ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF DEVELOPMENT STUDIES

INSTITUTE OF REGIONAL AND LOCAL DEVELOPMENT STUDIES

ASSESSMENT OF HIDES AND SKINS MARKETING IN TIGRAI REGION:
THE CASE OF ATSBI WEMBERTA WEREDA, EASTERN TIGRAI

Berhe Arkebe Negusse

A Thesis Submitted to School of Graduate Studies of Addis Ababa
University, in Partial Fulfillment for the Degree of Master of Arts in
Regional and Local Development Studies

June, 2009
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June 2009
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ACRONYMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>BoANRD</td>
<td>Tigrai Bureau of Agriculture and Natural Resources Development</td>
</tr>
<tr>
<td>BoARD</td>
<td>Tigrai Bureau of Agriculture and Rural Development</td>
</tr>
<tr>
<td>BoFED</td>
<td>Tigrai Bureau of Finance and Economic Development</td>
</tr>
<tr>
<td>BoPED</td>
<td>Tigrai Bureau of Planning and Economic Development</td>
</tr>
<tr>
<td>BoTIT</td>
<td>Tigrai Bureau of Trade Industry and Transport</td>
</tr>
<tr>
<td>CNFA</td>
<td>Citizens Network for Foreign Affairs</td>
</tr>
<tr>
<td>CSA</td>
<td>Central Statistics Authority</td>
</tr>
<tr>
<td>FAO</td>
<td>Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>HHs</td>
<td>Households</td>
</tr>
<tr>
<td>ITC</td>
<td>Information Technology and Communication</td>
</tr>
<tr>
<td>ILRI</td>
<td>International Livestock Research Institute</td>
</tr>
<tr>
<td>IPMS</td>
<td>Improving Productivity and Market Success of poor farmers</td>
</tr>
<tr>
<td>LMA</td>
<td>Livestock Marketing Authority</td>
</tr>
<tr>
<td>MIS</td>
<td>Market Information System</td>
</tr>
<tr>
<td>MoA</td>
<td>Ministry of Agriculture</td>
</tr>
<tr>
<td>MoTI</td>
<td>Ministry of Trade and Industry</td>
</tr>
<tr>
<td>PIC</td>
<td>Product Improvement Center</td>
</tr>
<tr>
<td>RMA</td>
<td>Rapid Market Appraisal</td>
</tr>
<tr>
<td>SD</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industry Development Organization</td>
</tr>
<tr>
<td>WOANRD</td>
<td>Wereda Office of Agriculture and Natural Resources Development</td>
</tr>
<tr>
<td>WOARD</td>
<td>Wereda Office of Agriculture and Rural Development</td>
</tr>
<tr>
<td>WOFED</td>
<td>Wereda Office of Finance and Economic Development</td>
</tr>
<tr>
<td>WOTIT</td>
<td>Wereda Office of Trade Industry and transport</td>
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ABSTRACT

Hides and skins have a wide importance mainly as a source of foreign currency of the leather industry to the country. The consumption of these products is low for reasons of low quality and market imperfection. Measures to solve the problem in the area were limited because of little research and consideration. The objectives of the study were to identify the roles of the major actors and market channels, analyze strengths and weakness of the marketing system, and estimate the potential demand of the hides and skins. A survey was conducted in which data and information were collected from 15 local collectors 5 butcheries and 6 hides and skins traders using structured questionnaire. Secondary data including prices, marketing, and purchase and sales of the raw material were collected from government bodies and private organizations. In addition, the production and quality of hides and skins were studied by selecting 121 sample rural household heads from 4 villages of the wereda using two stage random sampling. Formal and informal data collection tools of both primary and secondary data were also used. In analyzing the marketing conditions of the raw materials, descriptive statistics and SCP paradigm were used. Results indicate that 66% of rural households sell hides and skins to local collector in rural areas, while 34% supplied to the wereda wholesalers. Buying process was done without following the grading standards of hides and skins, by simple sorting based on visible defects. The concentration analysis indicated that the market was highly oligopolistic with narrow range of market concentration. The marketing margin and marketing cost analysis showed transport charges, income and municipality tax, labour cost, preservation material cost and store rent were costs that influenced the marketing margin. High market concentration, barriers to entry in terms of capital and credit, and high marketing margin in the study area reveal that hides and skins marketing was inefficient. Therefore, to improve marketing system, correcting malpractices, implementation of standard grades and provision of market information, capacity building for all actors in the chain, strengthening the extension service on the product handling and management to farmers were recommended.
CHAPTER 1
INTRODUCTION

1.1 Background

Agricultural growth, particularly through improved productivity and market access, is one of the principal routes to reducing poverty in developing countries. There is considerable diversity across countries with regard to the importance of smallholder livestock keeping in rural livelihoods. Ethiopia possesses one of the world largest livestock populations: eighth for cattle, twelfth for sheep and lambs, and eighth for goats (FAO, 2001).

Ethiopia's economy is predominantly agricultural where the livestock sub-sector plays substantial role. Its share of livestock holdings is 2.4%, 3.1%, 11.15%, 23% and 35.5% when compared with the total livestock population of the world, developing countries, Africa, COMESA member countries and East Africa respectively (FAO, 2001).

Though different data sources put different figures for the number of animals in Ethiopia, according to Belachew et al (2003), there are approximately 35.4 million cattle, 25.5 million sheep, 18.9 million goats, and 1.1 million camels in the country. The livestock sector in Ethiopia contributes 12 and 33% of the total and Agricultural Gross Domestic Product (GDP), respectively, and provides livelihood for 65% of the population. The sector also accounts for 12-15% of total export earnings, the second in order of importance, in 1998. Of the total household cash income from crop and livestock, livestock account for 37-87% in different parts of the country, and the higher the cash income the higher is the share of livestock, indicating that increased cash income come primarily from livestock (FAO, 1999). It is an integral part of the national agricultural wealth and serves as sources of power, meat, milk, egg, hides and skins, manure, and other products.

In Ethiopia hides and skins contribute much to the export earnings from the livestock sector. In addition, it has a large contribution to the leather industry in the country. Girma (2003) described that, Ethiopia has been exporting hides and skins in the past 100 years. The country has big potential to develop the sub-sector. In 2002 hides and skins represent major source of foreign exchange earnings for the country accounting for 14-16% of the total export revenue.
Ethiopia’s leather industry is at the forefront of the leather sector development of the Eastern and Southern African region. The industry has reached an advanced stage of development and a reputation for excellence in the international market (MoTI, 2008). The export performance of the sector showed very encouraging trends during 2005-2007. The major export contributor of the manufacturing sector in Ethiopia is the leather and footwear industries, which contributed 70% of the export earning for the year 2005-2007 (MoTI, 2008). The total value of the export of the leather and leather products is USD 66.9 million, 75.3 million and 98.4 million in the years 2005, 2006 and 2007, respectively.

In Tigrai there is broad consensus that investment in livestock is central both as a pathway out of poverty for many smallholder households, and food security strategies. The population of livestock of Tigrai region, according to 1997 census projection, is cattle 3.04 million, sheep 935,337, goats 1.46 million, equine 318,932, camel 10,417 and chickens 3.76 million (BoANRD, 2000).

Hides and skins is important economic component of the region, which contributes significant amount to the regional economy. In the region there are around 120 wholesalers and about 350 local collectors working in hides and skins trading. Hides and skins supplied to the market in 2006/07 from the region is 85,960 cattle hides, 408,741 sheepskins, 871,786 goatskins of which 25% is sold to the regional wholesalers and 75% is supplied directly to tanneries from wholesalers. The hides and skins grade according to the regional experts is mostly from first to third, measured by taking samples.

The organizational structure for extension service and quality control of the product is set under Agricultural Products Quality Control Team in the regional Bureau of Agriculture and Rural Development, junior experts at wereda level and livestock development extension agent at village level.

Different policies adopted by the Federal Government of Ethiopia, availability of cheap labor force and availability of the resource base create conducive environment especially for being competent in trading of hides and skins in the world market. However, the trade in the sub-sector is constrained by various structural, production, information exchange, and promotional problems, as well as financial constraints.
1.2 Problem Statement and Justification

Hides and skins are important livestock products providing income for the poor people living in the rural areas of the region. They are supplied to domestic and foreign markets. Since they have significant economic importance, much effort is needed to improve the quality and increase the quantity so that there will be effective and efficient utilization.

Traditionally farmers treat their animals when they get sick or injured. Of the different traditional methods of treating animal practiced by the farmers, branding is the common and this has a significant negative effect on the quality of the hides or skins produced from branded animal. Hides and skins are meat by-products and there is still little consideration given to the care required for the collection and processing of the hides and skins in to high quality leather (Adugna, 2004).

Limited studies were conducted regarding the extension and quality of the by-products. However, there is no detail study on marketing aspects of the raw materials. Sheep skins of the wereda are of high natural quality and significant number out of the region (4%), but the efficiency of the market is not assessed. Thus, it is important that the continuum of the product marketing system be examined.

1.3 Significance of the Study

The study is important to smallholder farmers to enable them achieve efficient market thereby better price. It is also vital to specify ideas about the flow of the market information about hides and skins in the study area. It also contributes to better understanding of the quality of livestock products and its effect on market prices.

Therefore, the study analyzes how hides and skins marketing is functioning in the domestic market, focusing on Atsbi wemberta Wereda, which is one of the major hides and skins supplying areas in Tigrai region. By identifying the major problems of quality and marketing system of hides and skins in the study area, the study will help to inform policy makers to implement specific and efficient institutional and other relevant options to develop efficient marketing system and extension program that would benefit the smallholders in the rural area.

Hence, the research findings would inform policy makers and practitioners to rethink and pinpoint about the constraints and solutions of the current marketing system of hides and skins so as to develop efficient marketing system.
1.4 Study Objectives

General objective

To assess the condition of the existing markets and analyze constraints and opportunities of the marketing chain of hides and skins in the study area.

Specific objectives

1. To identify the roles of the major actors and market channels of raw hides and skins
2. To analyze the strengths and weaknesses of the marketing system of raw hides and skins
3. To estimate the potential demand of hides and skins in the study area and nearby markets

Research Questions

1. Who are the major actors? What are their characteristics and roles in the marketing of the hides and skins? What do the market channels of raw hides and skins looks like?
2. What are the structure, conduct and performance of raw hides and skins market system in the study area? What are the constraints of the market?
3. Where are the potential demand areas of hides and skins of the study site?

1.5 Scope and Limitation of the Study

The study has focused on the functioning of the market and the relationship among the actors within the marketing channels from producers up to tanneries.

More specifically, the study focused on the different market levels, roles of marketing actors in the marketing channel, price formation, bargaining characteristics of producers, traders’ buying and selling strategies, traders’ behavior in relation to transport and information, and the process of competitions has been assessed. Furthermore, institutions involved directly or indirectly in hides and skins marketing have been assessed to generate relevant data. The study was delimited to a single wereda, for the obvious reason of time and financial resource constraints.

Unavailability of records and recall problem of traders, particularly in continuous information like buying and selling prices and profits, which was finally supplemented by secondary data obtained from wereda office of agriculture and rural development (WOARD). Lack of pertinent data and information like time series data also one of the limitations of this study.
Information required from tanneries is not obtained except Sheba tannery. The tanneries declined to give price and quality (grade) related information which they considered top business secret of their firm. As a result, information regarding tanneries was based only on information obtained from Sheba tannery.

1.6 Materials and Methods

1.6.1 Data collection and sampling
The wereda was selected purposively for the reason that the interest of the sponsor organization was geared the researcher to work on Atsbi wemberta wereda, since the wereda is one of the IPMS sites of ILRI. In addition, the observations of the researcher about the quality of sheep skins initiated to study on the area.

Researchers do not agree on the sample size and sampling procedures that should be used in each segment of the marketing chain. The decisions involved are partly a function of the information currently known, time and resources available, accessibility to and openness of the marketing participants themselves, as well as the estimated size of trading population (Mendoza, and Rosegrnat 1995).

To select manageable and representative sample a two stage random sampling procedure for farmers have been implemented. First, four villages out of the 16 villages in the wereda were selected randomly, and then 2% of farmer households have been randomly selected from each village in which the researcher expects representative and manageable from the sample frame (annex 5 and annex 6).

Table 1.1 Sample size of farmers interviewed

<table>
<thead>
<tr>
<th>Name of villages</th>
<th>House hold Population size</th>
<th>Sample size</th>
<th>Actual house hold interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>G/kidan</td>
<td>1826</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Felegeweini</td>
<td>1428</td>
<td>30</td>
<td>29</td>
</tr>
<tr>
<td>Habes</td>
<td>789</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Hayelom</td>
<td>1890</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Total</td>
<td>5933</td>
<td>122</td>
<td>121</td>
</tr>
</tbody>
</table>

Source: Own survey, 2008

In addition, all 5 butcheries, all 15 local collectors (village traders) of raw hides and skins at local market, and all 3 wholesalers in the wereda have been identified and interviewed. Similarly, from Adigrat the existing one regional wholesaler and two wholesalers, as well as Sheba Tannery from Wukro having relation with the wereda trade route have been purposively selected and interviewed.
The sample frame of villages, and farmers was taken from Atsbi wemberta wereda office of agriculture and rural development. The data was collected to get information of marketing aspects of raw hides and skins; focused on access to market and market price information, livestock ownership, demography, contact to extension service, income from farm and non-farm activities, etc.

Questionnaire was prepared to collect information of the channel, difference of quality and price between farm-gate and terminal market, and analyze price margin based on the information of farmers, local collectors, and wholesalers of the wereda, regional wholesaler and Sheba tannery. Information regarding the factory preference for quality and other characteristics of the hides and skins and the period of peak supply and demand has been gathered from informal discussions with traders, tannery, experts of agriculture and rural development and different documents.

Relevant secondary data was also collected from wereda, regional and federal government organizations (WOARD, WOTIT, WOFED, BoARD, BoTIT, MoTI, and CSA).

Both informal and formal survey methods have been conducted to collect the primary information. For the informal survey Rapid Market Appraisal (RMA) using checklists and observation has been implemented. RMA is a tool to understand how a product or commodity flows to end users, and to understand of how a commodity system is organized, operates and performs. RMA provides a quick flexible and effective way of collecting, processing and analyzing information and data about the markets and marketing systems. RMA helps to realize how valuable market information is. It will inspire farmers to learn and to develop new ideas on commodity they produce and test their marketability by asking customers what they think of the commodities.

The formal survey has been conducted using pre-tested structured questionnaire. Enumerators have been recruited and trained to manage the formal survey, using the structured questionnaire with farmers, local collectors and butcheries.

**1.6.2. Data analysis**

The data have been analyzed qualitatively and quantitatively. In this study, the structure-conduct-performance (SCP) model is mainly used as a framework to analyze hides and skins market structure, efficiency and behavior of actors participated in the hides and skins trading at different channels.
Generally in this study descriptive statistics like mean, ratios and percentiles have been also used to examine and explain basic characteristics of the channel members and market functions.

Relevant computer software packages such as SPSS have been used to analyze the relational data among actors in the hides and skins market chain.

1.6.2.1. Analysis of the market structure

Market structure can be defined as characteristics of the organization of a market, which strategically influence the nature of competition and pricing behavior within the market (Bain, 1987 cited in Girma 2002). Structural characteristics may be used as a basis for classifying markets.

To evaluate the concentration of firms as a characteristic of the organization of the market and the strategic influences on the nature of competition and pricing within the market would be estimated by market concentration ratio. The study preferred to use the concentration ratio, barriers to entry and product differentiation due to widely applicability in many researches.

Concentration ratio

The concentration ratio is expressed in the terms CR$_{x}$, which stands for the percentage of the market sector controlled by the biggest x firms. A CR$_4$ of over 50% is generally considered a tight oligopoly; CR$_4$ between 25 and 50 is generally considered a loose oligopoly, and CR$_4$ of fewer than 25 is no oligopoly at all. A CR$_4$ of over 50%, a CR$_3$ of over 60% or a CR$_2$ of over 80% should be considered a super tight oligopoly (Kohls and Uhl, 1985; Shughart, 1990).

The mathematical formulation for concentration ratio $C$ is:

$$C = \sum_{i=1}^{r} S_i, \ i = 1, 2, 3... r$$

Where: $S_i$ is the percentage market share of $i^{th}$ firm,
$r$ is the number of largest firms for which the ratio is going to be calculated, and $C$ is the market concentration ratio.

Many studies indicated the existence of positive relationship between market concentration and gross margin. It is generally believed that higher market concentration implies a non-competitive behavior and thus inefficiency of markets (Scarborough and Kydd, 1992).
Barriers to entry

The ease with which potential participants can enter various functions is commonly used as a means of assessing the degree of competition in an industry (Scarborough and Kydd, 1992).

Stigler (2005) suggests about four points that can create barriers to entry: legal barriers (franchise and patents), economies of scale, superior resources, and pace of entry.

Market structure is most commonly evaluated by examining trends in the numbers and sizes of firms relative to each other, and to number of consumers and producer, in particular times and places (Scarborough and Kydd, 1992). Interviewing traders about barriers to entry might be difficult since all have entered the market. Rather, observation of the different sizes of traders and the extent to which fluctuations in the number of active traders follow rises and falls in profitability can be considered. Hence, observation of the wereda wholesalers on how they are functioning, and their ups and downs was considered to evaluate barriers to entry and exist.

Product differentiation

Both hides and skins are used as raw materials for the tanning industries, which produce leather and leather products. Prices of hides and skins depend, among others, on quality, the requirement of the buyer and method of preservation. It is not only that sheepskin is preferred to cattle hide and goatskin, but also within the same sheepskins, there are variations in price depending upon grades, which determine the commercial value of the hide or skin.

There are two mandatory standards in Ethiopia, which deal with leather products, namely, raw hides and skins standards and leather standards set out in regulation No. 12/1990 (Mulat, 1999, cited in Girma, 2002). Cattle hides and sheep or goatskins are classified into various grades (1-4 and reject) according to quality, weight range, size and appearance in order to determine the commercial value and the type of leather to be produced.

1.6.2.2. Analysis of the market conduct

It is the pattern of behavior of enterprises in determining prices, sales promotion, and coordination policies and the extent of predatory or exclusionary tactics directed against established rivals or potential entrants (Pomeroy and Trinidad, 1995). The determinants of conduct indicators indicated in USAID (2008) market
guidance, are price setting behavior, buying and selling practices, advertising, merging together, and others that makes traders profitable. Market conduct refers to the practices or strategies of traders in maximizing their profits. Among these practices are the use of regular partners, long-term relations with clients, and suppliers, the use of intermediaries, and trade within personalized networks (Wolday, 1994).

In this case to analyze market conduct, to detect indications of unfair price setting practices, buying and selling practices, and the conditions under which such practices are likely to be prevailing would be used.

1.6.2.3. Analysis of the market performance

According to Abbott and Makeham (1981) market performance is how successfully the firm’s aims are accomplished, which shows the assessment of how well the process of marketing is carried out. Is produce assembled and delivered on time and without wastage? Is it well packed and presented attractively? Is its quality reliable and are terms of contract observed? Is the consumption of the products increasing and sales in competitive market expanding? There are such practical indicators of how well a certain marketing system is operating. In addition quantity supplied, equity (distributional and informational), access to market information are main performance indicators (USAID, 2008).

Marketing efficiency is essentially the degree of market performance. It is defined as having the following two major components: (i) the effectiveness with which a marketing service would be performed and (ii) the effect on the costs and the method of performing the service on production and consumption. These are the most important because the satisfaction of the consumer at the lowest possible cost must go hand in hand with maintenance of a high volume of farm output (Ramakumar, 2001).

The two approaches used in this study to measure marketing performance are marketing margin and the analysis of market channel efficiency.

Marketing margin

In a commodity subsystem approach, the institutional analysis is based on the identification of the marketing channels. This approach includes the analysis of marketing costs and margins (Mendoza et al, 1995). A marketing margin can be defined as a difference between the price paid by consumers and that obtained by
producers; or as the price of a collection of marketing services that is the outcome of the demand for and supply of such services (Tomek and Robinson, 1990). It measures the share of the final selling price that is captured by a particular agent in the marketing chain (Mendoza et al, 1995).

