to each method?

a. Reason for choosing the traditional way \_\_\_\_\_

b. Reason for choosing the court system \_\_\_\_\_

24. What type of problem you encountered due to loan default?

a) Loss of profit and capital  b) Social impact (conflict with customer and in family)  c) other specify \_\_\_\_\_

25. How long it takes to collect your credit?

a. 1-3 months  b. 3-6 months  c. Above 6 months  d. Unknown

26. Do you get any interest for delayed payment?

Yes  No

27. How many livestock on average can you purchase per week? -----

28. Why are you not purchasing more than this number per week?

1. Financial constraints  2. Could not handle more than this number

3. The price is high  4. The supply is insufficient

5. Lack of market (demand)  6. Other specify \_\_\_\_\_

29. Is there road/ transportation problem to access market in your Area?

1. Yes  2. No

30. If yes, how do you consider distance of your market that frequently you visit to sell your livestock?

1. Very far  2. Medium  3. Average  4. short distance

31. What is the state of the road to the livestock market?

1) Properly maintained  2) Fairly Maintained  3) Poorly aintained

32. How many hours does it take to reach the nearest & farthest market that you frequently visit to sell your livestock?

1. Nearest market -----day 2. Farthest market-----day

33. Do you get market information before you sell your cattle?

1. Yes  2. No

34. If yes, from where do you get market information?

1. Government office  2. Relatives  3. Neighbours   
4. Own markets visit  5. Other (specify)\_\_\_\_\_

35. How frequent do you get market information?

1. Weekly  2. Fortnightly  3. Sometimes   
4. Other (specify)\_\_\_\_\_

36. Which source of market information do you prefer?

1. Government office  2. Relatives  3. Neighbors   
4. Own market visit  5. Other (specify) \_\_\_\_\_

37. What is your reason for selecting the specified source(s) of market information?

1. It is accessible  2. It is reliable   
3. Other (specify)\_\_\_\_\_

38. To what extent is the market information you get is accurate?

1. Very high  2. High  3. Medium  4. Low  5. Very low   
6. Other (specify) \_\_\_\_\_

39. Do you have access to any form of credit (including informal sources)?

1. yes  2. No

40. If yes, please indicate the sources and amount

Credit source	Amount in ETB
1. Bank	_____
2. Micro finance institution	_____
3. Saving and credit association's	_____

4. NGO \_\_\_\_\_
5. Other traders \_\_\_\_\_
6. Moneylender \_\_\_\_\_
7. Friends or relative \_\_\_\_\_
8. Ekub \_\_\_\_\_
9. Other sources \_\_\_\_\_

41. Why do you borrow from the above selected source?

1. Easier to get Loan       2. Less collateral required

3 Others reasons: \_\_\_\_\_

42. Do you use intermediaries, such as agents or brokers, who either sell or buy on your behalf?

1. Yes       2. No

43. Do you have regular suppliers from whom you purchase regularly?

1. yes       2.No

44. Do you have regular customers to whom you sell regularly?

1. yes       2.No

45. Do you think that drought is main problem in livestock marketing in your area?

1. Yes       2. No

46. If yes to Q 19, what you think is the main reason?

- a. Lack of rain
- b. Over population of livestock
- c. Other (specify) \_\_\_\_\_

47. Are there problems of Livestock disease?

- 1). Yes       2. No

48. Is there any grade and standard in livestock trading?

a. Yes  b. No

49. Please indicate the effect level of the following constraints to livestock trading/  
marketing in your area

S. No	Constraints	High	Medium	Low	No effect
		3	2	1	0
1	Credit sale				
2	Lack of Capital				
3	Lack of grade and standard				
4	High transportation cost				
5	Lack of market information				
6	Livestock disease				
7	Drought/prolonged dry season				
8	Inadequate market infrastructure				
9	Poor transport system				
10	Poor road Condition				
11	Conflict				
12	Poor linkage with high land and export markets				
13	Seasonality in demand				
14	Seasonality in supply				
15	Lack of entrepreneur capacity				
16	High tax imposed				
17	Lack of institution for support				
	Other specify 1. _____ 2. _____ 3. _____				

50. What could you consider as an opportunity for the livestock trading in your areas?

Prioritized the following opportunity in terms of their importance

1. High livestock populations of the area
2. Highly demanded Borana breed
3. Increased number of primary livestock markets
4. Cross-border trade

- 5. Road infrastructure development and communication
- 6. Improved veterinary service
- 7. Favorable government policy
- 8. Establishment of supporting institutions (GO and NGOs)
- 9. Other (specify) 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

**Part IV**

1. What do you suggest to improve livestock marketing in your Zone? -----

## Annexure II

### PROFORMA FOR SUBMISSION OF M.A. (RD) PROPOSAL FOR APPROVAL

**Signature** : .....

**Name &** : Wondimagegne Chekol (PhD)

**Address of Guide** : Addis Ababa, Ethiopia .....

**Name & Address of the Student** : Hussein Galgalo  
Addis Ababa, Ethiopia  
.....  
.....

**Enrolment No.** : 099122232

**Date of Submission** : April 2014

**Name of Study Centre** : .....

**Name of Guide** : Wondimagegne Chekol (PhD)

**Signature of the Student** : .....

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Borena Zone Pastoral Districts, Oromia  
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**TO**

**INDIRA GANDHI NATIONAL OPEN UNIVERSITY**

**A research proposal on**

**A Study on Livestock Marketing in Borena Zone Pastoral  
Districts, Oromia Regional State, Ethiopia**

**M.A. Research Proposal**

**By**

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## **LIST OF ABBREVIATIONS AND ACRONYMES**

BZMEO	Borana Zone Report, Monitoring and Evaluation Office
CSA	Central Statistics Authority
DA	Development Agent
EPA	Environmental Protection Authority
FGD	Focus Group Discussion
GDP	Gross Domestic product
GOs	Governmental Organizations
LMA	Livestock Marketing Agency
MOFED	Ministry of Finance and Economic Development
NGO	Non-Governmental Organization

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# **1. INTRODUCTION**

## **1.1 Background of the Study**

Ethiopia is largely a rural country with an agrarian economy. Agriculture directly support 85% of the populations livelihood, provide 46% of GDP and 80% export revenue (CSA2009). Livestock production is an integral part of the Ethiopian agricultural system that has economic and social importance both at the household and national level. Livestock contributes 12% and 33% to the total GDP and agricultural GDP respectively, provides 65% for livelihood of the population and 12–15% of the total export earnings (LMA 2008). The sectors also provide multiple uses aside from income generation, including cash storage for those beyond the reach of the banking system, draft and pack service, milk and meat for household consumption, and manure for fuel and fertilizer. Therefore, livestock can serve as a vehicle for improving food security and better livelihood, and contribute significantly to agricultural and rural development.

The topographic and geographical feature of the country is favorable for the livestock production. According to the estimate of animal population census of 2004 Ethiopia has the leading livestock population in African continent (CSA 2004). Despite these huge resources, the income derived from the sector and the benefits accruing to the country and pastoralists communities were apparently small.

Livestock production is an important component of the national economy. Several studies conclude that market is positively related to pastoralist productivity, contribute to food security and poverty alleviation. However, the role of marketing in the pastoralist literature has largely been limited to short-term exercise to minimize the livestock losses due to droughts (by selling in times of the drought and

buying after the drought). There was no much emphasis to the unique potential contributions of marketing to the sustainability of pastoralist production (Coppock, 1994, Desta, 2004).

According to 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 been traditionally 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 Borena zone to discuss on issues of pastoralists and had indicate 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.