As Mendoza et al (1995) argued, when there are several participants in the marketing chain, the margin is calculated by finding the price variations at different segments and then comparing them with the final price to the consumer. The consumer price is then the base or the common denominator for all marketing margins. Computing the total gross marketing margin (TGMM) is always related to the final price or the price paid by the end consumer and expressed as a percentage.

In a marketing chain with only one trader between producer and consumer, the net marketing margin (NMM) is the percentage over the final price earned by the intermediary as his net income once his marketing costs are deducted.

\[ TGMM = \frac{\text{Consumer price} - \text{Farmer's price}}{\text{Consumer price}} \times 100 \] ………………………..2

\[ \text{GMMP} = \frac{\text{Price paid by consumer} - \text{Marketing gross margin}}{\text{Price paid by the consumer}} \times 100 \] ………….3

\[ \text{NMM} = \frac{\text{Gross Margin-Marketing Costs}}{\text{Price paid by consumers}} \times 100. \] ………………………………4

Where: TGMM = Total Gross Marketing Margin

GMMP = Gross Marketing Margin of Producers

NMM = Net Marketing Margin

Thus, the net marketing margin of hides and skins traders can be calculated using the average values from all traders or by specifying a typical trader in the study area. In this case, to estimate producers net margin, the average values of all producers and for traders due to the shortage and inability of estimating major costs by the majority is used. A typical trader was selected who has been able to estimate well the basic operation costs and benefits to measure the net profit margin.

**Marketing channels**

The analysis of marketing channels is intended to provide a systematic knowledge of the flow of the goods and services from their origin (producer) to their final
destinations (consumers) (Mendoza et al, 1995). This is acquired through studying the participants, with the first step to determine what and which final markets are. While the sources and destinations are clearly identified the study of participants within the channels, the activities they perform and the overall actions can easily be investigated.

Ramakumar (2001) identified the different marketing channels from which he computes ranking based on different performance indicators to arrive at marketing efficiency. The indicators included were producer’s share in the consumer’s price, marketing cost of intermediaries, marketing margin of intermediaries and returns per money of investment.

In this study, volume passed, producer’s share, marketing margin of traders and rate of return were taken to evaluate the efficiency.

\[ R = \frac{R_i}{N_i} \]

R- An overall rank of a channel (all performance indicators)
Ri- Rank of a channel per a single indicator
Ni- Number of performance indicators and i- Performance indicators (volume handled, rate of return, producers’ share, and marketing margin).

1.7 Organization of the Thesis

The thesis is structured in four different chapters. Chapter one covers background information on the context of the research, where research problem, objectives, research questions, significance, scope and limitation of the study are discussed. The successor deals with the research methodology starting with description of the study Wereda and end up with conceptual definition of SCP.

With the above brief introduction of the research paper, the remaining part of the thesis is organized as follows. The second chapter reviews detailed literature on relevant topics on the study of production and marketing of hides and skins. The third chapter explains results and discussion, including data presentation on respondents’ socio economic characteristics, and Structure-Conduct-Performance analysis. The final chapter obviously summarizes the findings of the study with some recommendations.
CHAPTER 2
LITERATURE REVIEW

2.1 Theoretical Literatures

2.1.1. Conceptual definitions and classifications

The term "hides and skins" are often used as if they were interchangeable, but according to the British standard definitions;

Hide is the raw skin of a mature or fully-grown animal of larger kinds, e.g. cattle and horses and also other large animals.

Skin is the skin of a mature or fully grown animal of smaller kinds, e.g. sheep, goats, pigs, reptiles, birds and fishes, or of immature animals of the large species, e.g. calves and colts.

Hides are divided according to age and weight of the animal. Accordingly:

- Calf skins usually weigh from 0-6 kg., in green condition.
- Adult animal hides which are categorized into three, light, medium and heavy.
  - Light: Hides from young heifers/bulls with a weight of 6-11 kg., in green state.
  - Medium: Hides from young cows and bull which weigh 11-17 kg.
  - Heavy: Hides from full-grown cows or bulls which weigh more than 17 kg.

Sheepskins are divided into hairy and wool types subject to the type of the hair cover.

Goatskins are highly valued as the raw material because of their high quality for upper leathers.

2.1.2. Quality of hides and skins

The quality of hides and skins for production of different types of leather is determined by certain characteristics of the raw material and these are (PIC, 1990):

- The thickness, and evenness of the thickness over the surface
- The weight
- The density
- The presence of defects

Hides and skins differ in their structure depending upon the habit of life, season of year, age, sex, and breeding.
The various operations involved in the preparation of hides and skins are most easily classified according to when they occur with respect to the time of slaughter. Accordingly, the first of three such periods is designated pre-slaughter. It covers the greater part of the animal's life, from its birth to about the time it is collected for delivery to the butchery. In fact it may be argued that the period begins even earlier, since some of an animal's characteristics are genetically determined. Any selection and breeding program that may be operated on the farm or ranch will inevitably affect many features of the offspring of a particular mating including certain characteristics of the hide or skin. Environmental ones often obscure genetic factors, in particular by the consequences of nutrition (Russell et al, 1980).

The pre-slaughter operations that affect the quality of the hides and skins available to the tanning industry are principally the result of the quality of the husbandry applied by those who looked after the animals-herders, farmers, ranchers, feedlot staff, veterinarians, hides and skins merchants and transport operators. In some circumstances, domesticated animals may receive almost no attention throughout their lives. These are the animals left to graze or forage (sometimes in open grassland), which may only be handled immediately before dispatch to the abattoir. By way of contrast, some dairy animals kept under intensive systems may be subject to almost continuous scrutiny. In between these two extremes there exist large ranges of animals' production systems, which can present more or less of a hazard to the quality of the animal's hide or skin (Russell et al, 1980).

In many livestock production systems, disease control is a major aspect of animal's husbandry. Any fatal disease that leads to the condemnation and destruction of the animal, or a serious disease that affects the productivity of the herd will have an adverse effect on the supply of hides and skins (Russell et al, 1980).

The final part of the pre-slaughter operations involves the supply and transportation of the animal to the market and ultimately the butchery. Special attention is required at this stage since any damage to the animal will not have time to heal before the animal is slaughtered, so any defect will remain on the hide or skins as an open wound. The range of different problems that can occur at this stage is extensive, and many others associated with improper transportation (Russell et al, 1980).

Hides and skins supplied to the tanning industry generally come from two different sources, controlled slaughter in designated establishments and slaughters and
deaths elsewhere. The latter includes the significant quantities of hides and skins sometimes available from special festivals (Leach et al, 1993).

Since the primary purpose of slaughter is to provide meat for human consumption, it should be done under the best possible conditions of hygiene and safety. This is most easily achieved in controlled slaughterhouses. This type of operation is also likely to provide the best conditions for hides and skins preparation. In those places where proper slaughtering facilities do not exist, it may be necessary to improvise and prepare carcasses under condition, which would not generally be considered acceptable (Leach et al, 1993).

Hides and skins from designated slaughtering operations may come from any one of a range of places including backyard activities, shambles, slaughter slabs, slaughterhouses and abattoirs. The facilities available at these establishments vary tremendously. At worst, they may consist of no more than a small space and a few small items of equipment such as knives. At best, they may consist of purpose-build structures with all mains services (electricity, steam, water, effluent treatment, etc.) and highly trained staff. Irrespective of the size of the establishment the slaughter facilities should conform to certain minimum standards, which are prescribed by law in most countries (Leach et al, 1993).

Preservation is the name given to a variety of procedures, which can be applied to hides and skins in order to reduce, or stop spoilage. Preservation can only maintain quality. It follows that a bad preservation will allow deterioration of all a skin, irrespective of its original quality (Leach, 1995).

Most hides and skins are preserved in one way or another before being shipped to a tannery, but it is not always necessary in the manufacture of leather (Haines, 1975) freshly flayed hides and skins may be dispatched immediately to the tannery and made into leather. Unfortunately, few tanneries are sited close enough to their source of raw material to be able to receive fresh skins. Generally though, tanneries are still geographically isolated from their raw material. This has significant implications in the utilization of hides and skins.

If freshly prepared hides and skins cannot be delivered directly to the tannery, they must be preserved. They should also be preserved if the delivery to a tannery is likely to be delayed, especially when the tannery is a long way from the butchery, and it may not be possible to deliver the fresh hides or skins quickly enough. Without
preservation, the hides or skins would spoil before they were received in the tannery (Haines, 1975). Assessing the quantity of hides and skins available for collection is certainly much easier than determining the quality. The problem is that quality means different things to different people because they have different expectations or requirements (Leach, 1995). Accordingly, when considering quality it must be done in context of:

1. What quality is required currently?
2. What quality might be required in the near future?

Only after such preliminary considerations is it possible to begin to answer questions about the scope for improvement of quality. Most of the time, the answer will be that the present quality is capable of being improved. However, the improvement efforts must be commensurate with the objectives. It would, for example, be quite unnecessary to introduce a new technique of preservation in a place where the existing techniques could more easily be improved, to provide acceptable quality hides and skins (Leach, 1995).

Traditionally, the determination of defects on hides and skins was the basis of grading operations carried out routinely before, during or after, preservation. These assessments received considerable attention though they often failed to reveal the majority of defects. Some defects simply cannot be seen in preserved hides and skins while the consequences of others may not be fully appreciated by those people doing the grading. In short, the most reliable way to determine the utility of hides and skins destined for the tanning industry is to submit them to tanning (Leach, 1995).

When hides and skins are exported, it may be difficult to obtain the results of tanning assessments for use by the original supplier. Now though, a lot of hides and skins are processed domestically. In these cases at least, feedback on the tanning characteristics of raw materials should be more readily available (Leach, 1995).

2.1. 3. Market and marketing concepts

The concept of exchange and relationships lead to the concept of market. It is the set of the actual and potential buyers of a product (Kotler and Armstrong, 2003). Conceptually, however, a market can be visualized as a process in which ownership of goods is transferred from sellers to buyers who may be final consumers or intermediaries. Therefore, markets involve sales locations, sellers, buyers, and transactions.
According to Kotler and Armstrong (2003), marketing is managing markets to bring about profitable exchange relationships by creating value and satisfying needs and wants.

2.1.3.1. Marketing system
In broad terms, marketing system may be defined as the totality of product channels, market participants and business activities involved in the physical and economic transfer of goods and services from producers to consumers. Marketing system operates through a set of intermediaries performing useful commercial functions in chain formations all the way from the producer to the final consumers (Islam et al., 2001).

2.1.3.2. Marketing channel
Formally, a marketing channel is a business structure of interdependent organizations that reach from the point of product origin to the consumer with the purpose of moving products to their final consumption destination (Kotler and Armstrong, 2003).

This channel may be short or long depending on kind and quality of the product marketed, available marketing services, and prevailing social and physical environment (Islam et al., 2001).

2.1.3.3. Marketing efficiency
Technical efficiency is concerned with the manner in which physical marketing functions are performed to achieve maximum output per unit of input. Technological changes can be evaluated to determine whether they reduce marketing costs per unit of output. New methods of packing and processing, for example may reduce waste and prevent deterioration in quality (Abbot and Makeham, 1981).

Price efficiency is concerned with the accuracy, precision, and speed with which prices reflect consumers’ demands and are passed back through the market channels to producers. Pricing efficiency is, thus, affected by rigidity of marketing costs and the nature and degree of competition in the industry. Activities that may improve pricing efficiency are improvement of market news and information, and competition (Cramer and Jensen, 1982). The objective of pricing efficiency is to improve the operation of buying, selling, and pricing aspect of the marketing process, so that it remains responsive to consumer's preference (Kohls and Uhl, 1985).
2.1.3.4. The value chain
Most research and development organizations agree that improved market access is crucial if the competitiveness of rural areas and its producers is to be enhanced. Promoting collaboration along the market chain, among different stakeholders, is a promising approach to: Increase efficiency in the market chain, by lowering the production and transaction costs which occur between the different market chain actors. Enhance the value of the products and services generated along a market chain, so justifying higher consumer sale prices (Bernet et al, 2006).

Stimulating positive market chain collaboration from the outside is a tricky issue. Market chain actors compete with regard to price and quality in their day-to-day business, which apparently inhibits the development of trust and concerted action (Bernet et al, 2006).

An ongoing process of innovation is needed along the market chain, which should enable those involved to constantly identify and take advantage of new market opportunities, thus positively affecting rural producers. To make this happen, the actors involved must be given the opportunity to fruitfully interact and build mutual trust. Only in this way will optimum use be made of available resources, which are transformed into products and services that are of value to market chain actors and consumers (Bernet et al, 2006).

Strategic linkages between geographic areas and competitive market chains are essential. Local actors, linked to primary production, must collaborate with those actors who are able to enter the market with products and services that are valuable to consumers and profitable to all involved in the production process for those actors based in rural areas (Bernet et al, 2006).

A major challenge faced by any effort to link rural areas with competitive market chains relates to quality standards.
Participatory processes also help economically and geographically marginalized actors to access new opportunities by forming links with other market-chain actors. Such collaboration not only increases income, it acts as a viable strategy of “empowerment” by enhancing people’s access to knowledge, skills and contacts (Bernet et al, 2006).

Supply chains, often buyer-driven, can span several countries and regions, as marketing and manufacturing agents set up global production networks. To enter
new markets, the sector must integrate itself at national, sub regional and regional levels. However, effective integration is difficult. Each stage of the supply chain — from recovering hides and skins, to converting them into leather in tanneries, to manufacturing and marketing leather products — requires specific policies, human skills and support systems (Rienstra, 2004).

2.1.4. Approaches to the study of agricultural marketing
The study of marketing involves various approaches. The most common are the functional, the institutional, and the commodity approaches (Cramers and Jensen, 1982).

2.1.4.1. Functional approach
Functional approach studies marketing in terms of the various activities that are performed in getting farm product from the producer to the consumer. These activities are called functions (Cramers and Jensen, 1982). Using the functional approach, it is feasible to “cost” these functions and to compare them against others (middlemen) doing the same job or against standard of performance (Cramers and Jensen, 1982). And this approach helps to compare cost and benefits of different functions. The widely accepted functions are: a) exchange (buying and selling), b) physical (processing, storage, and transportation), and c) facilitating (standardization, financing, risk bearing, and market information). Most of these functions are performed in the marketing of nearly all commodities.

Marketing of agricultural products consists primarily of moving products from production sites to points of final consumption. In this regard, the market performs exchange functions as well as physical and facilitating functions. The exchange function involves buying, selling and pricing. Transportation, product transformation and storage are physical functions, while financing, risk-bearing and marketing information facilitate marketing (Cramers and Jensen, 1982).

2.1.4.2. Institutional approach
Institutional approach examines the activities of business organizations or people in marketing. The institutional approach focuses on the study of the various institutions, which perform the marketing activities. These organizations or people are middlemen who perform the operations necessary to transfer goods from the producer to consumer, because of the benefit of specialization and scale that exist in marketing as well as production (Cramers and Jensen, 1982).
2.1.4.3. Commodity approach
In a commodity approach, a specific commodity or groups of commodities are taken and the functions and institutions involved in the marketing process are analyzed. This approach focuses on what is being done to the product after its transfer from its original production place to the consumer (Kohls and Uhl, 1985). It helps to pinpoint the specific marketing problems of each commodity as well as improvement measures. The approach follows the commodity along the path between producer and consumer and is concerned with describing what is done and how the commodity could be handled more efficiently.

2.1. 5. Framework for evaluation of marketing system
The development of reliable and stable market system has been an important element in commercialization and specialization in the agricultural sector. In order to study the functioning of markets many researchers have applied the Structure-Conduct-Performance (SCP) paradigm. The SCP approach was developed in the United States as a tool to analyze the market organization of the industrial sector and it was later applied to assess the agricultural system and this framework was to evaluate the performance of industries in the USA (Meijer, 1994). Subsequently, it was applied in the functioning of markets in agricultural sector, and served as a tool to evaluate the performance of the commercial system.

In order to study the functioning of markets many researchers have applied the Structure-Conduct-Performance (SCP) paradigm. It was applied in the functioning of markets in agricultural sector, and served as a tool to evaluate the performance of the commercial system. The framework distinguishes between three related levels; the structure of the market, the conduct of the market, and the performance of the market (Meijer, 1994).

As a method for analysis the SCP paradigm postulates that the relationship exists between the three levels distinguished. One can imagine a causal relations starting from the structure, which determine the conduct, which together determine the performance (technological progressiveness, growth orientation of marketing firms, efficiency of resource use, and product improvement and maximum market services at the least possible cost) of agricultural marketing system in developing countries (Meijer, 1994).

The relationships between structure, market behavior and performance must not be interpreted in isolation. Other factors, such as firms’ objectives, barrier to entry,
economies of scale, and assumptions about rival firms’ behavior, will be relevant determining factors of the degree and relationship between them (Schere, 1980). The structure and the conduct of market participants have a direct implication for the nature of production price relationships between different marketing levels and the direction of causality (Scarborough and Kydd).

2.1.5.1. Structure of the market
Market structure depicts the institutional environment among others in which transactions take place, which influences competition and pricing is considered to be fixed in the short run for actor in the marketing channels. Market structure is defined as characteristics of the organization of a market, which seem to influence strategically the nature of the competition and pricing within the market (Meijer, 1994).

Market concentration can be defined as the number and size of sellers and buyers in the market. Concentration is believed to play a large part in the determination of market behavior within an industry because it affects the interdependence of action among firms. The relationships between concentration and market behavior and performance must not be interpreted in isolation. Other factors, such as firms’ objectives, barrier to entry, economies of scale, and assumptions about rival firms’ behavior, will be relevant in determining the degree of concentration and relationship between concentration and behavior and performance (Schere, 1980).

Structural characteristics may be used as a basis for classifying markets. Markets may be perfectly competitive; monopolistic; or oligopolistic (Scott, 1995). The organizational features of a market should be evaluated in terms of the degree of seller concentration, entry barriers (licensing procedure, lack of capital, know-how, and policy barriers), degree of transparency and degree of product differentiation that condition or influence the conduct and strategies of competitors (Wolday, 1994).

The common indicators (attributes) of market structure are buyer and seller concentration, barriers to entry and exit, vertical integration and product differentiation (USAID, 2008).

Kohol and Uhl (1985) suggest that as rule-of-thumb, a four largest enterprise concentration ratio of 50% or more is an indication of strongly oligopolistic industry, 33 -50% a weak oligopoly, and less than that, an un concentrated industry. Oligopoly is a market structure in which there are a few large firms and entry is difficult but not
impossible. Oligopoly is different from other market structures because firms are interdependent: any action taken by one firm usually provokes a reaction by other firms.

2.1.5.2. Conduct of the market

The structure and the conduct of market participants have a direct implication for the nature of production price relationships between different marketing levels and the direction of causality (Scarborough and Kydd, 1992).

According to Abbott and Makeham (1981) conduct refers to the market behavior of all firms. In what way do they compete? Are they looking for new techniques and do they apply them as practicable? Are they looking for new investment opportunities, or are they disinvesting and transferring funds elsewhere?

Market conduct deals with the behavior of firms that are price-searchers are expected to act differently than those in a price-taker type of industry (Cramers and Jensen, 1982). Price-searchers can determine their selling prices or quantity of output they sell. In addition, they could use their market power to weaken or eliminate competitors, example-reducing price.

2.1.5.3. Performance of the market

According to Abbott and Makeham (1981) market performance is how successfully the firm’s aims are accomplished, which shows the assessment of how well the process of marketing is carried out. Is produce assembled and delivered on time and without wastage? Is it well packed and presented attractively? Is its quality reliable and are terms of contract observed? Is the consumption of the products increasing and sales in competitive market expanding?

As a method for analysis the SCP paradigm postulates that the relationship exists between the three levels distinguished. One can imagine a causal relations starting from the structure, which determine the conduct, which together determine the performance (technological progressiveness, growth orientation of marketing firms, efficiency of resource use, and product improvement and maximum market services at the least possible cost) of agricultural marketing system in developing countries (Meijer, 1994).
2.2 Empirical Literature

2.2.1. Development of hides and skins

The history of livestock production and the hides and skins they provide are inextricably linked with the history of human development. It is likely that humans have always exploited animals for various purposes. Initially perhaps, wild animals would have been killed simply to prevent those attacking settlements. Later, they would have been hunted or trapped to provide food, fuel for lighting and other materials for tools and clothing. The first attempts to use hides and skins must have been quite crude and may have involved no more than collecting the hair, fur or wool and using it to form soft bundles to make mattresses and pillows. Larger numbers of better quality hides and skins probably started to become available with the domestication of livestock during the Stone Age (Leach, 1995).

More widespread use of hides and skins would have required the development of special processing techniques. Raw hides and skins are of little use in their natural state and spoil quickly. The simplest way of protecting and processing them is by drying, which causes major changes in their physical characteristics. Dried hides in particular, are hard and durable and have always been widely used in the past. Some of the applications for dried hides include the manufacture of personal armor, shields, musical instruments (such as drums) and upholstering chairs. Dried skins have also been used for similar purposes and, because of the abundance of hair, fur or wool that commonly occurs on them, skins have long been used to make clothes particularly suitable for use in cold climates (Leach, 1995).

One of the most enduring applications for hides and (more particularly) skins is their use as writing materials. At one time, almost all documents were written on parchment. By far the most important application for hides and skins, in terms of both value and volume, are their use at the principal raw material in the manufacture of leather. Tanning, which is synonymous with leather manufacture, may refer specifically to the one crucial step in processing, which changes hides and skins into leather. Alternatively, tanning may be applied to a whole series of related operations. In fact, the whole sequence of procedures involved in the manufacture of leather consists of more than a dozen different steps (Lockhart-Smith and Elliott, 1974).

The development of the tanning industry in the last century was closely linked to the industrial revolution, and the associated demand for leather items required operating
machines, the provision of leather for footwear and other goods. The demand for raw material was considerable (Leach, 1995).

Until recently the general trade in hides and skins consisted of exports from developing countries to developed countries. Only in the 1970s did the net trade in raw materials balance and then change with developing countries starting to import more hides and skins (FAO, 1986).

The principal cause of this change was the establishment of tanneries in developing counties, which eventually required more than their own domestic supplies of raw materials. The newly established tanning industries provided valuable employment locally and the low cost of labour provided trading advantages. Rather than exporting low value raw materials, developing countries were now able to trade in more valuable leather or leather products. The development was encouraged to some extent by stricter controls on effluent discharges in developed countries, which discouraged tanners there from undertaking the preliminary tanning operations (which produce major effluent problems). As a consequence, there have been a major increased in tanning operations in developing counties and an increase in the trade of semi-processed and finished leather, as well as leather goods (Leach, 1995).

While many agricultural commodities are the primary products of a particular enterprise, hides and skins are not. With a few minor exceptions (in the case of some fur-bearing species such as mink) animals are not kept to provide hides and skins. In different countries, the primary reason for keeping animals varies. In general though, livestock such as cattle, buffalo, sheep and goats are maintained to provide meat, milk, wool, draught power or to provide a source of wealth (Leach, 1995).

Upon the death of the animal, by deliberate slaughter or natural causes, the meat is usually the most important product and receives considerable attention. Hides and skins are often dismissed as being of secondary importance and tend to receive inadequate attention. Since hides and skins are by-products, their supply is not primarily affected by the demands of the tanning industry. Deliberate slaughter of animals for meat production accounts for most of the hides and skins available to the tanning industry. In some countries, significant numbers of most hides and skins may also be provided by fallen or casualty animals. Though deliberate slaughter usually occurs in response to the demand for meat, they may be influenced by other factors. For example, prior to 1992, policy changes in the European Union (EU) lead to
increased slaughter of dairy animals, and droughts throughout parts of Africa necessitated the widespread slaughter of livestock (Leach, 1995).

Despite the significance of activities undertaken in slaughterhouses, it is generally accepted that the facilities available in most developing countries are less than ideal. In some instances, the problem is a general lack of money for the provision or improvement of facilities (Leach et al, 1993). Although hides and skins from conventional slaughtering operations constitute the bulk of raw materials for the tanning industry in some places, those from fallen animals and game animals may provide another useful source (Leach et al, 1993).

**Trade and marketing of hides and skins**

Market globalization poses a considerable challenge to farmers and those living in rural areas in developing countries, where inadequate infrastructure and limited access to information and technology increase both production and transaction costs. So, how can producers compete in such markets, which are more and more demanding with regard to product quality and timely delivery should be considered (Bernet et al, 2006).

The CNFA strategy is focused and flexible which is born out of rich experience in Eurasia, the Middle East, and Africa, the strategy is designed to address the multiple production, value-adding, and marketing challenges faced by developing agriculture. Typically working at three systemically linked levels of the agricultural economy (markets, enterprises, and farmers), CNFA strengthens the linkages between producers and buyers, enabling producers to access new technologies, improve quality and ultimately, to expand sales and incomes (CNFA, 2003).

Before CNFA undertakes certain projects, the economists and business specialists conduct thorough analyses of enterprises in a market chain, weak or broken linkages between those enterprises, and the unique competitive advantages of each market chain in regional markets. As a result, the program is more targeted – designed to address specific market chain weaknesses (CNFA, 2003).

Trade in hides and skins, semi-processed, tanned leather goods is a lucrative business. This is particularly the case for some developing countries where the dynamism of the sector has led to a move up the value-added chain and strong market positions. As a result, developing countries hold a 45% share of world trade
in leather manufactures. Many have substantially increased their share of world footwear production in relation to developed countries (Rienstra, 2004).

Exports of hides and skins have fallen in recent years to below 4%, yet leather is ranked very high as an export commodity in several African countries. The countries’ tanning capacity has fallen from 9.2% to 6.8%. At the same time, the livestock population has jumped about 25% over the last decade, faster than the world trend (Rienstra, 2004).

The livelihood of the smallholders is highly dependent on the cash income derived from livestock and livestock products. Alleviating constraints to marketing, improving market information and upgrading marketing infrastructures will potentially increase the welfare of smallholder producers and urban consumers and improve the national balance of payments. The more farmers are aware of the market demand and price, the higher will be their bargaining power that could improve their income through getting a larger share of the consumer spending. Market infrastructural and institutional set-ups will improve the access of producers to potential markets whereby they could supply more volumes with higher share of the end market price (Ayele et al, 2003).

Tannery and leather industries find themselves in precarious situations in all the three countries. Firstly, there are more tanneries than the locally available volume of raw hides and skins. Cheap and subsidized imports of leather products and articles are also out-competing the local leather processing industries and forcing them to close down in Kenya, Ethiopia and Sudan. The tannery industry is fraught with cash-flow problem. It is difficult to envisage how these industries can survive for long unless the respective governments take some critical measures to safeguard them from total collapse (Yacob, 2002).

Leather is a leading export for many African countries. The gap between resources and production is wide, but exposes the potential of the industry. Reducing the gap is critical in this important sector, which is strategic for economic and industrial development. By boosting exports, the entire continent stands to benefit. Because leather is a by-product of the meat industry, the supply chain begins with animal husbandry, the lifeblood of many rural communities (Rienstra, 2004).
The expert group meeting held during Meet in Africa (2005) identified a number of obstacles:

- The quality of hides and skins.
- A poor and deteriorating infrastructure of roads, power supply and telecommunications that affects all of the supply chain.
- A lack of foreign investment.
- Low labour productivity, poor management and outdated training services.
- Inadequate levels of technological development, productivity and workmanship.
- Limited or no access to secure working or low-cost capital.
- Environment protection measures.
- A lack of marketing information, expertise and control.

“The problems, constraints, challenges and solutions are interrelated and as a result, require an integrated approach,” says (Giovanni Dadaglio, Senior Market Development Officer at ITC’s Market Development Section cited in Riensra, 2004).

Meet in Africa (2005), launched in Cape Town in 1998, followed by Casablanca in 2000, Tunis in 2002 and Addis Ababa in 2004, is now an international crossroad, combining a trade fair involving buyers from all over the world with events including seminars, expert group meetings, buyers–sellers meetings and factory visits. In this forum, firms and institutions identify measures to be taken and valuable partnerships are forged. It also brings together professional associations, trade support institutions, customs, transport companies and various ministries of the host country to coordinate each event.

To become a strong global player, African countries must overcome many obstacles, including trade challenges, and a wide range of difficulties embedded in the supply chain, due to both internal and external pressures. The sector has a major opportunity if it can effectively bridge the gap between resources and production. Its major strength is the availability of raw hides and skins, as global forecasts predict that world demand for leather in the coming decade will outstrip supply (Meet in Africa, 2005).

Lack of or asymmetric livestock price information was characteristic of the Kenyan livestock sub-sector. Taking this as an example, Gatere and Dow (1980) cited in Ayele et al (2003), studied the possibility of an improved Livestock Market Information System (LMIS). They recommended the use of mobile, vehicle-mounted, weighbridges and VHF radio to collect rural price data based on animal quality. Then
such information was envisioning be broadcasting by national radio, television and newspapers regularly, or diffusing by agriculture extension agents.

Animal by products that have been least intervened with respect to marketing are hides and skins. The only intervention to improve both the quality and marketing of hides and skins is the issuance of a regulation by government that proved very difficult to observe. The trade, here as well, is functioning smoothly except for the continued deterioration in the quality of especially skins (Sintayehu, 2003).

Hides, skins, leather and leather products are the most widely traded commodities in the world with their total export value of US$ 44 billion. These products combined rank first in important exportable agricultural commodities like, meat, rubber, cotton, coffee, tea, rice and tobacco. The value takes 41% of the combined export values of these commodities (FAO, 2001).

Export of finished products is negligible. Traditional tanners also absorb substantial quantities of hides and skins for processing and manufacture of traditional household articles including farm implements, furniture, saddles and traditional musical instruments (Girma, 2003).

2.2.2. Development of the hides and skins Sector in Ethiopia

2.2.2.1. Historical backgrounds

In Ethiopia annual per capita consumption of food of animal origin, particularly of meat is very low (7.4 kg). However, this is assumed to grow with the improvement in income per head and population growth, leading to increased slaughter of animals and hides and skin production (Girma, 2003).

In Ethiopia off-take rate is estimated at about 8% (FAO 1998, as cited in Yacob, 2002) for cattle, one of the lowest in Africa in terms of proportion to the livestock population. This amounts to between 2.2 and 2.8 million head of cattle per year. Off-take for sheep and goats is estimated at 40.5% and 34% respectively or a total of about 14.5 million shoats annually. Nevertheless, there is a possibility that the FAO estimate may not include the off-take that takes place through the cross-border trade to Somalia, Djibouti and Kenya. Thus the off-take level of livestock particularly for shoats and to some extent cattle could be relatively higher than both estimates (Yacob, 2002).

Ethiopia has been exporting more of hides and skins relative to its meat and live animals export. The channels for the collection of hides and skins to the tanneries are
relatively well established but need significant improvements to reduce damages caused by thorns, ectoparasitic diseases, poor flaying and storage methods. Whereas achieving significant improvements on the former two may not be easy given the country’s’ under developed animal health delivery system and livestock grazing habits, technical improvements on the latter two are within reach given some commitment (Yacob, 2002).

Hides and skins are the basic raw material for the production of leather for footwear, clothing, upholstery, industrial uses, etc. A good proportion of this raw material comes from the farmer, village trader, trader, and country butcher and therefore these producers must make all possible efforts to maintain a high standard of quality of the raw materials (PIC, 1990).

Cattle hides: Probably the best-known types of mammalian hides used by the tanning industry are those provided by cattle. In 1990, based on the level of recorded slaughtering for meat production, cattle would have provided about 28% of the total number of all hides and skins. On the basis of weight, cattle hides may have contributed as much as 90% of the tanning industry’s raw materials from conventional sources.

Sheep skins: are important sources of raw materials for the tanning industry, providing 48% of the pieces in 1990 or 7% of the weight of raw material from conventional sources. They are considerably smaller than hides, with medium-sized skins.

Goat skins: are the third principal sources of raw materials for the tanning industry, providing 24% of the pieces in 1990, or 3% of the weight. They are about the same size as sheep skins, but slightly lighter at 2-5 kg and thinner at 1-2 mm. They are generally considered by tanners to be one of the best materials for leather manufacture. The papillary layer constitutes about 50% of the thickness of the dermis, but it does not seriously weaken the skin.

Girma (2002) mentioned, the emergence of modern tanning in Ethiopia dates back to 1918, through ASCO and Awash (currently Addis Ababa and ELICO). The introduction of modern system of improvement of hides and skins in an organized form in the country could be looked at in three different stages of development:

The first was the establishment of Livestock and Meat Board in 1964 and continued introducing the system of moving the traditional method of preservation of hides and
skins (ground drying, smoking and pegging of sheep and goat skins etc.) to modern preservation frame drying technique, so as to promote the production and supply of better quality raw material and to discourage the improperly preserved hides from reaching the central market. This resulted in a systematic procedure of marketing (Ahmed, 2000). The Board has been involved in the employment, training and assignment of hides and skins technicians at potential hides and skins production centers such as Shashemene, Addis Ababa, Dessie, Mekele and Gondar.

The second stage was the establishment of the Second Livestock Development Project (SLDP) in 1972 for the improvement of livestock marketing infrastructure and quality of hides and skins (Girma, 2002), planned to intensify the improvement scheme initiated in phase one of the Meat Board, and has contributed greatly to the proper handling of hides and skins in the country.

In the third stage of development, the government tried to have a broader outlook of the hides and skins industry of the country and a detailed work was done. A series of comprehensive hides and skins development programs and projects were also systematically prepared and launched. The hides and skins improvement responsibilities were decided upon in 1980, to be under the MoA, which was represented in all 14 provinces and in each province there were a number of extension workers responsible to properly execute the extension programs in their respective areas.

Under such a scheme, the specific responsibility of hides and skins improvement development was then vested in the MoA. The Animal Resources Marketing Department (ARMD) in the Ministry, whose mandate covers both extension and regulatory activities, took over these responsibilities together with the hides and skins improvement staff of the SLDP that were transferred to the MoA (Girma, 2002).

To implement the foregoing of the Ministry found necessary to establish an autonomous and responsible public authority with appropriate powers and duties. Therefore, an animal products and by-products marketing authority, known as Livestock Marketing Authority (LMA) has been brought into being by proclamation as an autonomous Federal Government body having juridical personality (Wilson et al., 1999, cited in Girma, 2002).

The objective of the Authority as given by the Proclamation is to promote the domestic and export marketing of animals, animal products and by-products (hides
and skins) by increasing their supply and improving their quality. Its mandate is wide ranging including direct involvement in the construction and establishment of marketing infrastructure, abattoirs and processing facilities.

The Military Government (Derg) in accordance with the general framework of socialist oriented economic growth; a number of fundamental and far-reaching reforms and institutional changes were introduced since early 1975 (Ahmed, 2000). First, establishment of the Hides and Skins Marketing Corporation (HSMC) in 1976 under the supervision of the ministry of trade and industry was done. The Corporation was set up to further strengthen the hides and skins trade on the basis of the following objectives:

- To improve hides and skins qualities to compete in the world market;
- To advertise both at home and abroad the quality of Ethiopian hides and skins
- To publicize daily international hides and skins prices as well as future trends; and
- To introduce a countrywide system of buying and selling on an established grade and weight system; and to provide a regular supply of hides and skins for the tanneries. The Corporation had participated in the local and export trade of the commodities.

Gearing towards the expansion of the business, the Corporation offered premium prices and incentive for both high volume supply (above quota) of better grades and weights of hides and skins (Girma, 2002). Besides, efforts have been made by the same corporation to train slaughter home people, and hides and skins merchants in order to properly handle and maintain hides and skins.

Second, establishment of the National Leather and Shoe Corporation (NLSC) in recognition of the economic importance of the leather sector in Ethiopia, and having in mind the raw material availability and market opportunities, in 1976. The NLSC, under the MoTI, was determined to reshape and administer the nationalized leather sector including 8 tanneries, 6 shoe factories and one garment factory (LMA, 1999).

Third, establishing and expanding Agricultural Service Cooperatives organized from three to five peasant associations, and cooperative marketing were became the important rural institutions to provide economic and social services to their members.

In addition to the corporations and service cooperatives, there were many types of traders who were involved in the exchange of hides and skins during the era of Derg, although their roles were limited. These include collectors, urban assemblers,
wholesalers and big dealers (Addis Ababa). Besides, there were also agents and brokers who played active roles in the rural, towns and terminal markets (LMA, 1999).

The major constraints of hides and skins marketing faced were reflections of the economic policy which were characterized by socialist-oriented development and centralized planning system: nationalization of major industries, financial institutions, allocation of quotas, fixing prices, legal monopoly of corporations, restriction of trade movement and the like (Girma, 2002). Apart from the problems that stemmed from the system, the main constraints in the marketing of hides and skins included an inadequate network of primary buyers, lack of facilities for slaughtering, preservation, storage and transportation, ‘lack of incentives for improvement’ and limited effectiveness of government extension service (Ahmed, 2000).

Following the demise of Derg in May 1991, the Ethiopian People's Revolutionary Democratic Front (EPRDF) led government, introduced a series of significant policy reforms. The total changes of the economic and institutional environment of the country focused on stabilizing the economy and deregulating economic activities, which were previously characterized by central planning. The role of the state was limited; the trade regime liberalized; capital ceiling of private sector removed; private traders allowed in the domestic and foreign trade sector; private investment procedure simplified and other significant reforms enacted (Girma, 2003).

For thousands of years, Ethiopian farmers have consciously and unconsciously selected locally adapted animals. Their characteristics now are more often relevant to survival and to minimizing the risk of total loss than to have high levels of production. These traditional species and breeds still dominate the livestock sub-sector in the country. In view of its varied climatic and topographic conditions, its ethnic composition and the size of its livestock population, Ethiopia is clearly a major repository of farm animal resources and genetic diversity (Wilson et al., 1999).

In the history of world leather market, the Ethiopian hides and skins which are by-products of these locally adapted animals, have proved special suitability for the production of different leather products; and so that they have won international reputation for their unique natural substances of fineness, cleanness, compactness of texture, thickness, flexibility and strength (Darge, 1995).
The Ethiopian sheep skins of the highlands which are estimated to constitute above three-fourth of all the country’s sheep population are categorized as “hair sheep/Sellalie sheep skins” and are internationally known to be of the world’s finest and highly compacted texture. They are globally recognized as an excellent raw material particularly for the production of high quality leather for dresses, glove and other garments. This unique feature of the Ethiopian sheepskins enables them to fetch higher prices in the international leather market (Darge, 1995).

Goatskins from the highlands are categorized as Bati-genuine and those from the lowlands as Bati-type in the international market. Bati-genuine is associated with highest quality class goatskins in the world. They are characterized by thicker, highly flexible and clean inner surface and are known worldwide for being excellent raw material for the production of high quality suede leather. The lowland goatskins that are classed as Bati-type have less substance as compared with Bati-genuine, yet, they also command high demand in the international market for suede leather production. The Ethiopian cattle hides are classed as “Zebu-type” and are internationally popular for their fine grain pattern and fiber structure; and are well suited for the production of quality upper leather (Darge, 1995).

The production of hides and skins is found principally in the farms of the mountain and high plain areas; this environment gives hides a considerable thickness. Hides that are not dried in direct sunlight are large, with a good quality surface, apart from defects resulting from branding, and from insects (UNIDO, MoTI, 2004).

Ethiopian highland sheepskins, estimated to comprise about 70% of the national sheepskin production, have an international reputation for a unique combination of characteristics of fine quality, thickness, flexibility, strength and compact texture. They are very suitable for the production of high quality leather garments, sports gloves and are in great demand on the world market (UNIDO, MoTI, 2004).

2.2.2.2. Marketing of hides and skins
The available research results for livestock marketing in Ethiopia are outdated. Current knowledge on livestock market structure, performance and prices is poor and inadequate for designing policies and institutions to overcome perceived problems in the domestic and export marketing systems (Ayele et al, 2003).

Livestock and livestock products are the major foreign exchange earners, only second to coffee, with hides and skins contributing the most. The share of live animal
exports in total livestock and livestock products export earnings have declined in recent years. Skins and hides exports increased during this period while meat exports remained relatively constant (Zewdu 1995). As Yacob (2002) indicated, Livestock prices drop down during droughts and peak up during holidays (Christian, Muslim or other public).

Transport constitutes a major cost factor in livestock trading. As a result, transport costs determine the level of profits accrued by livestock traders. Those traders with their own means of transport accrue the highest profit margin from high turn over volume and savings in transport costs (Yacob, 2002).