## **1.2 Statement of the Problem**

Pastoralism is a source of livelihood to millions of people in the Horn and East African nations. In Ethiopia, an estimated 10–12% of the populations are pastoralists (CSA 2004). Livestock is the basis of livelihood of both smallholder producers and pastoralists. The whole of Ethiopia agriculture is based on livestock, either to use for farm related activities or livelihood. Nevertheless, the sector has not developed as much and has not helped the country to gain the required economic growth in general and for pastoralist communities in particular in line with other countries were smaller number of livestock have benefited a lot. Issues with regard to improving the efficiency of the sector and its contribution to the economic development were raised at various platform and forums of government and partner organizations at different times. The government of Ethiopia currently established State Ministry of Livestock

under Ministry of Agriculture to improve sector efficiency and contribution to national economy (MoA, 2013). Various constraints related to financial, human resource allocation and structural problems were cited.

Despite various efforts made by government to improve the efficiency of the sector livestock marketing in pastoral areas faces various constraints.

Marketing is so essential to pastoralists not only as a mechanism whereby pastoralists exchange their livestock and livestock products for cash (Bekure and Tilahun, 1983) but also facilitates destocking of animals during drought (Turner and Williams, 2002; Barrett et al., 2004). The extent to which pastoral livestock are being marketed depends on the availability and access to markets (Barton et al, 2001). Ethiopian pastoralists have been traditionally characterized by less involvement in commercial and formal contractual livestock trade (Desta and Coppock 2002). Many social, economic, ecological, and policy factors have been cited as constraints that limit livestock commercialization and formalization. However, as human population grow 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).

Access to markets will profoundly affect the abilities of all members of Borena lowland society to make good living and contribute to national wealth. Livestock marketing seems to be hampered by high level of variability and risk from environmental, socio-economic and institutional variables. Moreover, one of the serious problem in livestock marketing distortion in the pastoralist districts is limited access to livestock market which enforce pastoralist traders to enter into informal contract credit selling with market actors in supply chain where terms of agreement are not usually respected in due

time. Thus, informal contract credit selling may result in complete defaulting and has far negative socio – economic consequences on livestock traders and herders in the areas.

Studies conducted on this area were not in depth and did not consider the constraints of livestock marketing especially in the study area that resulted in information gap. Therefore, this study is aimed at identifying the opportunities and constraints in livestock marketing in pastoral districts of Borena zone.

### **1.3. Objectives of the Study**

#### **1.3.1. General Objectives of the study**

The general objective of the study is to examine the opportunities and constraints of livestock marketing in selected districts of Borena Zone Oromia Regional State.

#### **1.3.2. Specific objectives**

The specific objectives of this study are summarized as follows:

1. To find out how the existing livestock marketing function;
2. To identify the major opportunities available to pastoralist and local traders;
3. To assess the major constraints faced by local traders in livestock marketing.

### **1.4 Research Questions**

The study will attempt to address the following research questions to achieve the intended objectives;

1. How does the prevailing livestock marketing function?
2. What are the major opportunities prevailing in livestock marketing?
3. What are the major constraints faced by local traders in the study area?

## 1.5. Some Basic Concepts

**Pastoralist:** - Pastoralists defined as People who are primarily raising and depending on livestock and their products as their source of food and income (Elliot. 2005). Pastoralism is define as a production system that involves livestock raising and uses mobility to adapt to a dry land ecology that is not suitable for sedentary crop cultivation (Cohen, 1988).

**Market:** - The concept of market is linked to meeting, the degree of communication among buyers and sellers, and the degree of substitutability among goods. A place where sellers and buyers meet and exchange takes place, an area where price determining forces (supply and demand) operate, and an area where there is a demand for goods (Andargachew, 1990). It is a mechanism or an institution through which buyers and sellers exchange information and transact.

**Marketing Systems:** - A marketing system is a collection of channels, intermediaries, and business activities, which facilitate the physical distribution and economic exchange of goods (Kohls and Uhl, 1985). A channel of distribution may be defined as a path traced in the direct or indirect transfer of the title to a product as it moves from a producer to ultimate consumer or industrial users. Every channel of distribution contains one or more of “transfer points” where there is always either an institution or a final buyer of the product.