There has been a marked growth in the establishment of new private tanneries in Ethiopia since 1992, though many of them don’t operate at full capacity due to shortages in raw skins and hides supplies. Most of the skins and hides exported are semi-processed (as pickled, wet blue or crust). Finished leather goods and articles are produced mainly for the domestic market and to some extent for the export markets. Hides and skins generate the second foreign exchange earnings after coffee (Yacob, 2002).

There are 20 tanneries in operation, which have created direct job opportunities for 3975 people. Of the 20 tanneries, 9 are 100% export oriented in semi-processed skins, 14 have facilities for the treatment of effluents. A further four tanneries are expected to start operations in the near future and licenses have been issued for the establishment of an additional 18 tanneries. The processing capacity of the tanneries far exceeds the supply of hides and skins, particularly raw sheep and goatskins. This has created an unhealthy competition among tanners; with the results that skin prices are high. This raises the price of leather to the local manufactures of leather products and affects the capacity to compete in the export market (UNIDO, MoTI, 2004)

According to Yacob (2002), following the structural adjustment program a slow market liberalization process has been taking place in Ethiopia. Formerly Government-owned industrial abattoirs and tanneries (except three of the latter) have been fully privatized. Livestock and livestock products marketing are carried out entirely by the private sector.

The Government didn’t have any specific policy on livestock marketing until the establishment of the Livestock Marketing Authority (LMA) in 1998. The LMA was set up with the objectives of promoting domestic and export markets by initiating policies,
laws and regulations, issuing quality control directives on exportable and importable materials, encouraging and establishing staging points and quarantine stations for domestic and export trade, promoting the organization of livestock markets, abattoirs, skins and hides sheds, encourage the condition of research on the marketing of animal and animal by-products etc (Yacob, 2002).

In Ethiopia, hides and skins are traded in accordance with international free market conditions in terms of price. But this system works to the advantage of the big traders and tanneries that have the opportunity and capacity to follow world market price trends and fluctuations; the rural farmer /primary producer lacks this opportunity. Traders supply about 70% of the hides, and 90% of the sheep and goatskins to the industry (UNIDO, MoTI, 2004).

The marketing chain for the hides and skins trade is principally from the primary producer (rural farmer) to rural markets, to small dealers and agents-collectors, to town traders and shed owners (where the hides and skins are frame-dried and /wet-salted), to the big traders in Addis Ababa (the central market) - and finally to the tanneries. The hides and skins produced in butcheries and abattoirs are auctioned to big traders and to tanneries, both public and private (UNIDO, MoTI, 2004).

In general, in different cross-border trade outlets, prices do not move in the same direction, indicating some sort of market failure. Thus, there are no established spatial price differences (price ratios) that can be linked to this trade pattern. And there is no market integration, making it difficult to prescribe policy interventions to combat this trade (Tegegne et al. 2001).

The advantage of applying the value chain permits the development of an integrated approach to the analysis of problems and constraints throughout an industry, thus leading to the identification of solutions to problems within specific components that will positively affect other components, and the chain as a whole (UNIDO, MoTI, 2004).

The leather value chain begins with animal husbandry, the source of its raw materials. It then has four stages - three processing stages and the marketing, composed of several elements that are critical to the functioning of the chain: marketing of hides and skins, the basic raw material, and the marketing of intermediate and of final products. The leather value chain, with all the inputs, policies and support system that it requires, is clearly a high complex system, where problems and constraints and the search for their solutions are interrelated (UNIDO, MoTI, 2004).
The market chain is stretched in space and time starting from the point of slaughter to the markets where end products are supplied. The commodity passes through different hands with or without changing its form (Girma, 2003).

As Girma (2003) explained, the market is generally very wide with long channel in which different market forces with different trading capacities are involved. These are primary producers, collectors, big suppliers, butcheries and abattoirs, traditional tanners, tanning industries, and transport enterprises.

Figure 1.1. The Marketing Channels for Hides and skins in Ethiopia

Source: (Yacob, 2002 cited in Girma, 2003)

2.2.3. Hides and skins in Tigrai region

Livestock in the region is an essential component of over all farming system serving as a source of draught power, milk, meat, and manure, and cash income for the farm family. Hides and skins as a livestock products are one of the different animal products and by - products offered to the central as well as foreign market to earn foreign currency (Adugna, 2004).

Despite the regional economic importance of the livestock, the sub sector has remained untapped due to many problems, which directly or indirectly have negative impact on the production of quantity and quality of hides and skins. Out of them poor
livestock management, poor genetic potential, high prevalence of disease and parasites, and lack of improved processing and marketing system (BoANRD, 2004).

Regarding the participation of local tanners in the raw hides and skins marketing, they mainly use cattle hide and goat skins that better quality and they pay relatively higher price than the licensed traders' pay. They use to buy at farm gate of the farmers. The amounts they consume vary from place to place within the region and the type of products they produce as demanded by the local market. Most local tanners found in western, central and eastern zones use goat skin but those who are in southern zone use cattle hide. Their number before ten years was around 1380. To alleviate the development constraints mentioned and to enhance the livestock and livestock products marketing development so that to benefit from the resource, the region has planned and implemented different agricultural development policies and strategies (BoANRD, 2004).

Breed is one of the natural factors that affect the quality of hides and skins produced in the region. The distribution also indicates the sources of the raw material. Hence, according to livestock development action program study made by BoANRD in 2000, different ruminant livestock breeds exist in the region as explained below:

Cattle: Some of the cattle breeds found in the region include Arado, Abyssinia, Raya/Harmo, Abergele, Barka/Begait, and Medenes respective to their proportion from the total population. They are adapted to highlands (Arado and Abyssinia) and lowlands (Raya, Barka, Medenes and Abergele). There is no clear information and no research is done so far on the natural substances difference of the hides and skins from the different cattle breeds. However, as to the information obtained from different tanneries, hide from Harmo cattle has large size that makes it to be highly demanded.

Sheep: The most known sheep breeds of the region are Abergele, Begait, Highland sheep, Abyssinia and Elle. Abergele and highland sheep are the most recognized breeds fit for mutton production found mainly in the highlands of southern and central zones. Begait sheep are, lowland breeds, mainly found in northwest zone of the region. With regard of the natural quality, skins produced from highland sheep, Abergele, Abyssinia and Begait sheep breeds are highly demanded by tanneries.

Goats: The most known goat breeds found in different zones of the region are Abergele. Highland goats mainly found in the highland areas of the region. Where as
Begait breeds found in the lowlands. In addition, Widar and Maeruf goat breeds are found in the southern and eastern zones bordering with Afar region. Goatskins obtained from Abergele, highland goat and Begait are best demanded than Widar and maeruf goatskins.

The type of animals being slaughtered for meat, however, differs from place to place reflecting the distribution of animal types, feeding habit and income of the people. The most commonly slaughtered animals in the region, therefore, are poultry, cattle and shoats.

Tigrai is one of the largest suppliers of hides and skins preceded by Oromiya and Amhara regions. The amount of hides and skins channeled to the central market is increasing from year to year. All hides and skins collected and preserved by the wholesalers are graded based on the quality defects identified before being transported to different tanneries. Of the total hides and skins offered to the central market so far, 46%, 35%, 13%, 6% and 0.2% are graded as first, second, third, fourth and rejected, respectively (BoaNRD, 2004).

Lack of price incentives to the primary producers, illegal cross-border traders, competition from local tanners are major obstacles to the improvement of hides and skins collection and quality improvement efforts of the region. In addition, defects like flaying cuts, putrefaction, improper shape, branding, scratches, disease and parasites as well as storage and transport are the major hides and skins marketing problems (BoANRD, 2004).

Regarding utilization of hides and skins assessment of CSA in 2007 holder’s utilization practices of the region shows 69% and 62.5% of hides and skins for sale, respectively. Out of the five zones, east zone have highest share of sale (92% and 86% of hides and skins) respectively. While western Tigrai utilize for household consumption 37% and 61% of hides and skins respectively, this is largest proportion in the region (CSA, 2008).

**Description of the study area**

Atsbi Wemberta Wereda is found in Eastern Zone of Tigrai National Regional State. The Wereda is located between 14° 09' and 13° 55' N Latitude and 39° 63' and 39° 89' E Longitude. It is about 70 km far from Mekelle to the North East through Wukro. The total area of the wereda is estimated at 1223 km² comprising of 16 villages ranging from 26.5 km² (Hadinet) to 209 km² (Kelisha Imni), and Atsbi Endaslassie.
and Haikmeshal towns (BoFED, 2006). It is bordered with Afar region in the East, and by the weredas of Enderta, Kilte Awlalo and Saesie Tsaeda Emba, in the South, West and North, respectively. The total population of the Wereda projected for 2007 is 116,632 (BoPED, 1998). Altitude in the area ranges from 918 to 3069 meter and 75% of the wereda is upper highlands and only 25% is found in low lands. The wereda is classified in to two agro-ecological zones. These are Tepid Sub-moist Mid-highlands of wemberta Area (apiculture/livestock farming system) and Sub-moist Highlands of Atsbi Area (pulse/livestock farming system) which consists of 7, and 9 villages, respectively (WoARD, 2006).

Rainfall is usually intense and short in duration. Under normal conditions, however, rain starts around the end of June then ends on early September. The average annual rainfall is around 550 mm. As a result Atsbi wemberta is one of the drought prone areas of the region. The area receives bimodal rainfall: Belg (short rains) from November to March (which are not enough for crop production, except for early variety barley) and Meher (long rains) from June to September (ILRI/IPMS, 2004).

Atsbi wemberta wereda has around 2% cattle, 4% sheep, and 0.4% goats of the region. Livestock are integral part of the farming system. Oxen provide almost the entire traction and threshing power. Sheep appear to be more important in pulse/livestock farming system, and goats are also important in the escarpments to the east and in the midlands (apiculture/livestock farming system). Apiculture is an important source of household income in both farming systems.

Hides and skins are an important commodity in both farming systems. Sheep skin comprises of more than 70% of the marketed skin in the wereda. It is reported that the skins in this wereda are of high quality because of their high fiber content (ILRI/IPMS, 2004). Cattle hides and shoats skins have been taken as one of the major important marketable commodities for the purpose of this study.
Figure 2.2. Map of the Study Area

Source: Tigrai BoFED, GIS Centre, 2008
CHAPTER 3
RESULTS AND DISCUSSION

This chapter deals with the findings of descriptive analysis on hides and skins marketing focusing on marketing channels, and the role and linkage of marketing agents. It also discusses the analysis of quantifying costs and margins for key marketing channels and identifies the strengths and weaknesses of hides and skins marketing in Atsbi Wemberta wereda.

3.1 Characteristics of Major Market Participants

As Mendoza (1995) pointed out, some traditionally accepted definitions help to identify and classify participants in the marketing process. In the real world, these classifications are by no means mutually exclusive. In this regard, producers, local collectors, wholesalers, transporters, and tanneries were identified as the hides and skins market participants in the study area.

In the sub-sections that follow characteristics of farmers related to demography, market participation, extension access, credit and information access, farming and non farming experience, income, and resource ownership are described. Traders’ characteristics related to demography, trade experience, income and resource ownership are also discussed.

3.1.1 Demographic characteristics of sample farmers

The demographic characteristics of farmers in terms of sex, religion, educational level, age, and family size of household head are presented in Table 1 below.

The table below indicates 99.2% of sample household were male. The educational background of the sample household heads is believed to be an important feature that determines the readiness of household heads to accept new ideas and innovations. In the table, about 13.4% of the sample household heads were illiterate, about 37.8% can read and write, whereas 42.1% and 6.7% had joined elementary and secondary schools, respectively. The average age of the sample household heads was 46. The available data indicates that the average family size of the household is 6.
Table 3.1 Demographic characteristics of sample farmers

<table>
<thead>
<tr>
<th>Variables</th>
<th>N= 121</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex Male (%)</td>
<td>99.2</td>
</tr>
<tr>
<td>Female (%)</td>
<td>0.8</td>
</tr>
<tr>
<td>Religion Orthodox (%)</td>
<td>96.7</td>
</tr>
<tr>
<td>Muslim (%)</td>
<td>3.3</td>
</tr>
<tr>
<td>Education Illiterate (%)</td>
<td>13.4</td>
</tr>
<tr>
<td>Read and write (%)</td>
<td>37.8</td>
</tr>
<tr>
<td>Elementary school (%)</td>
<td>42.1</td>
</tr>
<tr>
<td>High school (%)</td>
<td>6.7</td>
</tr>
<tr>
<td>Average age of household head</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>45.73</td>
</tr>
<tr>
<td>SD</td>
<td>10.65</td>
</tr>
<tr>
<td>Average household size</td>
<td></td>
</tr>
<tr>
<td>Person</td>
<td>6.03</td>
</tr>
<tr>
<td>SD</td>
<td>1.78</td>
</tr>
</tbody>
</table>

Source: Survey result, 2008

In the study area, farming is the main source of income for the households. The average annual income from farming of the sample household for the year 2006/07 for example was Birr 5464 with high variability. These facts are shown in Table 3.1 above.

Table 3.2. Experience and income of sample farmers

<table>
<thead>
<tr>
<th>Activities</th>
<th>N=121</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience in farming</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>21.31</td>
</tr>
<tr>
<td>SD</td>
<td>12.33</td>
</tr>
<tr>
<td>Annual farming income</td>
<td></td>
</tr>
<tr>
<td>Birr</td>
<td>5464</td>
</tr>
<tr>
<td>SD</td>
<td>4925.73</td>
</tr>
<tr>
<td>Non - farming experience (yes, %)</td>
<td>53.7</td>
</tr>
<tr>
<td>Non - farming experience</td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>5.26</td>
</tr>
<tr>
<td>SD</td>
<td>7.77</td>
</tr>
<tr>
<td>Annual non - farming income</td>
<td></td>
</tr>
<tr>
<td>Birr</td>
<td>1655</td>
</tr>
<tr>
<td>SD</td>
<td>1248</td>
</tr>
</tbody>
</table>

Source: survey result, 2008

From Table 3.2 it can be understood that non-farming is the major source of income next to farming for 54% of the sample households. The sample households have annual average non-farming income of Birr 1655 per household. These households had a mean of 5 years on non-farming experience.
With respect to the distance of the market places, where they sold their hides and skins respondents reported that the average walking time to local and wereda markets was 0.30 hour and 2.15 hour, respectively.

**Resource ownership**

Resource ownership is characterized in terms of land, livestock, types of house owned, and farm implements. These are indicated in Table 3. The livestock species found in the study area are cattle, goat, sheep, donkey, mule, horse, poultry, and bee colony. Livestock is a means of generating income, in addition to serving as food and traction power. To assess the livestock holding of each household, Tropical Livestock Unit (TLU) per household was calculated.

Table 3.3. Resource ownership of household

<table>
<thead>
<tr>
<th>Resource</th>
<th>N=121</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLU</td>
<td></td>
</tr>
<tr>
<td>(Yes, %)</td>
<td>100</td>
</tr>
<tr>
<td>Mean</td>
<td>6.63</td>
</tr>
<tr>
<td>SD</td>
<td>4.29</td>
</tr>
<tr>
<td>Land holding (hectare)</td>
<td></td>
</tr>
<tr>
<td>(Yes, %)</td>
<td>99.0</td>
</tr>
<tr>
<td>Mean</td>
<td>0.65</td>
</tr>
<tr>
<td>SD</td>
<td>0.48</td>
</tr>
<tr>
<td>Mud roofed house (%)</td>
<td>35.0</td>
</tr>
<tr>
<td>Corrugated iron sheet roofed (%)</td>
<td>65.0</td>
</tr>
<tr>
<td>Plowing tools (%)</td>
<td>87.6</td>
</tr>
</tbody>
</table>

Source: Survey result, 2008

The study indicates that the sampled households had an average of about 4 cattle, 16 shoats, and 5 equines. Land is one of the necessary resources of the households in the study area. The results also show that about 35% of the total sample households had mud-roofed houses, and 65% of iron sheet-roofed houses (partial or fully). As discussed with wereda experts before five years, only 20% of the households had iron sheet-roofed houses, but the livelihood and demand for iron sheet-roofed houses of the farmers is improving in the last five years.

Producers are the first link in the marketing chain. In the Wereda there exist two types of producers, i.e. town dwellers (butcheries, individual meat users) and farmers. The ultimate decisions on what, how much and when to slaughter are made by them. They sell their hides and skins to whoever they expect pays fair price.
Farmers in the Wereda mainly supply hides and skins to the local collectors. Even those who reported that they negotiate with buyers indicate that the final decision is of the buyers.

3.1.2. Characteristics of local collectors

The demographic characteristics of local collectors defined in terms of sex, religion, education level, age, and family size of the household heads are presented in the table below.

Table 3.4. Characteristics of local collectors

<table>
<thead>
<tr>
<th>Variables</th>
<th></th>
<th>N= 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average experience in collecting hides and skins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>10.31</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>6.33</td>
<td></td>
</tr>
<tr>
<td>Average annual income from hides and skins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birr</td>
<td>31203</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>29293</td>
<td></td>
</tr>
<tr>
<td>Average farming income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birr</td>
<td>4410</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>4300</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate (%)</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>Read and write (%)</td>
<td>53.3</td>
<td></td>
</tr>
<tr>
<td>Elementary school (%)</td>
<td>26.7</td>
<td></td>
</tr>
<tr>
<td>High school (%)</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>Average age of household head</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>49.2</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>11.29</td>
<td></td>
</tr>
<tr>
<td>Average household size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>6.53</td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.46</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey result, 2008

According to the table, all local collectors are male. Despite women households are around 30% in the area their participation in hides and skins’ trading is nil. The educational background of the local collectors is important in determining the capacity of local collectors to provide proper care to ensure the quality of the hides and skins. About 13.3% of the local collectors were illiterate, 53.3% can read and write, whereas 26.7% and 6.7% had joined elementary and secondary school respectively. The above data also indicates that the average family size of local collectors is nearly seven members. The majority of the local collectors had of more than 10 years experience on hides and skins trading.
Hides and skins trading is the main source of local collectors’ income in the study area. In this regard, the result shows that the average annual income of the local collectors from hides and skins trading for the year 2006/07 was Birr 31,203 with high variability. In the same year, they earned an average of Birr 4,410 from farming activities.

The nature and development of markets and villages for extension service can play a major role in determining patterns of sale. Where markets are well developed and competitive, local collectors can respond largely to the profitability of alternative hides and skins supply.

With respect to the distance of the markets where they sold their hides and skins, the respondents were asked whether the wereda market place is far or not from the local market. Accordingly, the average walking time of local collectors from their locality to dry and all weather roads was 25 and 51 minutes, respectively and to wereda market was 2.45 hours.

**Resource ownership**

Resource ownership of local collectors is characterized in terms of types of house, store/shed, and slaughtering materials owned. These are indicated in the table below.

Table 3.5. Resource ownership of local collectors

<table>
<thead>
<tr>
<th>Resource</th>
<th>N=15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud-roofed house (Yes, %)</td>
<td>26.6</td>
</tr>
<tr>
<td>Iron sheet roofed house (Yes, %)</td>
<td>73.4</td>
</tr>
<tr>
<td>Hides and skins shed (Yes, %)</td>
<td>100</td>
</tr>
<tr>
<td>Slaughter materials (Yes, %)</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey result, 2008

Table 3.5 indicates that 26.6% of the total local collectors had mud-roofed houses, and 73.4% had iron sheet-roofed houses. Sheds and slaughter ing materials are the main factors of preparing and preserving of hides and skins, and all local collectors had owned these materials.

Local collectors are the first link between producers and wholesale traders. For instance, local collectors in the Wereda purchased 66% of the farmers’ marketed hides and skins in 2006/07. They mainly buy small lots of hides and skins directly from farmers and sell to wholesalers depending on the agreement made prior and/or
fairness of the price offered. Their sources of money and market information in most cases are wholesalers.

3.1.3. Characteristics of wholesalers

Wholesale traders provide both information regarding price and some times advance payments for selected reliable clients (local collectors). Wholesale traders had relatively a timely price information access from tanneries. They absorbed the hides and skins supplied to the wereda market and mainly sell to tanneries and regional wholesalers after preservation. Besides, 2% of their sales circulated between them in the wereda, while their supply to regional wholesalers and tanneries is 98%. Hence, in most cases they played the leading role in price determination during purchasing at wereda level. On the other hand, all are price takers when selling the hides and skins as shown in table 2.6 below.

Table 3.6. Determination of hides and skins selling price

<table>
<thead>
<tr>
<th>Agent</th>
<th>Who determine price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Myself</td>
</tr>
<tr>
<td>Farmers (n=126)</td>
<td>1</td>
</tr>
<tr>
<td>Butchers (n=5)</td>
<td>3</td>
</tr>
<tr>
<td>Local Collector (n=15)</td>
<td>0</td>
</tr>
<tr>
<td>Wholesaler (n=3)</td>
<td>0</td>
</tr>
<tr>
<td>Total (N=144)</td>
<td>4</td>
</tr>
<tr>
<td>% total</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: survey result, 2008

3.1.4. Characteristics of tanneries

Tanneries are processors who buy hides and skins from wholesalers and produce pickle, wet blue, crust and finished leather, and supply to domestic and external markets. As the informal discussion with MoTI experts indicated, the tanneries are well equipped with the necessary capital, facilities and knowledge. This category of traders is mainly concentrated in Addis Ababa. All of them have been identified as holders of specialized hides and skins (semi processed and processed) export license. Farther all have reported having good access to timely market information.
3.2 Access to Different Services and Markets

3.2.1. Access to telephone services

The tremendous progress in telecommunication network development made recently by the country, contributed a lot to the fast decisions made by most marketing channel members. Most local collectors in the wereda villages reported that the establishment of wireless telephone services in their respective villages has helped them to receive timely market information from their clients and friends. Even though, the quality of the service of the Tele stations is poor and sometimes not functioning, all local collectors have access to telephone service in their vicinity.

The telephone service in Atsbi Endaslasie town is only on the Tele station except for public office and NGOs. Wholesale traders commented that the telephone service at the Tele center is very poor compared with the other areas. These traders get information mostly from Adigrat, Wukro, Mekelle or Addis Ababa. The wholesale traders also face difficulty in keeping the business secret and time management at local Tele center. Hence, the traders prefer to have telephone connection installed at their residence.

3.2.2. Access to extension services of livestock products management

Despite the region’s huge and extensive investment in promoting farmers extension works, the study result revealed that only 45% of the sampled farmers received extension services regarding livestock husbandry and products management. In this regard, 6.2% of the respondents reported receiving veterinary service, and very little (3.1%) about hides and skins management with significant variability among villages. In addition, the contact of development agents with farmers regarding hides and skins was not frequent and regular. Only 6.6% of the respondents got extension service weekly, 38.8% monthly and 19.8% at different time. The result from the RMA shows that some development agents do not have the time to offer enough technical advices on hides and skins due to the fact that they are assigned to other agricultural extension activities like soil and water conservation and household packages.
Table 3.7. Access of sample farmers to livestock products management extension service

<table>
<thead>
<tr>
<th>Villages</th>
<th>Total sample HHS</th>
<th>Access to livestock products management extension service</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gerekidan</td>
<td>36</td>
<td>15</td>
<td>42</td>
</tr>
<tr>
<td>Felegeweini</td>
<td>29</td>
<td>13</td>
<td>45</td>
</tr>
<tr>
<td>Habes</td>
<td>18</td>
<td>7</td>
<td>39</td>
</tr>
<tr>
<td>Hayelom</td>
<td>38</td>
<td>19</td>
<td>50</td>
</tr>
<tr>
<td>Total (N=121)</td>
<td>121</td>
<td>54</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: survey result, 2008

3.2.3. Access to road and transport

It is evident that the availability of well functioning good roads, transport network and commercial vehicles are very important. Transport facilities used to create place utilities of the product. Transport is an important factor in the marketing channel that links surplus regions to deficit areas. It allows farmers in surplus areas to profit from better prices on other markets, and consumers in deficit areas also benefit from lower prices from surplus markets.

Hides and skins are mainly transported from local markets to Atsbi Endaslase town, then to Adigrat, Wukro and Addis Ababa. It is interesting to note that hides and skins of the wereda are not transported to Mekelle, but rather back to Adigrat due to the networking between traders. According to the survey result, all local collectors used pack animals and small Isuzu trucks to transport from local markets to the town and wholesale traders used medium and big size trucks to transport hides and skins to Wukro, Adigrat and Addis Ababa.

From the study, it is learned that transport shortage was not the major problem. Rather, the problem is shortage of stock. Since hides and skins, by their nature, cannot be transported with other commodities transporting small stock increases the unit cost of transport.

In the study area, most local markets of the villages have access to dry and all-weather roads. In fact, all are coarse gravel and soil made, which cannot be used easily by all types of vehicles. From the informal discussion with traders, it is learned that those local collectors located near the all weather road of Atsbi to Wukro have the advantage of getting truck vehicles at lower cost. These help local collectors to
lower their cost and increase selling price, which is sometimes higher than that of Atsbi Endaslasie market.

Local markets in villages faraway from the main road faced a problem more than the marketing sites located along the main road which had the chance to get trucks rent at low charges. The average transport cost from local markets to wereda market has been calculated for local collectors. The result revealed that the average transport cost of local collectors from their local market (village market) to the wereda market (town) was birr 10/pack animal or 100/truck load for about 20 km distances that ranges from Birr 3 to 4 Birr/ hide, or Birr 1 to 2 Birr/ skin, and constituted 62.6 % of their total operation costs.

Kelisha Emni which is on the way to Afar region with dry weather road is more than 45 km far from the Wereda town. The distance has an impact on price determination. Even though producers around Kelisha Emni produce highly demanded hides and skins, they receive lower price due to the poor roads and the longer distance.

The distance from Atsbi Endaslasie town to Wukro, Adigrat and Addis Ababa was 25km, 100km and 850km respectively. The average costs of transport from Atsbi Wemberta to Wukro, Adigrat and Addis Ababa have been Birr 300, 500 and 3500 per truck load, respectively. The mean transport cost for wholesalers constituted 46% of their total marketing costs. Transport cost to Addis Ababa is sometimes higher than the normal rate that is from Birr 3500 to 4500 per truck due to the raw material that couldn’t be transported with other commodities.

3.2.4. Access to market information

Market information is said to be more perishable than the commodity itself. Access to timely and accurate market information is therefore vital not only for hides and skins marketing but also for the marketing of other commodities. Tschirley et.al (1995) argues that the existence of information barriers results in unexploited market opportunities, seasonal gluts and produces with inadequate quality specification and control, inequitable returns to producers and fundamentally poor returns to production and marketing system as a whole.

Accurate and timely market information enhances market performance by improving the knowledge of buyers and sellers concerning prices, price trends, production, supply movements, stocks, and demand conditions at each level of the market (Scarborough and Kydd, 1992). Although producers, traders and tanneries are the
direct beneficiaries of the reliable and timely market information, ultimately, there are benefits to the consumers (users of leather products) and government, as a result of market efficiency and enhanced competition. Hence, producers, traders and tanneries require information on the most current prices and market conditions in domestic and international markets.

In the study area, producers had limited market access and weak bargaining power partly due to dearth of market information. The study result shows that over 84% of producers accept reported market prices. Only 15.7% of the sampled farmers have access to market information with significant difference in access among farmers in the different villages. It is also interesting to note that 96.7% of the sample farmers in all the sites reported that they had no price information prior to going to the market for selling the hide or skin to the collectors or traders or before visiting the nearby markets. Otherwise the source of information is neighboring farmers who happen to visit the nearby local or wereda markets, or local collectors in their vicinity.

This study found out that wholesalers and tanneries have market information access with significant difference on timeliness and quality of information. Generally, the quality and the timeliness of the information is the critical problem for most channel members, except regional wholesalers and tanneries. At local level, personal visit to markets, nearby farmers, client traders, and sometimes telephones serve as the sources of market information. For the better off traders (wholesalers and rarely local collectors) the main information channel is through telephone.

Table 3.8. Farmers’ access to market information of hides and skins

<table>
<thead>
<tr>
<th>Villages</th>
<th>Total samples</th>
<th>Access to Market Information(yes)</th>
<th>% With access to market information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Felegeweini</td>
<td>29</td>
<td>5</td>
<td>17.2</td>
</tr>
<tr>
<td>Gebrekidan</td>
<td>36</td>
<td>5</td>
<td>13.9</td>
</tr>
<tr>
<td>Habies</td>
<td>18</td>
<td>2</td>
<td>11.1</td>
</tr>
<tr>
<td>Hayelom</td>
<td>38</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>19</td>
<td>15.7</td>
</tr>
</tbody>
</table>

Source: Survey result, 2008

None of the studied individuals (neither producers nor traders) responded having used radio as a source of information due to lack of radio dissemination due to lack of the source. In the Tigrai region major crops’ price information is disseminated regularly via the voice of “Dimtsi Weyane” radio while the price of livestock and
livestock products, except honey, is not. Source of market information of each site’s producer is presented in Table 3.9 below.

Table 3.9. Source of market information of sample producers

<table>
<thead>
<tr>
<th>Source of information</th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>29</td>
<td>27.1</td>
</tr>
<tr>
<td>Local collectors</td>
<td>70</td>
<td>65.4</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>8</td>
<td>7.5</td>
</tr>
<tr>
<td>No response*</td>
<td>14</td>
<td>*</td>
</tr>
<tr>
<td>Total</td>
<td>107</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey results, 2008

Some producers try to get scanty and outdated price information from the local collectors and wholesale traders. Basically, wholesalers do in all cases obtain relatively timely price information and make purchase decision based on the existing market situation as compared to the local collectors and producers. Generally speaking, tanneries had best access to all information through electronic media and the internet, and played significant role in price decision. In the existing marketing system, local collectors and wholesalers basically follow the price trends of big institutional buyers (regional wholesalers and tanneries) in price setting. In addition to the non-accessibility and poor quality of the available information, Wolday (1994) explained that absence of centralized MIS and lack of stronger analytical skills to interpret the available sources are major constraints in marketing. Based on this rationale, Tschirley et al. (1995) argued that Ethiopia must take the leading role in creating MIS to facilitate production and marketing activities.

The buyers at different levels get information from different sources namely tanneries and regional wholesalers. The wholesalers who have the capacity to supply hides and skins to the tanneries and regional wholesalers receive information from the tanneries through telephone. The wholesalers who lack the capacity to supply hides and skins to the tanneries, on the other hand, obtain secondary information from the regional wholesalers. This has given the primary information receivers the advantage to enjoy superior market power. In contrast, in the study area the scarce market information coupled with limited availability of working capital has pushed a wholesaler out of the market.
3.3 Major Production and Marketing Constraints

There are a number of highlighted constraints that hamper further development of the hides and skins sector in Atsbi Wemberta as well as in the region. The following production and marketing problems are indicated by various respondents.

3.3.1. Production and marketing problems of farmers

Farmers reported a number of problems related to production and marketing of hides and skins. Low husbandry and management of livestock product decrease the quality of hides and skins and create problems in marketing.

Most important husbandry related quality defects of the products are livestock diseases and parasites, like mange, as well as lack of veterinary services were indicated as the major hindrance of quality by 73.6% of the sample farmers. Injury, flay cut and drought also have significant effect on reducing the quality of hides and skins. Of the sample farmers, 26.4% responded that they face rejected grades from the traders, due to low quality of hides and skins caused by drought, flay cut and injury, forcing them to sell at lower price.

Table 3.10. Major production and marketing problems of farmer households

<table>
<thead>
<tr>
<th>Description</th>
<th>N=121</th>
<th>% Share</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production problems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diseases and parasites</td>
<td>78</td>
<td>64.5</td>
</tr>
<tr>
<td>Flay cut</td>
<td>24</td>
<td>19.8</td>
</tr>
<tr>
<td>Lack of veterinary service</td>
<td>11</td>
<td>9.1</td>
</tr>
<tr>
<td>Drought</td>
<td>8</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100</td>
</tr>
<tr>
<td><strong>Marketing problems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of competitive pricing (price setting)</td>
<td>76</td>
<td>62.8</td>
</tr>
<tr>
<td>Lack of transparent quality measurement</td>
<td>24</td>
<td>19.8</td>
</tr>
<tr>
<td>Lack of access to the market (information and distance)</td>
<td>21</td>
<td>17.4</td>
</tr>
<tr>
<td>Total</td>
<td>121</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey results, 2008

Lack of competitive pricing is the major problem of marketing. Farmers do not set price for their hide or skin. The reasons stated by farmers are: usually prices set by traders, they are mostly price takers, because they can't return back their hide or skin. Of the farmers' hides and skins prices, 62.8% set by buyers. Measuring or
grading quality is the second marketing problem for 19.8% of the farmers. Even though some farmers have knowledge about the quality, they are not allowed to check the measuring standards. Lack of access to market (information and distance) and unstable hides and skins prices also have significant problem to the farmers.

3.3.2. Marketing constraints of traders

The problems faced by hides and skins traders include poor quality, capital shortage, administrative problems, poor telephone services, and unstable prices. Government facilitating and regulatory support, access to credit or nearby bank service, transport, storage, information flow, are also reported as the problems of the traders. Only some of the most important problems are briefly discussed below:

Improving the quality of hides and skins involves improving husbandry, slaughtering, transport, and storing. As noted earlier, all of the traders confirmed that the hides and skins brought to markets have quality problems due to disease and parasites, injury and flay cuts. Two traders respond that local collectors are reluctant to sell their produce on time due to lack of actual price information and low price offer for their hides and skins.

The wholesale traders reported capital shortage and lack of access to credit as limiting factors in operation and business expansion. The problems in acquiring loan resulted from lack of bank in the wereda. Because, taking credit from other distant banks is not safe for transporting their money. Hides and skins trade is seasonal and its profitability is doubtful for informal lenders. Therefore, nobody was interested to lend for hides and skins traders easily. The other problem is unstable price of hides and skins which causes deficit. Some of the traders sold their hides and skins to tanneries on credit, which aggravates their financial problem.

The survey revealed that wholesale traders complain that the government does not focus on hides and skins trade by accessing them to credit facility. They also complain that they could not get regular buyers and could not sell their hides and skins on free market basis unless they have network with regional wholesalers and/or tanneries. This, according to them, is because hides and skins trade is seasonal and operated only for a few months (on and off). Farther problems include lack of transparent service delivery of the municipality, double (municipality and Inland Revenue) charge and telephone service in that they have no connection to their home.
The other infrastructural problem relates to the poorly paved roads that connect local markets with the Wereda/town market. Human portages and pack animals are the most frequently used means of transport as some of the roads to the local markets are difficult for vehicles during rainy season. It was observed that Isuzu trucks are the best means of transport for local collectors and to move hides and skins from local (village) markets to wereda market. All local collectors reported that they could get transport only on market days or on contract basis. Because of transportation problems they couldn’t reach to the market on time. Under such circumstance, local collectors will be unable to sell their products at fair prices.

Wholesale traders who supply hides and skins to tanneries reported that purchasing prices and actual grades of hides and skins based on standard grades were not made public immediately after purchase. Rather they were announced after the hides and skins are sorted and actually graded based on quality defects, in which case the process to announce takes several days, even weeks. Thus, the trader will go back to his destination without collecting his sales revenue. For instance, one trader reported that collects his sales revenue after two months from Ethiopia tannery was found to suffer from shortage of money to run his business. Similarly, the same trader reported that price information was communicated from the tanneries to the suppliers mostly when the world market prices of hides or skins were low. Further, in the informal discussion with the wholesalers, those traders who sell to regional wholesalers collected their money immediately after sells. In fact they buy by simple sorting the hides and skins, without actual standard grading. Some of them prefer to sell to regional wholesalers at lower price to get their money immediately.

### 3.4 Potential Demand of Hides and Skins

According to the World Bank (2005), the estimated off-take rate for sheep in Ethiopia is 40%; and UNCTAD (2002) estimated the off-take rate for goats and cattle, which is 37% and 6.5%, respectively. Taking these estimations to the region as well as to the wereda, since there is no specific off-take rate for regions, the expected supply of hides and skins from the wereda to the market is 36,153. But the actual hides and skins marketed in 2006/07 are 52,861, and this exceeds the expected number. The main reason, according to the informal discussions with the target groups, is that hides and skins are also bought from Afar region and other bordering weredas. In
In addition, cattle and shoats from southern zone are sold in the wereda market as reported by the wereda experts.

The increment of supplied hides and skins is also due to the increased consumption of meat by the society, which in turn results from increased income of households. The average throughput of the samples per household per year is two. On the other hand, in some drought areas increase of deaths due to drought increased the supply of low quality hides and skins, as explained by the experts.

The supply of hides and skins fluctuates from time to time, increasing on holidays (New Year, True Cross (Meskel), X-mass and Easter) and decreasing at other times. Among the holidays, supply is highest during True Cross and Easter.

The potential demand of the wereda's hides and skins comes from Adigrat, Wukro and Addis Ababa (highest). No hides and skins are sold to Mekelle market, even though it is the central market of the region for other commodities. The demand is increasing almost constantly throughout the year in the specified areas. The reason for the increment of demand is the rising of new tanneries in the country.

The hides and skins supplied from the wereda to Adigrat, Wukro and Addis Ababa in the years 2004/05, 2005/06 and 2006/07 was 57,183, 53,975 and 52,861 respectively.

There are 21 tanneries in the country with the capacity of pickle 132,500, crust 69,790, and finished leather 45,890 per day. The export of semi processed and processed leather and leather product is increasing from year to year. For instance, in the year 2004/05 66,968 USD, 2005/06 75,328USD, and 2006/07 89,541USD was exported (MoTI, 2008). It is important to note that the tanneries are currently shifting from semi processed to processed leather and leather products.

The hides and skins supplied from Tigrai region in 2006/07 was 1,366,485. Sheba tannery bought 1,009,395 in the same year, out of which only 49% was from Tigrai, while 51% was from Amhara, Addis Ababa and Oromiya (Jimma). Out of the hides and skins produced in the wereda, only 19% was supplied to Sheba tannery in Wukro. The reason for not buying more than this, as explained by the tannery, was shortage of supply of good quality. On the other hand, the Wholesale trader in Atsbi reported that the reason for not selling to Sheba tannery is the low price offered by the tannery and the long process that grading of each hide or skin requires.
3.5 Market Structure - Conduct – Performance (SCP)

This section describes the size and distribution of firms in the market, and their behavior, which are important determinants of how well the markets perform various functions.

3.5.1. Structure of the market

In what follows, the characteristics of the organization of the market that may influence the nature of competition and pricing within the markets including degree of buyers' concentration, entry barriers, product differentiation and market transparency are discussed.

3.5.1.1. Market concentration

Market concentration refers to the number and relative size of buyers or sellers in a market. Many studies indicate the existence of some degree of positive relationship between market concentration and gross marketing margins (Scot, 1995). It is generally believed that, higher market concentration implies a non-competitive behavior and thus inefficiency. However, some studies also warn against the interpretation of such relationships in isolation from other determinant factors like barriers to entry and scale economies (Scot, 1995).

In this study, the degree of market concentration was measured using one of the common measures of market concentration, i.e. Concentration Ratio. Considerable attention was given to wholesale traders, as they were the centers that link the producers and collectively agents to the tanneries. Hence, CR$_1$ of the wholesalers was calculated from the volume hides and skins purchased (annex 5 and 6).

Table 3.11. One firm's concentration ratio of wholesalers of hides and skins in Atsbi and Adigrat

<table>
<thead>
<tr>
<th>Year</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/05</td>
<td>70.2</td>
<td>74.8</td>
<td>69.2</td>
<td>74.1</td>
<td>73.9</td>
<td>62.7</td>
<td>76.9</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>2005/06</td>
<td>77.5</td>
<td>72.6</td>
<td>83.2</td>
<td>78.2</td>
<td>64.4</td>
<td>78.7</td>
<td>93.9</td>
<td>76.5</td>
<td>91.3</td>
</tr>
<tr>
<td>2006/07</td>
<td>Source: Annex 5 and 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.11 shows in Atsbi market, the purchase of the top potential trader accounted for 70.2, 74.8 and 69.2 percent of the total cattle hides, and sheep and goatskins
purchased in the year 2004/05. The corresponding figures for 2005/06 and for 2006/07 were 74.1, 73.9 and 62.7 percent and 76.9, 70 and 72 percent respectively. In Atsbi and in Adigrat one trader has been dominating the markets between the periods 2004/05-2006/07. In Atsbi, over the 2004/05-2006/07 period, one trader had an average share of 71.6 percent of the hides and skins purchases, and in Adigrat an average share of 80 percent of the hides and skins purchases.