## 1.6. Significance of the study

The study addresses the opportunities and constraints of livestock marketing in pastoral districts of Borena zone. The issues related to livestock marketing had not been fully appreciated for a long period of time as a major challenge that hinder the contributions of livestock resource to the country in general and to the pastoralist communities of Borana zone in particular. Therefore, this study will enable policy

makers, local administrative, pastoralists, market actors and different stakeholders working for the well-being of the country and pastoralists to identify the opportunities and constraints of livestock marketing in pastoral areas of Borana zone. It is also believed that the results of this study will help as an input for further study and developing appropriate livestock marketing system of pastoral area.

### **1.7. Scope of the Study**

To make the research manageable in a given time frame and cost effective the research will limit the scope to examine the opportunities and constraints of livestock marketing in Borena zone for local traders. Moreover, the study will be delimited spatially to Borena zone pastoral districts, particularly to Dire and Yabello livestock market.

### **1.8. Limitations of the Study**

While carrying out the research work, the researcher will face the following limitations, such as shortage of time and resource, unavailability and lack of willingness of sample respondents to conduct interviews and difficulty to access to quantitative information on informal credit selling due to shortage of recorded information by traders.

### **1.9. Research Design**

According to Kothari (1990), research design is the arrangement of conditions and procedures for data collection and analysis in a manner that aims to combine relevance to the research purpose. Descriptive type of research design will be used to describe the characteristics of the variables in the study. Moreover, both qualitative and quantitative data will be collected. The combinations of two will provide better interpretation. The quantitative approach provides an objective measure of reality. The qualitative data approach allows the researcher to explore and better understand the complexity of a phenomenon (Kothari 1990).

## **1.10. Research Techniques**

As each research method has its own research technique for the accomplishment of its activities, this study will employ instruments such as Semi-structured interview schedule; focus group discussion, case studies and observation techniques for data collection.

### **1.10.1. Semi structured interview schedule**

Semi-structured interview schedule will be used to gather data from pastoral area local traders who are involved in livestock marketing. Semi-structured interview schedule is prepared to collect first-hand information about opportunities and constraints in livestock marketing for pastoralist traders who will be selected by using convenient sampling technique. The closed and open-ended questions are prepared and translated into Afanoromo language to collect primary data from respondents.

### **1.10.2. Focus group Discussion**

Focused group discussions (FGDs) will be conducted with four groups of 7-10 participants in the target population of study areas (two FGDs of pastoralist traders and officials). The check lists will be prepared and focus group discussions will be conducted mainly to identify major opportunities and constraints in livestock marketing for pastoralist local traders to know areas of intervention for improvement of livestock marketing.

### **1.10.3. Case studies**

The case studies will be conducted with pastoral areas traders on major constraints they faced in livestock trading. This will be conducted with four traders to get required information.

### **1.10.4. Observation**

Observation will be undertaken in Yabello and Dire districts by informally discussing with pastoralist traders and assessing different activities carried out by pastoralists and livestock traders in the community at market level during market days. This observation will be supported by photographs and videos.

### **1.11. Description of the Study area**

The study will be undertaken in Yabelo and Dirre pastoral districts (district) of the Borana zone of Oromia Regional State. The pastoral rangeland of Borana is found in the southern part of Ethiopia, lying between 3036' 600 38' N and 36043'-410 40' E geographical grids in the Southern part of the Regional State of Oromia, it has a spatial area of 69,373.3 km<sup>2</sup> (about 7.6-12.3% and 19.5% of the total land area of Ethiopia and Oromia, respectively (ORDPEDB, 2000). Borana zone is one of the seventeen administrative zones of Oromia Regional State, located at about 570 kilo meters south of Addis Ababa on the way to Kenya. According to Borana zone report monitoring and evaluation office (BZRMEO, 2010), Borana zone covers total land area of 63,939 km square with the total population of 1,113,538 (male 563,540 and female 549,998) of which 881,121(91%) and 232,417 were residing in rural and urban areas, respectively.