Table 3.11 clearly shows that Atsbi market was strongly oligopolistic, with very narrow range of market concentration. The findings of this study imply that the same individual participants were dominating the trade throughout the years.

Although the concentration ratios were high enough in all the markets of the hides and skins trade over the 2004/05-2006/07 period, there were slight differences in the degree of concentration within the cattle hides, sheep and goatskins trade. For instance, cattle hide trade was more concentrated than of sheep and goatskins in Atsbi within the period 2006/07, though there were no important differences in 2004/05 and 2005/06 while in Adigrat market the concentrations of goatskins trade were higher than of the sheepskins throughout the years. In Adigrat market the concentration ratio is very high in 2006/07 than the previous years showing very tight oligopolistic (non competitive) market.

In summary, the concentration ratios reveal that in both towns very few traders controlled the volume of hides and skins trade. It is therefore, important to look into the entry barriers so as to find out if there are major impediments to people who want to get involved in the trade of hides and skins in the study areas.

3.5.1.2. Barriers to entry

Trade barriers have often laid the groundwork for market imperfection. Whether by intent or not, many regulatory actions by state or local units have the result of restricting freedom to entry and the free flow of goods and services (Kohls and Uhl, 1985).

It is difficult to interview the traders about barriers to entry since all have entered the market. Rather, observation of the extent to which fluctuations in the number of active traders follow rises and falls in profitability can be considered.

Even though some barriers were intrinsic to certain traders and others were erected by the single or combined actions of the incumbent traders, the barriers to entry and stay in the trade of hides and skins in the study areas included lack of working
capital, loose regulatory activity, unreliable price information, and risk and administrative barriers. The main barriers to entry will be discussed as follows:

**Lack of capital**

The survey result revealed that an initial outlay was required to participate in the trade of hides and skins. This is explained by the high working capital requirement and investment capital required for purchasing hides and skins, and to construct stores and curing sheds. Therefore, based on the volume of purchase, an amount varying from Birr 50,000 to 100,000 Birr was required to construct stores and curing sheds for hides and skins. Although the working capital required was reported to vary depending upon the price level and quantity of the raw material to be purchased, the working capital of wholesalers was reported to be varying from Birr 30,000 to Birr 50,000 to exist in the competition.

Therefore, traders are in need of credits from financial institutions to address their financial requirements. Yet, they have no access to the institutions in the wereda, and they regret to borrow from other towns due to security issues to travel long distance carrying their money. Those traders who had no access to official credit sources due to absence of banks borrowed from informal lenders, relatives and friends. As a result, they were forced to pay high interest rate.

The traders’ access to working capital determines the structure and conduct of the market. That is, those who have a good amount of money can buy in bulk and pay immediately to producers. Even they have the capacity to increase the purchasing price. Capital provided insights into relative market bargaining powers, conditions of demand, and of competition and key opportunities on the trade of the raw materials.

There are wholesalers who extend some amount of capital, as advance payment, to collectors to assure good collection of hides and skins. This has limited the freedom to freely trade through forcing credit receivers to retain hides and skins until the wholesaler asked for the delivery. In other words, a collector’s indebtedness to a wholesaler narrows his choice to a single trader.

On the other hand, the difference in capital between traders has contributed to the divergence in terms of rate of accumulation of hides and skins and therefore in degrees of competition. Thus, according to the survey, lack of capital is the major problem in hides and skins marketing in the area. It is the real barrier to enter into and stay in the hides and skins markets.
License regulatory activity

About 15 years ago, licensing was a major bottleneck to get involved in raw hides and skins trading. A license holder was forbidden to perform any activity other than the one for which he was licensed. At present, however, getting a license simply requires having facilities such as store, curing shed and other materials irrespective of whether one is engaged in other activities or not. A license can be issued to a wholesaler with a minimum initial working capital of Birr 5,000 (BoTIT, 2006). And sectors responsible for the issuance of the certificate and license, respectively, are the wereda office of agriculture and rural development and office of trade industry and transport. Before the issuance of the working certificate to the traders, the appropriate livestock expert does technical evaluation of the established internal facilities including stores and curing sheds from the WOARD. Once the establishments were found to meet the required standards, the Work Permit was issued by the WOARD. The facilities were not only evaluated during issuance of working certificate, but they were also regularly inspected for their continuous compliance with the standards at least once a year before annual renewal of trade license. However, in addition to the Work Permit, wholesalers must get a trade license from the WOTIT if they fulfill the initial capital requirement.

The local collectors were registered by the WOARD for technical fitness to work on hides and skins trade/collection and have temporary certificate that is renewable every six months, but no trade license.

The traders believe that the weak inspection of the establishments has contributed to the recurrent quality deterioration of hides and skins in the study sites. Some traders were buying by ‘commission agents’ outside the market place and the agents put the hide or skin on dust without caring for the quality. In this intent, in addition to influencing the quality of hides and skins, the condition has led to unhealthy competition among trade participants.

The tax that hides and skins traders have to pay depend on the level of license, and the amount of hides and skins they sell. The tax paid by the traders ranged from Birr 800 - 3000 in the survey period. According to the WOTIT, a licensing fee of Birr 165 was required to get a license and the renewal fee was Birr 52.00. The respondents reported that there is additional payment for the municipality, which ranges from Birr 300 - 600.
Risk and administrative barriers

Hides and skins trade in the study area was subjected to price risk. In spite of this, there was disagreement among participants on whether shortage of supply or increased demand was a risk in the hides and skins marketing system. Two wholesale traders in the wereda argued that although there was unstable supply of hides and skins, production of the raw material had rather increased. Thus, they underlined that the only risk factor was the stiff competition among traders due to high demand for the raw material in the tanneries, resulting from attractive leather price in the world market. On the other hand, one wholesale trader pointed out that shortage of supply was an important problem in the hides and skins market for economies of scale due to the unsatisfied demand. The same trader, of the same order reported that at present, as a result of the free market policy in the country, the numbers of tanning industries and leather product factories have been increasing over years. These industries and factories use a large volume of raw hides and skins and leather.

The increase in demand for the raw material has created a cutthroat competition, which can only be withstood by potential traders with good capital and credit performance. Some wholesalers reported that the networking between few wholesalers, regional wholesalers and tanneries is also a great barrier for new traders to enter and compete in the market.

3.5.1.3. Product differentiation

There are two mandatory standards in Ethiopia, which deal with leather products, namely, raw hides and skins standards and leather standards set out in regulation No. 12/1990 (Mulat, 1999, cited in Girma, 2002). Cattle hides and sheep or goatskins are classified into various grades (1-4 and reject) according to quality, weight range, size and appearance in order to determine the commercial value and the type of leather to be produced.

Accordingly, the traders in the study area reported that they tried to classify and offer different prices for hides and skins based on size, weight and presence of visible defects. But to follow the standards strictly, they have fear of loosing customers, since they assume their competitors do not follow the standards. According to the traders, hides and skins obtained from butcheries fetch better prices compared with backyard slaughter, which lack quality due to improper slaughtering technique, place,
and preservation method. Sheep and goat skins supplied in fresh state and wet salted are first choices of traders provided they have no visual defects. The rejected hides or skins, most of the time, are sold to the tanneries at lower prices.

Practically, according to producers, since they didn’t pay better prices for hides and skins of better quality based on size, weight and absence of defects, no care and attention is paid in the raw material handling to improve the quality.

The main defects attributed to quality deterioration were flaying cuts, Hole, putrefaction (due to delayed care) and scratches (Mulat, 1999, cited in Girma, 2002). According to the regional experts of hides and skins, the reason for decrease in quality of hides and skins was explained by improper slaughtering practices and delay in supply by producers and poor preservation methods exercised by traders.

The volume and grade of hides and skins supplied from the wereda to the secondary or terminal market are shown in Table 12 below.

Table 3.12. Grade of hides and skins of the wereda supplied to regional wholesalers and tanneries in 2006/07

<table>
<thead>
<tr>
<th>Product</th>
<th>Total Quantity supplied (number)</th>
<th>Quantity graded * (number)</th>
<th>Grade in number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1st-3rd</td>
</tr>
<tr>
<td>Cattle hide</td>
<td>1,504</td>
<td>1,490</td>
<td>1,428</td>
</tr>
<tr>
<td>Sheep skin</td>
<td>38,989</td>
<td>32,218</td>
<td>28,122</td>
</tr>
<tr>
<td>Goat skin</td>
<td>12,368</td>
<td>8,902</td>
<td>6,210</td>
</tr>
<tr>
<td>Total</td>
<td>52,861</td>
<td>42,610</td>
<td>35,760</td>
</tr>
</tbody>
</table>

% Of total 80.6 83.9 15.4 0.6

* Grades given by tanneries
Source: Survey result, 2008

Mulat, 1999, cited in Girma, (2002) noted that though standards are the prerequisites for quality control and certification activities, as a result of limited skill and experience, nature of judgment which is highly subjective, absence of strict follow up and supervision and above all, due to market influence, traders and tanneries do not efficiently utilize the standards set in regulation No. 12/1990. However, it is clear that there is room for significant improvement of hides and skins. During discussions with the concerned parties, it was emphasized that purchasing by grade standard was the only means that could improve quality. In principle, there was no dispute on this issue. However, there was equally broad concern and apprehension as to the mechanism of implementation, for fear of being disadvantaged due to market influence of hides and skins and high competition among participants. The
producers, rural collectors and wholesalers do not deep knowledge and apply the standards clearly.

3.5.1.4. Market transparency

Market information is not transparent among traders and producers in the study area. In the sample markets all actors had information through different sources. Local collectors rely on contact with wholesalers to obtain market information regarding price in tanneries. Moreover, information of price in the nearby market is unevenly distributed among the traders. Survey result indicated that the majority of the channel members got price through the combination of telephone, personal observation and other traders. It was observed that many local collectors staying for longer time to get telephone service on the market day to check wholesale price to purchase from farmers. On the other hand grading is not on the basis of the standard indicators of grading, rather subjectively by simple sorting which is not clear to the sellers.

3.5.2. Conduct of the market

It is difficult to generalize about pricing behavior where the number of firms is small and no collusion exists among such firms. Each must take account of what other firms will do in response to a particular pricing decision (Tomek and Robinson, 1990).

Even though the price of hides and skins is a reflection of world market price and the behavior of traders in pricing, an attempt was made to examine the collusive, discriminating or competitive pricing strategy for hide and skin traders in the study area during the survey period. The findings show that no evidence was found to support the popular assertion of collusive pricing associated with a concentrated market, because the survey assessed that there is high competition between the traders and disagreement among them.

According to the traders, a price change made by one of the traders will be immediately followed by a similar change by other traders. If the price paid by a trader is below the price prevailing in the market, he will end up by losing his customers. However, the rigor of price competition among traders was moderated by added incentives they give to the collectors. Other forms of incentives given by wholesalers include provision of transportation services or covering transfer costs, and lending working capital. These incentives include some of the mechanisms of
establishing long-term partnership with the agents. Thus, marketing agents differentiate among others on the basis of the network they have between them.

Although there are other potential buyers within the same towns, an agent’s indebtedness to a trader narrows his choice to a single trader. This credit marketing arrangement enabled the traders to exercise some form of price fixation or price discrimination in each of the market areas.

Though tanneries are concentrated around Addis Ababa, informal discussion with wholesalers revealed that, the tanneries mostly use networking with most wholesalers, as a result of which a newcomer finds difficulty in selling his hides and skins. All traders reported that tanneries have no transparent measuring system of quality standards. They didn’t give clear grades for the supplied hides and skins; rather they put 1-3, 4 and reject grades and they pay the same (lump sum) price for grades 1-3rd, and separate price for grade 4 and the rejected. Further, most of the time, they didn’t give the money immediately. Instead they gave them after weeks, and even months, and the prices were determined absolutely by the tanneries.

To see the details of tanneries, the researcher faced difficulty due to their denial to give data quoting "quality and price information are confidential". But Sheba tannery cooperated in giving data and information. Accordingly, actual (final) grading is not possible before processing, responded by the tannery so it was buying on gross basis then averaging 1-3, 4 and rejected by sorting based on visual defects, because grading according to the standards during purchasing takes long time and thus might loose his clients and some of the indicators are identified after processing. Payment was done on the basis of the international market immediately or some times on credit basis.

3.5.3. Performance of the market

Further insights into the economic efficiency of markets, and particularly the costs of market imperfections, can be obtained through an examination of the ways in and degrees to which price behavior departs from that predicted by the model of perfect competition (Scarborough and Kydd, 1992). In this study, the pricing behavior was examined in order to determine the level of operational pricing efficiencies. Towards this end, analysis of marketing margin, marketing costs and market channels was made (table 14).
3.5.3.1 Marketing margin

With liberalization of the economy and lifting of the price control mechanisms after 1991, at present, participants in the marketing chain function freely. Thus, in this study, computation of the marketing margin depends on values of hides and skins under such circumstances. The time series data used in the margin estimation, to a much larger extent, were price information obtained from the respective wereda agricultural offices and Sheba tannery in Wukro.

There are numerous participants in the marketing chain of hides and skins in general. However, it was difficult to obtain time series data for all participants, except wholesalers who transfer the same product to Wukro, Adigrat and Addis Ababa in 2006/07. Therefore, wholesalers were mainly considered in this study. At the same time, prices of all segments coupled with cost accounts of the same agents were used to carry out the margin calculation. Hence, the study analyzed the data on the supply of hides and skins that went into and out of the town in 2006/07.

The producer prices were prices at which the traders purchased cattle hides, sheep or goatskins from urban or rural residents who slaughtered cattle, sheep and/or goats and marketed the hides and skins either fresh or dried. The average annual hide and skin prices in the town were used for the calculation of the marketing margin. The total marketing margin (TMM) is obtained by subtracting the producer prices in the market from the tannery prices in the same markets. The difference between the gross margin from the tanneries in the terminal market and the corresponding wholesale marketing costs in the town is the net marketing margin (NMM) of the wholesaler. On top of this, producer's portion, the price paid by the end consumer that belongs to the producer (the producer's gross margin (GMM_P)), is calculated as a difference of price paid by the consumer and gross marketing margin.

The relative margins expressed as percentage, cannot be compared between them when margin calculations are done using different denominators as if they belong to the same chain (Mendoza, 1991). Thus, to get rid of errors and misunderstanding that can be encountered as a result of using different bases, the consumer price which, in this case, is the tannery price, is employed as a common denominator for relative margin calculations expressed as a percentage. Therefore, based on the data on the buying and selling prices and applying the gross marketing margin calculation formulae (GMM), the marketing margins for trade participants in the marketing chain are shown in table 14.
3.5.3.2 Marketing costs

The marketing margin in the hides and skins marketing system includes marketing costs and typically some additional net income by the different market participants in the system. Hides and skins traders incur costs when performing marketing functions. Although the magnitude of the marketing costs varies over time and among traders and is based on the volume traded, level of marketing channel data on marketing costs were collected for the year 2006/07 from concerned government bodies and the traders themselves. The marketing costs considered in this study included store rent, annual income tax, loading costs (labour), preservation costs and transportation costs.

As producers and local collectors did not keep records of costs, there were difficulties to capture all the costs incurred by producers and local collectors. As a result, marketing costs were collected from wholesalers only that are those who supplied hide and skins to the respective markets in the year 2006/07.

The result shows that of all the expense items incurred by the wholesalers, transportation cost, preservation cost, income tax, store rent and labour cost were the most important cost components in the year 2006/07, which have the mean of Birr 1.45, 1.11, 0.35, 0.22 and 0.02, respectively.

The distance to be covered and road grade (asphalt, gravel or muddy) are the main determinant criteria for transport cost. The asphalt road from Addis Ababa to Adigrat is 900 kilometers. The same type of road from Addis Ababa to Wukro is 825 kilometers. The coarse gravel road from Wukro to Atsbi Endaslase is 25 kilometers. Traders paid Birr 300 and 500 to transport on ISUZU truck containing up to 5000 pieces of wet salted or air-dried hides and skins from Atsbi to Wukro and Adigrat, and Birr 3500 to transport a full large sized truck, containing up to 10000 pieces of wet salted or air-dried hides and skins, from Atsbi to Addis Ababa respectively. The rate of transport cost of the course gravel road from Atsbi to Wukro is very high as compared to the asphalt roads from Wukro to Adigrat and Addis Ababa.

The predominance of transport costs in the hides and skins marketing system signifies two important consequences. Firstly, the marketing has closely followed the rate of increase in transport costs. Secondly, the transport costs in the hides and skins marketing have introduced a downward rigidity in the marketing margin.
3.5.3.3 The marketing channels

The chain connecting both producers and tanneries was found to be complex. Hides and skins markets are liberalized, and government institutions provide only technical support, licensing and regulatory work. The basic and important hides and skins marketing channels identified during the study are diverse and a little bit different from the chains of other commodities; that the hides and skins were traded to Adigrat and goes back to Wukro and Addis Ababa.

The initial links for hides and skins marketing channels are producers that kill animals either on festivals or occasions and sell the outer covering and the final destinations are tanneries that process the raw material to semi-processed and finished leather, and sell to domestic and export market. In between, lots of actors existed which play significant roles for the movement of the product to its final destination.

The various agents involved in the marketing process of hides and skins in the study area include producers, local collectors, wholesalers and tanneries. Producers are the initial sources and consist of individual meat consumers and butcheries and agents could be of local collectors, wholesalers and tanneries.

The magnitude of these channel participants was measured based on 2006/07 business transaction. As per the findings of the study, the number of marketed hides and skins that would flow to the market through the identified channel members was 52,861 (1,504 hides, 38,989 sheep skins, 12,368 goatskins). Hence, the shares are estimated based on the reports from the survey participants and WOARD data sources.

The urban producer who kills animals at home or backyards sells the fresh or dried hides or skins to the wholesale trader. On the other hand, farmers sell mostly fresh or dried hide or skin in their farm gate or local markets to local collectors (66%), who in turn sell to wholesalers. In some cases farmers sell their produces to wholesalers (34%), after transporting to the wereda market, in expectation of better price offer.

Of the region’s raw hides and skins supplied to wukro, Gonder, Dessie, Addis Ababa and Modjo 75% comes directly from wholesalers and 25% through regional wholesalers of the region. Hides and skins that are preserved and assembled at wholesale levels of the wereda are passed to regional wholesalers (Adigrat and Addis Ababa, 29%) and/or tanneries (Sheba and Ethiopia, 71%). Most of the hides and skins of the wereda are directly supplied to Addis Ababa (Ethiopia Tannery).
Tanneries process the hides or skins purchased; either in the form of air dried or salted states from their suppliers, to semi-finished or finished leather for both domestic and export markets.

The channels that were considered for the analyses are as follows:

Channel 1: Producer – Wholesaler – Tannery (AA) = 12158
Channel 2: Producer – Wholesaler – Tannery (Wukro) = 1859
Channel 3: Producer – Wholesaler - Wholesaler – Tannery (AA) = 310
Channel 4: Producer – Wholesaler – Regional Wholesaler (Adigrat) – Tannery (Wukro / Sheba) = 3840
Channel 5: Producer – Local collector – Wholesaler – Tannery (Wukro) = 3102
Channel 6: Producer – Local collector – Wholesaler – Tannery (AA) = 25181
Channel 7: Producer – Local collector – Wholesaler – Regional wholesaler (AA) – Tannery (AA) = 6411

Seven lines of market channels were identified for hides and skins. Two of them went through regional wholesalers in Adigrat and Addis Ababa to tanneries, while the others directly from wholesalers of the wereda to tanneries.

Besides, the volume that passed through each channel was compared, and based on the result the channel that stretched from producer- local collector-wholesaler-tannery (AA) hosted the largest followed by channel that went through producer-wholesaler-tannery (AA) shouldering a volume of 25,181 and 12,158 respectively.

As observed from table 13 the largest producer’s share obtained through a channel when a sale from producer - wholesaler – tanneries (Wukro) (channel 2) is made seconded by producer- wholesaler-tannery (AA) (channel 1). Even though these channels were very impressing from the perspective of producers and consumers (better producer share and low buying price for tanneries), the volume of hides and skins that passed through channel 2 was very insignificant amounting 1859. Still comparing based on the total gross marketing margin the channel that stretched from producer- wholesaler-tannery (channel 2) is better.