According to the new organizational structure of Oromia, the previous Borana Zone has been divided into two Zones. These are, Borana and Gujji Zones. Borana Zone is the southern part and has thirteen districts, namely, Yabelo, Arero, Moyale, Dire, Dhas, Dilo, Duda-dawa, malka-soda Gelana, Abaya, Bule-Hora, and Teltele with Yabelo being the Zonal capital. The Zone is dominated by semi-arid climate. The area has a bi-modal type rainfall regime ranging on average from 400 mm in the South to 600 mm in the North annually. About 59% of the precipitation occurs from March to May and 27% from September to November. A "dry" year is the one in which annual rainfall is less than 75% of average and this may occur every five years (Baker, 1989) but nowadays this may occur more frequently. The hottest months are December, January, February and March. Several water wells locally called "Ellas" are available in the area. Borana Zone has three agro-climatic conditions namely 'Kola', 'WoinaDega' and 'Dega', which make 70%, 20% and 10%, of the zone respectively (BZRMEO, 2010).

The target populations for this study are formal and informal livestock traders who engage in market transaction of two Districts (Dire - Dubluk, Yabello - Bake) market place.

### **1.12. Sampling Techniques**

The study will employ both probability and non-probability sampling techniques. Probability sampling will be used to minimize biases and to ensure representativeness of the study. Simple random sampling will be adopted to select traders. Non-probability sampling techniques will be used for the selection of two districts among 13 districts of Borena zone. Purposive sampling will be utilized due to large volume livestock trading transaction. At District level, two major Market places, Haro-Bake from Yabello and Dubluk from Dire will be selected purposively. Purposive sampling for selecting key informants from government officials, live animal exporters and traders to increase the validity of the study.

### **1.13. Sample Size**

Identifying and knowing the traders was the major challenge for researcher. The Borana zone trade office provided the list of licensed traders of yabello and dire districts, but it was not complete. Therefore, the only option for the researcher is to develop the list of traders in the area. Hence, the researcher with the assistance of local officials, known traders, clan leaders, livestock marketing experts and key informants has generated list of livestock traders operating in the livestock markets of the district. The total number of livestock traders developed is 228(two hundred twenty eight).

Among those pastoralist traders 122 belongs to Yabello district and the remaining 106 belongs to Dire district. To get necessary data from target population, sampling method is selected over census because of time and financial constraints. Therefore, sample size is determined using a simplified formula provided by Cochran's (1977) as follows:-

$$n = \frac{N}{1 + N(e)^2}$$

Where 'n' is the sample size, N is the population size and 'e' is the level of precision. The conventional confident level of 92% is used to ensure a more accurate result from the sample. Based on this, the error term would equal to 0.08. Using the total population of 228 and error margin of 0.08, the sample size is calculated as follows.

$$n = \frac{228}{1 + 228(0.08)^2} = 93$$

Proportional sample size is used to get proportional number of pastoralist traders for both Yabello and Dire districts by using the following formula:

$$ni = \frac{n * Ni}{N}$$

Where:  $ni$  is the sample for each district;  $Ni$  is the total number in each district;  $n$  is the total sample size and  $N$  is the total population. Accordingly, the following table depicts the number of sample size selected from their respective district.

**Table 1.1:-Sample Size**

S.No	Districts	Target Population	Total population	Sample size
1	Yabello	Pastoralist traders	122	50
2	Dire	Pastoralist traders	106	43
<b>Total</b>			<b>228</b>	<b>93</b>

**Source:** Borana trade agency and researcher pilot study, 2014

After the researcher decides the total number of sample respondents for each district, convenience-sampling technique will be used to arrive at individual sample respondents. This sampling technique will be used because pastoralist traders are mobile people moving from one market to another which makes it difficult to find all the respondents to complete interview schedule and that the only option available for the researcher will be to conduct interview with pastoralist traders found around market centers.

#### **1.14. Sources of Data**

The research will use both primary and secondary sources of data.