However, using one indicator as sole parameter would not give appropriate result to judge the efficiency of the channel. Hence, following the works of Ramakumar (2001) all the four parameters were taken simultaneously. The four parameters that were included, encompassed volume handled, producers share, total gross marketing margin, and rate of return. Using these parameters the overall rank indicated channel 1 becomes first seconded by channel 6. In all cases the inefficient channel was channel 7 (low producers share, high GMM, long channel, ranked last).
Table 3.13  Hides and skins market channels, marketing margin analysis (2006/07)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Channels</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Volume handled (No)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank by volume (Rv)</td>
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<td></td>
<td></td>
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<tr>
<td>2. Marketing cost/margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Producers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price (br/1 kg hide)</td>
<td>3.45</td>
<td>3.45</td>
<td>3.55</td>
<td>3.45</td>
<td>3.05</td>
<td>3.05</td>
<td>3.05</td>
<td></td>
</tr>
<tr>
<td>Price (br/sheepskin)</td>
<td>28</td>
<td>27</td>
<td>28</td>
<td>27</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Price (br/goatskin)</td>
<td>17</td>
<td>16</td>
<td>17</td>
<td>16</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Marketing cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local collectors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price (br/1 kg hide)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price (br/sheepskin)</td>
<td></td>
<td></td>
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Source: survey result, 2008
AA – Addis Ababa; AW – Atsbi Wembera; Ad – Adigrat; Wuk - Wukro
Figure 2.1 The Main Marketing Channels of Hides and skins in the Study Area

Producers
(Producers, butcheries, others)
(52,861)

Local Collectors
(Different villages)

Wholesaler
(Atsbi)

Regional Wholesalers
(Adigrat and Addis Ababa)

Tanneries
(Addis Ababa)

Sheba Tannery
(Wukro)

Processed

Export Market

Leather Manufacturers

Domestic Market

Source: Survey result, 2008
CHAPTER 4
CONCLUSION AND RECOMMENDATIONS

4.1 Summary and Conclusion
The main objective of this thesis was to analyze the marketing system of hides and skins in Atsbi Wemberta Wereda. The specific objectives included identifying the roles of major actors and market channels, analyzing the strengths and weaknesses of the marketing system, and estimating the potential supply and demand of hides and skins. Different respondents at all stages of the market channels were interviewed. The analysis of the strength and weakness of the market was made with the help of descriptive and SCP tools employing SPSS software.

A total of 121 farming respondents drawn from four kebles, all 15 local collectors, all 3 wholesalers from Atsbi, 1 regional wholesaler and all 2 wholesalers from Adigrat, as well as Sheba tannery were interviewed using structured questionnaires. Rapid market appraisal using key informant discussions was the other tool employed in the process of primary data collection. Secondary data was also used in the study.

Analysis of data collected from farmers showed that the average family size was about 6, the average experience in farming and non-farming activities was 21.31 and 5.26 years, respectively and the farming and non-farming income earned were Birr 5,464 and 1,655 respectively indicating non farming income is subsidiary to the farmer. The house types of the sample farmers were 65% iron sheeted and 35% mud roofed. There is an improvement of life style of the farmers. The sampled households had an average of 4 cattle, 16 shoats and 5 equine and one bee colony with high variability.

The producers sell their hides and skins to whoever pays better price. Out of the producers 59% did not acquire any power in price decision as they are price takers. Most farmers of the wereda supplied their hide or skin mainly to local collectors due to distance and information factors.

Local collectors are the significant actors in the local market of hides and skins; they buy 66% of the total supply and sell to wholesalers depending upon prior agreements and/or fairness of the price offered, and have an average of 10.31 years experience in collection, earning average annual income of Birr 31,203 from this job in the survey period.
Wholesale traders from the area are bulk purchasers of all channel members in the wereda and play significant role in price making at wereda level because of having timely price information from tanneries, directly or through regional wholesalers. Atsbi Wemberta WOARD is the core extension service giving institution. Three development agents are employed in each village to give crop, natural resource and livestock related technical support to farmers. Only 45% of the sampled farmers received extension service regarding husbandry and livestock products management, with very little focus on hides and skins management and marketing. The contact of extension agents was not frequent and regular, which indicates discontinuity of technical support.

Producers have limited access to market and weak bargaining power partly due to dearth of market information. Wholesalers seemed to control the major channel (due to asymmetric market information) which resulted in an exploitative market behavior in raw hides and skins market.

Hides and skins of the wereda were marketed to Adigrat, Wukro and Addis Ababa. Out of the estimated marketed hides and skins, 8,140 (15.4%) were sold to Adigrat (regional wholesaler), 4,961(9.4%) to Wukro (Sheba tannery) and 39,760 (75.2%) to Addis Ababa (Ethiopia tannery and regional wholesaler).

The production and marketing system was constrained by a number of problems. Livestock diseases and parasites as well as lack of veterinary services were indicated as the major hindrances to quality of hides and skins as reported by 73.6% of the sample farmers. Injury and flay cut, and drought also have significant effect on reducing the quality as reported by all trade agents. Quality grading practiced by traders is not based on the standards and specifications of the country. They are subjective and not transparent. Lack of access to market (information and distance) also causes significant problem to the sample farmers.

Hides and skins traders in the wereda faced quality problems, capital shortage and lack of access to credit due to lack of bank service. Unstable price of hides and skins is the other problem of the traders. Delayed payment is a cause of financial problem for the wholesalers. Two wholesale traders complained that there was no enough government support (poor service delivery of municipality, double charging) and they couldn't sell on
free market basis due to networking of some wholesalers and tanneries. There was shortage of supply of good quality hides and skins due to husbandry and management problems. Low price information and low price offer for hides and skins made local collectors reluctant to sell on time waiting for price increase. Lack of access to transportation is also another problem of the local collectors.

Supply of hides and skins is mainly dependent on livestock ownership and extension service in the area. The supply of hides and skins, especially goat skins from the area is decreasing from year to year. According to the informal discussions with target groups and WOARD experts, the reasons for the decrease in supply include producers in the border to other wereda may sell to the neighboring weredas, due to nearness of the markets, and loose follow up and control.

The potential demand of the wereda hides and skins were regional wholesalers and tanneries in Adigrat, Wukro (Sheba tannery) and Addis Ababa (Ethiopia tannery). The demand was increasing throughout the year due to increasing value of hides and skins in domestic and export markets. In fact, currently the prices are falling down drastically. The rising of new tanneries in the country and their improved capacity of processing explore the demand. All supplied hides and skins in the year were marketed at different prices. The price fluctuated mainly due to international market instability.

Market concentration of the licensed traders in the studied markets (Adigrat and Atsbi) was analyzed using concentration ratio. Market concentrations (for the wholesale traders of hides and skins) in the markets were very high (87% and 73% for Adigrat and Atsbi in 2006/07, respectively), resulting in a state of oligopolistic market structure. From the findings the same individual participants were dominating the trade throughout the years.

The relationship between access to credit and market power was a useful finding in the study. Those traders who had received loans from formal sector in Adigrat benefited and increased their purchasing activities. i.e., traders with high working capital had huge collection of the raw stock due to effective control of the quantity of hides and skins supplied to the market than Atsbi traders.

Lack of capital and credit, coupled with unreliable market information, made the traders in the wereda weak in their market decisions and increasing market risks, which are characteristics of inferior market.
As a result of free market policy in the country, numbers of tanning industries and leather product factories have been increasing thereby using a large volume of hides and skins, and leather. The wholesalers reported that the networking between some wholesalers and tanneries is also a barrier for new traders to enter and compete in the market.

Moreover, the entry of new trader was hampered, among others, by the urban municipality delayed service in leasing land. This has dissuaded traders from building stores and curing sheds, which are basic structures for proper handling and marketing of hides and skins. The cumbersome process of the municipality to lease land led the existing traders to rent houses which are not conducive for proper handling of hides and skins. Thus, the expenditure for rent in addition to a shortage of capital made the traders practically difficult to stay in the competition.

There are mandatory standards of raw hides and skins, and leather legally issued in Ethiopia. Based on these standards there are grades (1-4 and reject). Wholesale traders in the study area reported that they were buying partially based on the quality standards, but according to the producers and informal discussions with experts as well as the observation during the survey period, they didn’t pay better prices for good quality hides and skins. The wholesale traders reported the reason for not differentiating price based on the quality standards is that if one followed these standards he would expect to loose his customers, because others didn’t follow the standards due to loose control of government body. In fact, they are serious for reject grades. Due to this and low extension service, producers didn’t care for and no attention was paid to the raw material handling and to improve the quality.

During discussions with the concerned parties, it was emphasized that purchasing by grade was the only means that could improve quality. In principle, there is no dispute on this issue. However, there was equally broad concern and apprehension as to the mechanism of implementation, for fear of being disadvantaged due to market influence of hides and skins and high competition among participants.

Most wholesalers handle their customers (local collectors) through different mechanisms like giving credit, covering transfer costs and others. On the other hand they have long-term relationships with tanneries.
Tanneries have no transparent measuring system of quality standards as reported by traders. They didn’t give clear standard grades, but rather estimated. The other problem is they didn’t pay immediately for the suppliers. The sellers had no chance to see alternative market after taking to the tanneries because the tanneries didn’t declare the price immediately. The tanneries also set price by themselves.

The profit of market participants varies among different channels. Wholesalers obtained highest profit in channel 1 because of the direct purchase from producers, low operating costs and direct sale to the tanneries. In contrast, rural collectors received lowest profit in channel 7, because of high transport cost. Among processors, Sheba tannery buys relatively at lowest price per hides and skins, in channel 2 and 5 reasoning to avert market risks.

TGMM is lowest which accounts 15.5% of the consumer’s price and GMMp is highest (84.5%) in consumer’s price in channel 2.

Marketing margins of tanneries is highest, in channel 7. Profit margins for all marketing agents are positive. Therefore, it can be concluded, that the markets are operating profitably with significant difference among channel members.

Finally, though there are potential opportunities for the production and marketing, the raw hides and skins is constrained by many factors. Some of the constraints identified include: Shortage of finance, lack of timely and accurate market information, weak extension services on livestock product management, inability to explore the potentials of the world hides and skins market, poor infrastructures like credit institutions and telephone services, high cost of transportation, loose controlling and facilitating institution.

Informal discussion with Ethiopia Tanneries Association reveals few tanneries (Ethiopia tannery, ELICO, Dire) share more than 70% of the leather supply of the country. This non-competitive structure has resulted in considerable price uncertainties and price differences among regional markets. Hence, the availability of price /market information in the short run could help in reducing undue variations in prices and in the long run it will result in the most profitable allocation of resources.
4.2 Recommendations

Designing of efficient market channel, establishment of purchase by standard grade system for raw hides and skins, skill development of market forces, delivery of current market information, and developments of product promotion strategies and training of extension agents are some of the recommended solutions below.

- There is an effort on extension system to improve livestock and livestock management in the region, but the extension approach is general and less effective in improving the production/quality and market of hides and skins. The study result farther confirmed that only 45% of the target hides and skins producers have access to extension agent’s contact on livestock products management and even the contact was irregular and less frequent. Attention should be given to this sub sector, hence, it is recommended to make a reform on the organizational structure, train the extension agents and updating their capacity with improved production and marketing matters thereby to transfer their knowledge to the producers. There should also be training for the local collectors and wholesale traders involved in the preservation of the raw materials.

- Marketing of hides and skins should depend strongly on quality, which in turn relies upon the treatment of the animal during its lifetime and the way in which the hide or skin is removed, treated, stored and transported prior to tanning. Therefore, care and proper handling of hides and skins both on stock and curing shed as well as transporting is very essential to raise quality and foreign exchange earnings. The weakness is in the first link of the market chain; raw hides and skins are of poor quality due to branding, scratching, flay cut, and diseases and parasites; poor butchery; and lack of a proper hides and skins marketing system, including a proper pricing system based on quality standards. Provision of efficient and effective veterinary service to the animals and effective extension service to the producers is crucial for the quality improvement. The sorting of hides and skins into standard grades is a facilitating marketing function which constitute an agreed upon market language. Therefore, concerned government and private bodies should reinforce and mainstream the system of selling/buying of hides and skins on standard grade basis. This has a greater incentive for quality improvement as those who produce better quality of hides and skins are paid attractive prices.
• The existing hides and skins markets are loosely integrated due to lack of accurate and timely information or information asymmetries that have made the markets non-competitive. Thus, a market information system is required that allows stakeholders to get information on quantity and price, both on the domestic and foreign markets. Therefore, public or private market information service rendering agencies should be involved in the area of hides and skins marketing in providing reliable and timely information.

• The SCP analysis of the channel members clearly indicated that the channel has not too much routes of hides and skins market. The CR1 measures of market structure indicated the tight oligopolistic nature of hides and skins market at woreda level markets. Successful commercialization can be achieved only when it is supported by an efficient marketing system. The Atsbi Wemberta hides and skins market had much inefficiency due to the monopoly of product handled and farmers’ weak bargaining power due to lack of market information. Therefore, emphasis should be given to improve the facilities of the market like credit and telephone as well as information access to make the market efficient and competitive.

• For a tremendous expansion and effective utilization of our livestock industry is therefore, to device an integrated approach in the livestock sub-components such as veterinary and husbandry as well as feed management and marketing to improve production of animals eventually production and marketing of hides and skins.

• Further, market research needs to be undertaken to identify the detailed problems and constraints in the production and marketing system of hides and skins of the region and to know the requirements of the national market. This helps to design policies and strategies that can bring effective production and marketing system of hides and skins and to match the supply with the demand.
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LMA (Livestock Market Authority), Assessment Report, 1999.


### ANNEX

**Annex 1. Ethiopia tanneries and their capacities (2007/08)**

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Source: MoTI, 2008
## Annex 2. Ethiopian export of leather and leather products

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<th>2002/03 Quantity</th>
<th>2002/03 Value 000's USD</th>
<th>2003/04 Quantity</th>
<th>2003/04 Value 000's USD</th>
<th>2004/05 Quantity</th>
<th>2004/05 Value 000's USD</th>
<th>2005/06 Quantity</th>
<th>2005/06 Value 000's USD</th>
<th>2006/07 Quantity</th>
<th>2006/07 Value 000's USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hides and Skins</td>
<td>10,500</td>
<td>52,200</td>
<td>9,309</td>
<td>43,027</td>
<td>15,331</td>
<td>66,968</td>
<td>15,491</td>
<td>75,328</td>
<td>15,679</td>
<td>98,479</td>
</tr>
<tr>
<td>Skins (Semi Processed)</td>
<td>7,894</td>
<td>43,657</td>
<td>5,345</td>
<td>38,239</td>
<td>8,951</td>
<td>55,722</td>
<td>8,830</td>
<td>58,430</td>
<td>66,543</td>
<td></td>
</tr>
<tr>
<td>Hides (Semi Processed)</td>
<td>2,284</td>
<td>5,284</td>
<td>3,935</td>
<td>3,930</td>
<td>5,840</td>
<td>6,870</td>
<td>6,273</td>
<td>7,252</td>
<td>10,564</td>
<td></td>
</tr>
<tr>
<td>Finished Leather</td>
<td>437</td>
<td>3,572</td>
<td>168</td>
<td>7,648</td>
<td>103</td>
<td>803</td>
<td>221</td>
<td>1,997</td>
<td>14,421</td>
<td></td>
</tr>
<tr>
<td>Leather Products</td>
<td>323</td>
<td>3,259</td>
<td>30</td>
<td>858</td>
<td>103</td>
<td>803</td>
<td>221</td>
<td>1,997</td>
<td>14,421</td>
<td></td>
</tr>
</tbody>
</table>

Source: MoTI, 2008

## Annex 3. Tigrai region livestock population (2007/08)

<table>
<thead>
<tr>
<th>S/N</th>
<th>Zone</th>
<th>Cattle</th>
<th>Sheep</th>
<th>Goat</th>
<th>Donkey</th>
<th>Horse</th>
<th>Mule</th>
<th>Camel</th>
<th>Poultry</th>
<th>Beehives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Western</td>
<td>54151</td>
<td>512151</td>
<td>277314</td>
<td>35927</td>
<td>NA</td>
<td>950</td>
<td>1977</td>
<td>537409</td>
<td>22755</td>
</tr>
<tr>
<td>2</td>
<td>North West</td>
<td>771917</td>
<td>79967</td>
<td>903196</td>
<td>71149</td>
<td>NA</td>
<td>NA</td>
<td>6956</td>
<td>1157851</td>
<td>35028</td>
</tr>
<tr>
<td>3</td>
<td>Central</td>
<td>754280</td>
<td>318478</td>
<td>1237653</td>
<td>135312</td>
<td>NA</td>
<td>NA</td>
<td>4860</td>
<td>1255629</td>
<td>86574</td>
</tr>
<tr>
<td>4</td>
<td>Eastern</td>
<td>380860</td>
<td>604471</td>
<td>201410</td>
<td>88435</td>
<td>NA</td>
<td>NA</td>
<td>3671</td>
<td>562316</td>
<td>48841</td>
</tr>
<tr>
<td>5</td>
<td>Southern</td>
<td>671199</td>
<td>333976</td>
<td>385890</td>
<td>131674</td>
<td>NA</td>
<td>NA</td>
<td>16984</td>
<td>749131</td>
<td>49670</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>2632407</td>
<td>1849043</td>
<td>3005463</td>
<td>462497</td>
<td>950</td>
<td>34448</td>
<td>4262336</td>
<td>242868</td>
<td></td>
</tr>
</tbody>
</table>

NA = data not available
Source: CSA, 2008

<table>
<thead>
<tr>
<th>S/N</th>
<th>Villages</th>
<th>Household Population</th>
<th>Total Population</th>
<th>Livestock Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>Gebrekidan</td>
<td>1114</td>
<td>712</td>
<td>1826</td>
</tr>
<tr>
<td>2</td>
<td>Hadinet</td>
<td>1039</td>
<td>562</td>
<td>1601</td>
</tr>
<tr>
<td>3</td>
<td>Haresaw</td>
<td>730</td>
<td>487</td>
<td>1217</td>
</tr>
<tr>
<td>4</td>
<td>Zarema</td>
<td>986</td>
<td>571</td>
<td>1557</td>
</tr>
<tr>
<td>5</td>
<td>Felegeweini</td>
<td>956</td>
<td>472</td>
<td>1428</td>
</tr>
<tr>
<td>6</td>
<td>Ruba Feleg</td>
<td>925</td>
<td>517</td>
<td>1442</td>
</tr>
<tr>
<td>7</td>
<td>Golgol Naele</td>
<td>956</td>
<td>665</td>
<td>1621</td>
</tr>
<tr>
<td>8</td>
<td>Adimesanu</td>
<td>1042</td>
<td>601</td>
<td>1643</td>
</tr>
<tr>
<td>9</td>
<td>Habes</td>
<td>498</td>
<td>291</td>
<td>789</td>
</tr>
<tr>
<td>10</td>
<td>Barka Adisubha</td>
<td>908</td>
<td>457</td>
<td>1365</td>
</tr>
<tr>
<td>11</td>
<td>KaleAmin</td>
<td>1166</td>
<td>786</td>
<td>1952</td>
</tr>
<tr>
<td>12</td>
<td>Michael Emba</td>
<td>1004</td>
<td>366</td>
<td>1370</td>
</tr>
<tr>
<td>13</td>
<td>Hayelom</td>
<td>1316</td>
<td>574</td>
<td>1890</td>
</tr>
<tr>
<td>14</td>
<td>Erra</td>
<td>917</td>
<td>362</td>
<td>1279</td>
</tr>
<tr>
<td>15</td>
<td>Kelisha Emni</td>
<td>924</td>
<td>423</td>
<td>1347</td>
</tr>
<tr>
<td>16</td>
<td>Dibab Akoren</td>
<td>716</td>
<td>354</td>
<td>1070</td>
</tr>
<tr>
<td>17</td>
<td>Haikmeshal Town</td>
<td>479</td>
<td>379</td>
<td>858</td>
</tr>
<tr>
<td>18</td>
<td>A/E/slase Town</td>
<td>826</td>
<td>814</td>
<td>1640</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>16502</strong></td>
<td><strong>9393</strong></td>
<td><strong>25895</strong></td>
</tr>
</tbody>
</table>