##### **1.14.1. Primary Data Sources**

The data collection technique for the study will rely more on primary data, which will be collected from livestock traders, pastoralists and officials, through semi-structured interview schedules, focus group discussion and observations.

##### **1.14.2. Secondary Data Sources**

The secondary data sources will be gathered from relevant books, working papers, previous researches, reports, websites, journals, unpublished materials and other related documents.

#### **1.15. Data Presentation**

After data is collected, edited and entered in to SPSS version 20, the outcome will be presented by using tables, bar graphs and pie charts with text description to facilitate the interpretation of the results for data analysis. While qualitative data will be presented in a qualitative form.

#### **1.16. Data Analysis and Interpretation**

The raw data which will be collected through semi structured interview schedule, focus group discussion and observation will be analyzed critically. The quantitative data will be analyzed by using Ms-excell or SPSS version 20 based on the descriptive methods such as frequency and percentage.

**Table 2. Time Estimated for Conducting Research Projects**

<b>S/n</b>	<b>Research activity</b>	<b>Time required</b>
1	Identification of research problem	2 weeks
2	Review of literature	1 month
3	Identification of objectives	1 week
4	Selection of research design	2 weeks
5	Selection of sample	2 weeks
6	Selection of tools of data collection	1 month
7	Pre-testing tools of data collection	2 weeks
8	Data collection	3 month
9	Editing of data	2 weeks
10	Preparation of code book	1 week
11	Preparation of master chart	2 weeks
12	Processing of data	1 week
13	Analysis of data	1 week
14	Writing of report	2 months
15	Presentation of report (typing and binding)	1 month
	<b>Total</b>	<b>12 months</b>

**Table 3. Logistics Estimate**

<b>S/N</b>	<b>Item</b>	<b>Personnel required</b>	<b>Duration</b>	<b>Cost</b>
1	Research assistant at 4,5000 birr per month	1	3 months	13,500
2	Research investigators at 3,500 birr per month	2	3 months	21,000
3	Supervisor of research assistant and research investigators at birr 2,500 per month	3	3 months	22,500
4	Typing and binding	1	2 months	10,000
5	Overhead expenditure		5 months	8,500
6	Contingencies			7,550
	Grand Total			<b>83,050</b>

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# CARRICULUM VITAE

## I. PERSON SPECIFICATION

Name	Wondimagegne Chekol
Date of Birth	January 20, 1957
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Nationality	Ethiopian
Sex	Male
Marital Status	Married
Language	Amharic, English, German

## II. EDUCATION

PhD in Agriculture, Goettingen University, Germany, 1989-1994

MSc in Agriculture, Goettingen University, Germany, 1983-1987

BSc in Plant Science, Addis Ababa University, Alemaya College of Agriculture, Alemaya, Harar, 1977-1980

Bahir Dar Secondary School, 1969-1972

Bahir Dar Elementary School, 1963-1969

### II. TRAINING and Study Visit

Leadership and Management at St. Mary's University College (2011)

Soft ware package for social science at St, Mary's University College (2011)

Project Cycle Management at St. Mary's University College (2010)

Three-month researches leave at Bonn University, DAAD, Germany (2013)

Three-month researches leave at Bayreuth University, DAAD, Germany (2009)

SAQA (South African Qualification Authority) (2008)

Quality Assurance Mechanism in Higher Education Institutions, Addis Ababa (2007)

Management of Vocational Education, Tianjin University of Technology and Education, Tianjin, Peoples Republic of China (2007)

Leadership and Management, Ethiopian Management Institute, Addis Ababa (2003)

Three-month researches leave at Bayreuth University, DAAD, Germany (2005)

Project planning and Monitoring, ASARCA, Nairobi, 2004

Monitoring and Evaluation, EARO, 2002

Identifying and calcifying local indicators of soil fertility, CIAT, Arusha, Tanzania

SAS Software and Basic Biometry, EARO, 2002

Three-month researches leave at Bayreuth University, DAAD, Germany (2005)

Three-month researches leave at Osnabrueck University, DAAD, Germany (2001)

Three-month research leaves at Osnabrueck University, DAAD, Germany (1999)

Addis Ababa Teacher Training Institute, 1973, Ethiopia

### **III. WORK EXPERIENCE**

Assistant Professor and Dean of Institute of Agriculture and Development Studies, School of Graduate Studies, St. Mary's University, March 2014 to date

Assistant Professor and Director of Center for Educational Improvement, Research and Quality Assurance, St Mary's University College since September, 2009 to 2014

Member of the task force to produce "The Ethiopian National Qualification Framework", Representative of Higher Education Sector. Produced Ethiopian National Qualification Framework and Implementation Documents for the Ministry of Education

Senior Expert and team Leader Quality Audit in Higher Education Relevance and Quality Agency, since December, 2006

Worer Research Center Director, 2003 -2006

Associate Researcher I EARO, Worer Agricultural Research Center 1999-2006

- Soil research Section Head, Worer Agricultural Research Center 1999-2003
- Dry land natural resource management research program coordinator, EARO, Worer Agricultural Research Center, 2001-2006
- Drainage Research Project Coordinator, 2001-2004

Team leader of Prosopis juliflora management task force at Worer Research Center 1999-2006

Assistant Lecturer, Alemaya College of Agriculture, 1982

Assistant Administration Head of the Department of Plant sciences, Alemaya College of Agriculture, 1982

Graduate Assistant, Alemaya Agricultural University, 1981, Ethiopia

Guest Lecturer Awassa College of Agriculture, 1981/1982, Ethiopia

Graduate student, International Live stock Center for Africa (ILRI), 1988, Addis Ababa, Ethiopia

High school teacher, Arbaminch Secondary School, 1974-1976, Ethiopia

## V. RESEARCH

### Publications

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Tamire Hawando, Wondimagegne Chekol et al 1981: Land use planning, soil fertility and soil conservation studies in Harerghe Highlands; summary research report, Alemaya College of Agriculture, Ethiopia

Extension work, Legambo Project (FAO funded), main activities were: soil classification and mapping, Land use planning, soil conservation and Agro-forestry, Alemaya College of Agriculture 1979-1982, Ethiopia

## **VI SKILL and ATTITUDE**

Computer literate, Word and Excel

Aware of HIV/AIDS and Gender Equality

Familiarity with Afar community and culture and their way of working

## **VII OTHER ACTIVITIES**

Vice President of the Ethiopian Soil Science Society 2010 -2012

Secretary of the Ethiopian Soil Science Society 2012-2014

Member of the Editorial Committee of Journal Agriculture and Development

Editor in chief of the Ethiopian Society of Soil Science proceedings in 2000

Chairman of the African and Asian Academician, George-August University, Germany (1990-1994)

Coordinator in the scaling up of modern Agricultural Technology in Afar Regional State (2003-2006)

Serves as Advisor and Co-advisor of MSc students at Hawassa and Haremaya Universities, since 2003 to date)

Member of the screening committee for German Academic Exchange Service (DAAD) PhD Scholarship candidates

Member of the advisory committee of the DG of Ethiopian Agricultural Research (2003) Institute

Partner for the implementation of Afar Livestock Recovery Project of FAO Funded by Norwegian Development Fund (2003- 2006)

Resource Person of Farm Africa Projects in Afar Regional State (1999-2006)

Partner for the implementation of PCDP Project in Afar Regional State (2003-2006)

Partner for SASAKA Global Rice Research and seed production since 2005 to date

Vice Chairman of the Ethiopian Soil Science Society since 2010

Secretary of the Ethiopian Soil Science Society since 2010 -213

Member of Ethiopian Agricultural Society

Member Ethiopian Soil Science Society

Member of German Soil Science Society

Msc students Advisor for the MA program (Rural Development) of Indra Gandhi Open University School of Continuing Education