Source: AWOARD, 2008
Annex 5. Hides and skins purchase of traders in Atsbi Wemberta

<table>
<thead>
<tr>
<th>Year</th>
<th>Trader</th>
<th>Cattle Hide</th>
<th>Sheep Skin</th>
<th>Goat Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Purchase</td>
<td>Share (%)</td>
<td>Cumulative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cumulative</td>
<td>Share (%)</td>
</tr>
<tr>
<td>2004/05</td>
<td>1</td>
<td>600</td>
<td>70.2</td>
<td>70.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>100</td>
<td>11.7</td>
<td>81.9</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>155</td>
<td>18.1</td>
<td>100</td>
</tr>
<tr>
<td>2005/06</td>
<td>1</td>
<td>1271</td>
<td>74.1</td>
<td>74.1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>229</td>
<td>13.4</td>
<td>87.5</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>215</td>
<td>12.5</td>
<td>100</td>
</tr>
<tr>
<td>2006/07</td>
<td>1</td>
<td>1157</td>
<td>76.9</td>
<td>76.9</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>247</td>
<td>16.4</td>
<td>93.34</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>100</td>
<td>6.6</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: WOARD, 2008

Annex 6. Hides and skins purchase of traders in Adigrat

<table>
<thead>
<tr>
<th>Year</th>
<th>Trader</th>
<th>Cattle Hide</th>
<th>Sheep Skin</th>
<th>Goat Skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Purchase</td>
<td>Share (%)</td>
<td>Cumulative</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cumulative</td>
<td>Share (%)</td>
</tr>
<tr>
<td>2004/05</td>
<td>1</td>
<td>10501</td>
<td>77.5</td>
<td>77.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1802</td>
<td>13.3</td>
<td>90.8</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1251</td>
<td>9.2</td>
<td>100</td>
</tr>
<tr>
<td>2005/06</td>
<td>1</td>
<td>11284</td>
<td>78.2</td>
<td>78.2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1368</td>
<td>9.5</td>
<td>87.7</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1775</td>
<td>12.3</td>
<td>100</td>
</tr>
<tr>
<td>2006/07</td>
<td>1</td>
<td>16039</td>
<td>93.9</td>
<td>93.9</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>731</td>
<td>4.3</td>
<td>98.2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>300</td>
<td>1.8</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: WOARD, 2008
Annex 7. Grades of hides and skins supplied to terminal market (Region, 2006/07)

<table>
<thead>
<tr>
<th>No</th>
<th>Types</th>
<th>Unit</th>
<th>Quantity supplied</th>
<th>Quantity un graded</th>
<th>Graded*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>1</td>
<td>Sheep skin</td>
<td>No</td>
<td>408741</td>
<td>35370</td>
<td>138724</td>
</tr>
<tr>
<td>2</td>
<td>Goat skin</td>
<td>No</td>
<td>871786</td>
<td>169248</td>
<td>322888</td>
</tr>
<tr>
<td>3</td>
<td>Cattle hide</td>
<td>No</td>
<td>85960</td>
<td>13806</td>
<td>28793</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>No</td>
<td>1366487</td>
<td>218424</td>
<td>490405</td>
</tr>
</tbody>
</table>

* Regional experts did grading.
Source: WOARD, 2008

Annex 8. Grades of hides and skins supplied to terminal market (Wereda, 2006/07)

<table>
<thead>
<tr>
<th>No</th>
<th>Types</th>
<th>Unit</th>
<th>Quantity supplied</th>
<th>Grades*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>1</td>
<td>Wet salted sheep skin</td>
<td>No</td>
<td>38989</td>
<td>15667</td>
</tr>
<tr>
<td>2</td>
<td>Wet salted goat skin</td>
<td>No</td>
<td>12368</td>
<td>4707</td>
</tr>
<tr>
<td>3</td>
<td>Wet salted cattle hide</td>
<td>No</td>
<td>766</td>
<td>291</td>
</tr>
<tr>
<td>4</td>
<td>Dry salted cattle hide</td>
<td>No</td>
<td>738</td>
<td>278</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>No</td>
<td>52861</td>
<td>20943</td>
</tr>
</tbody>
</table>

* Wereda expert did grading.
Source: WOARD, 2008

Annex 9. Assessment of defect of calfskins

<table>
<thead>
<tr>
<th>Defects</th>
<th>Defect-units allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hole, hole or hole caused by beetles, each</td>
<td>2</td>
</tr>
<tr>
<td>Weak spot, gouge, gash or channels caused by beetles, each</td>
<td>1</td>
</tr>
<tr>
<td>Poor pattern</td>
<td>2</td>
</tr>
<tr>
<td>Siding or corduroying, per side</td>
<td>2</td>
</tr>
<tr>
<td>Edge scaled with urine or dung</td>
<td>2</td>
</tr>
<tr>
<td>Heating or grain damage, per average area of 10x15cm</td>
<td>2</td>
</tr>
<tr>
<td>Salt spots, red or purple spots, per average area of 30x30cm</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: BoARD, 2007. Adapted from the National Standards; (Regulation No 12/1990 and ES 1199-2005)
## Annex 10. Assessment of defects of large cattle hides

<table>
<thead>
<tr>
<th>Types of defects</th>
<th>Defect-units allocated on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bellies</td>
</tr>
<tr>
<td>Hand hole, hole or hole caused by beetles, each</td>
<td>1</td>
</tr>
<tr>
<td>Weak spot, gouge, or gash or channels caused by beetles, each</td>
<td>1</td>
</tr>
<tr>
<td>Badly shaped head</td>
<td>0</td>
</tr>
<tr>
<td>Poor pattern</td>
<td>2</td>
</tr>
<tr>
<td>Siding or corduroying per side</td>
<td>1</td>
</tr>
<tr>
<td>Hole, warble each</td>
<td>0</td>
</tr>
<tr>
<td>Warble scar</td>
<td>0</td>
</tr>
<tr>
<td>Heating or grain damage, per average area of 10x30cm each</td>
<td>1</td>
</tr>
<tr>
<td>Dung or traces of urine, per average area of 15x30cm each</td>
<td>1</td>
</tr>
<tr>
<td>Scars, per average length of 15 cm</td>
<td>1</td>
</tr>
<tr>
<td>Salt spots, red or purple spots, per average area of 30x30cm</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: BoARD, 2007. Adapted from the National Standards; (Regulation No 12/1990 and ES 1199-2005)

## Annex 11. Assessment of defects of skins

<table>
<thead>
<tr>
<th>Defects</th>
<th>Defect - Units allocated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand hole, hole or holes caused by beetles each</td>
<td>2</td>
</tr>
<tr>
<td>Weak spot, gash, gouge or channel caused by beetles, each</td>
<td>1</td>
</tr>
<tr>
<td>Poor pattern</td>
<td>2</td>
</tr>
<tr>
<td>Siding or corduroying, per side</td>
<td>1</td>
</tr>
<tr>
<td>Edge soiled with urine or dung</td>
<td>2</td>
</tr>
<tr>
<td>Heating or grain damage, per average area of 10x15 cm each</td>
<td>2</td>
</tr>
<tr>
<td>Salt spots, red or purple spots, per average area of 30 x 30 cm</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: BoARD, 2007. Adapted from the National Standards; (Regulation No 12/1990 and ES 1201-2005)
Annex 12. Grading of cattle hides and calfskins in relation to defects

<table>
<thead>
<tr>
<th>Origin of hide or skins</th>
<th>Grade by appearance</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Cattle</td>
<td>Grade 1</td>
<td>No defects visible in the butt; defects in the shoulder or belly assessed at not more than 5 defect units in total and 90-100% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 2</td>
<td>Defect in the butt, shoulder &amp; belly assessed at not more than 12 defect units in total of which not more than 8 in the butt and 80-89% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 3</td>
<td>Defects assessed between 12 and 24 defect units at the most and 70-79% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 4</td>
<td>Defects assessed at more than 24 defect units, the unusable area of the hide being at the most equal to 50-69% of the total area</td>
</tr>
<tr>
<td></td>
<td>Rejects</td>
<td>Hides of which more than 50% of the surface is unusable.</td>
</tr>
<tr>
<td>Calf</td>
<td>Grade 1</td>
<td>No visible defects, which are likely to depreciate the skin, appearing beyond 2.5 cm from the edges and 90-100% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 2</td>
<td>Defects assessed to a total of 1-3 defect units and 80-89% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 3</td>
<td>Defects assessed to a total of 4-8 defect units and 70-79% usable.</td>
</tr>
<tr>
<td></td>
<td>Grade 4</td>
<td>Defects assessed at a total of more than 8 defect units, the usable area being at the most equal to 50-69% of the total area.</td>
</tr>
<tr>
<td></td>
<td>Rejects</td>
<td>Skins of which more than 50% of the area is unusable.</td>
</tr>
</tbody>
</table>

Source: BoARD, 2007. Adapted from the National Standards; (Regulation No 12/1990 and ES 1199-2005)
### Annex 13. Grading of raw skins in relation to defects

<table>
<thead>
<tr>
<th>Origin of skin</th>
<th>Grade by appearance</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamb, sheep &amp; Goat</td>
<td><strong>Grade 1</strong></td>
<td>No visible defects which are likely to depreciate the skin, appearing beyond 2.5cm from the edges and 90-100% usable.</td>
</tr>
<tr>
<td></td>
<td><strong>Grade 2</strong></td>
<td>Defects assessed to a total of 1-3 defect units and 80-89% usable</td>
</tr>
<tr>
<td></td>
<td><strong>Grade 3</strong></td>
<td>Defects assessed to a total of 4-8 defect units and 70-79% usable</td>
</tr>
<tr>
<td></td>
<td><strong>Grade 4</strong></td>
<td>Defects assessed to a total more than 8 defect units, the unusable area being at the most equal to 50-69% of the total area.</td>
</tr>
<tr>
<td></td>
<td><strong>Rejects</strong></td>
<td>Skins of which more than 50% of the area is unusable</td>
</tr>
</tbody>
</table>

Source: BoARD, 2007. Adapted from the National Standards; (Regulation No 12/1990 and ES 1201-2005)
Annex 14. Farmers / Butchers Survey Interview Schedule

Name of enumerator---------------------------------------------------------------
Signature---------------------------------------------------
Date of data collection ------------------------------------------
I. Area Information
Region: ---------------------------------------------------
Zone: -----------------------------------------------------
Wereda: -----------------------------------------------------
Name of Village/Kebelle --------------------------------- 
Sub village/Gott ---------------
Distance of residence to:
   a) All weather road __________ walking time in hours 
   b) Dry weather road _________ walking time in hours 
   c) village market center __________ walking time in hours 
   d) Wereda market center __________ walking time in hours 
Total Land holding __________ 'timad' in 1999 E.C 
   a) Cultivated area ______'timad' e) Fallow land _____timad e) Others (specify)__timad 
   b) Private pasture land____ timad d) Homestead_____ timad 
II. Demographic and Farm Characteristics of Households
Name of Household Head -----------------------------------------------------
Gender  -------------  Female = 0 Male = 1, Age -------------
Religion ------------- Orthodox = 1,   Muslim = 2, Protestant = 3, Catholic = 4, Other = 5 
Household size ------------- Male------------ Female---------- 
Characteristics of household members (including the head)

<table>
<thead>
<tr>
<th>S/ no</th>
<th>Age (in years)</th>
<th>Sex</th>
<th>Level of Education</th>
<th>Occupation (see code)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1</td>
<td>&lt; 14 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>15-65 years</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>&gt; 65 years</td>
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</table>

Codes for sex, level of education and occupation

<table>
<thead>
<tr>
<th>Sex</th>
<th>Code</th>
<th>Level of education</th>
<th>Code</th>
<th>Type of occupation</th>
<th>Code</th>
</tr>
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<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>Illiterate</td>
<td>0</td>
<td>Farming</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
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<td>Read and write (non formal)</td>
<td>1</td>
<td>Trade or retail</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Handicraft</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>3</td>
<td>Wage labor</td>
<td>4</td>
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<td></td>
<td>4</td>
<td>Student</td>
<td>5</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>5</td>
<td>Other (specify)</td>
<td>6</td>
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</tbody>
</table>
Experience and revenue from different activities in 1999 E.C.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Did you participate in activities 1=yes 2=No</th>
<th>Years of experience</th>
<th>Annual income (Birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farming</td>
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<td></td>
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</tr>
<tr>
<td>off-farming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hides &amp; Skins sale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (specify)</td>
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<td></td>
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</tbody>
</table>

Livestock ownership

<table>
<thead>
<tr>
<th>Type of livestock</th>
<th>Number owned in 1999 E.C</th>
<th>No. of livestock sold</th>
<th>Cash income from sale (Birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cows</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heifers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yearling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep</td>
<td>mature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep</td>
<td>lamb</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goats</td>
<td>mature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goats</td>
<td>kids</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donkeys</td>
<td>mature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donkeys</td>
<td>kid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bee colony</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ownership of resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>1=Yes</th>
<th>2=No</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of house owned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1 = Soil &amp; Wood roofed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 = Iron sheet roofed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-3 = Both types</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plowing tools (<em>Mofer, Kenber, maresha etc</em>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal cart</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

III. General

1. Did you slaughter any animal in 1999 E.C?  a) Yes b) No
2. Did you sell Hides or Skins to market in 1999 E.C?  a) yes  b) no
3. If no, why?
4. If yes, where did you sell your Hides or Skins?  a) at village market  b) at wereda market  c) Other (specify) -------
5. To whom did you sell your Hides?
   a) Local tanners   b) Collector   c) Broker   d) Farmer
   e) Wholesaler   f) Other (specify) -----

6. How much did you sell as per number 5?
   a) Local tanners     b) Collector     c) Broker
   d) Farmer     e) Wholesaler     f) Other (specify) -----

7. At what price did you sell as per number 5?
   a) Local tanners     b) Collector     c) Broker
   d) Farmer     e) Wholesaler     f) Other (specify) -----

8. To whom did you sell your Skins?
   a) Local tanners   b) Collector   c) Broker   d) Farmer
   e) Wholesaler   f) Other (specify) -----

9. How much did you sell as per number 8?
   a) Local tanners     b) Collector     c) Broker
   d) Farmer     e) Wholesaler     f) Other (specify) -----

10. At what price did you sell as per number 8?
    a) Local tanners     b) Collector     c) Broker
    d) Farmer     e) Wholesaler     f) Other (specify) -----

11. Why did you sell to as per number 5 and 8?
    a) lesser transport cost   b) higher price   c) Fair scaling of quality   d) Other (specify) --

12. What type of Hides did you sell in 1999 E.C.?  
    a) Fresh   b) Sun dried   c) Salted

13. What type of skins did you sell in 1999 E.C.?  
    a) Fresh   b) Sun dried   c) Salted

14. When did you sell your Hides and Skins to the market in 1999 E.C.?
    a) Immediately after slaughtering   b) after a day   c) after 2 days   d) after a week

15. Did you face difficulty in finding buyers when you wanted to sell? 1= yes 2= No

16. If yes, is it due to:*
    a) Inaccessibility to market   c) Lack of price information
    b) Low price offer   d) Other (specify) -------

17. Did you know the market price before you sell your Hides and Skins? a) Yes   b) No

18. If yes, how did you get price information of Hides and Skins in the market?
    a) Broker   b) personal observation   c) Other Hides and Skins traders
    d) Other farmer   e) Radio   f) Telephone   g) Other (specify) ------------------

19. How did you qualify the reliability of the information? a) high   b) moderate   c) low

20. How did you qualify the timeliness of the information? a) timely   b) outdated

21. How did you qualify the adequacy of the information? a) adequate b) moderate c) inadequate

22. What did you do, when the Hides and/or Skins you offered to the market were not sold?
    a) Took back home   b) Took to another market on the same day
    c) Took to another market on another day   d) Sell at lower price
23. What are the number and the average selling price of your hides and skins in 1999 E.C?

<table>
<thead>
<tr>
<th>Type of Hides &amp; Skins</th>
<th>Average Unit price (Birr)</th>
<th>Total Amount (No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted hide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh sheep skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh goat skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried sheep skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried goat skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted sheep skin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted goat skin</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. Who set the selling price of Hides and Skins in the market place?
   a) Own self   c) By negotiation
   b) Buyers (specify) d) Other (indicate)

25. Where the price of hides & skins is become fair?
   a) at local collector b) at broker c) at whole seller d) at retailer e) I didn't compare

26. On what basis did you sell your hides?
   a) Weight   b) Substance   c) Breed   d) Other (specify)

27. On what basis did you sell your skins?
   a) Substance   b) Size   c) Weight   d) Other (specify)

28. How did you transport the Hides from home to market?
   a) Head/back loading   c) Vehicle   e) Other (specify)
   b) Animal’s cart   d) Pack animal

29. How did you transport the Skins from home to market?
   a) Head/back loading   c) Vehicle   e) Other (specify)
   b) Animal’s cart   d) Pack animal

30. What problems did you face to your animals in 1999 E.C?
   a) disease and parasites   b) injury   c) lack of veterinary service   d) others (specify)

31. What did you do if your animal gets sick? *
   a) Traditional treatment (specify)   c) Taking to vet. Clinic   d) Other (specify)

32. What problems did you face to your hides and skins during slaughter and flaying in 1999 E.C?
   a) Flay cut   b) hole   c) silts and stains   d) other (specify)

33. What problems did you face to your hides and skins after slaughter in 1999 E.C?
   a) silts and stains   b) preservation   c) lack of transport   d) Other (specify)

34. What problems did you face to your hides and skins at marketing in 1999 E.C?
   a) price setting   b) lack of competitive market   c) lack of price information   d) Other (specify)
35. What is your suggestion to solve each problem?
36. How did you slaughter your animal? a) In the backyard  b) In clean area  
   c) Other (specify) ---
37. Did you care for the hides & skins during slaughtering & transporting? a) Yes  b) No
38. If yes, how?
39. If no, why?
40. Did you have extension agent contact in 1999 E.C?  
   a) Yes              b) No
41. If yes, how often?  
   a) Weekly  c) Monthly  e) Once in a year  
   b) Once in two week  d) Twice in the year  f) any time when I ask them
42. What was the extension advice on?  
   a) Veterinary service  d) Animal products handling  
   b) Animal husbandry  e) Other (specify) ---------  
   c) Hides and Skins preservation (management) & transporting
43. What are the major problems of raw hides and skins marketing?
44. What do you suggest to solve the major problems mentioned?

Annex 15. Hides & Skins Local Collectors Interview Schedule

Name of enumerator ------------------
Signature ----------------
Date of data collection _________________
Name and Address of respondent
   Name ------------------------------------------
   Region-----------------------------------
   Zone--------------------------------------
   Woreda----------------------------------
   Kebele/Village --------------------------------
   Distance from station to:
       e) all weather road _________ walking time in hours
       f) Dry weather road _________ walking time in hours
       g) Local market _____________ walking time in hours
       h) Wereda market ___________ walking time in hours
Demographic Characteristics of the respondent
   Age ------------
   Gender -------------  Female = 0  Male = 1,
   Religion -------------   Orthodox = 1,  Muslim = 2,  Protestant = 3,  Catholic = 4,  Other= 5
   Household/Family size --------------  Male--------  Female-------
Characteristics of household members (including the head)

<table>
<thead>
<tr>
<th>S. no</th>
<th>Age (in years)</th>
<th>Sex</th>
<th>Level of Education</th>
<th>Occupation (see code)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Main</td>
</tr>
<tr>
<td>1</td>
<td>&lt; 14 years</td>
<td></td>
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<tr>
<td>2</td>
<td>15-65 years</td>
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<td></td>
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</tr>
<tr>
<td>3</td>
<td>&gt; 65 years</td>
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Codes for sex, level of education and occupation

<table>
<thead>
<tr>
<th>Sex</th>
<th>Code</th>
<th>Level of education</th>
<th>Code</th>
<th>Type of occupation</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
<td>Illiterate</td>
<td>0</td>
<td>Farming</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>Read and write (non formal)</td>
<td>1</td>
<td>Trade or retail</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grade 1-4</td>
<td>2</td>
<td>Handicraft</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>Grade 5-8</td>
<td>3</td>
<td>Wage labor</td>
<td>4</td>
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<td></td>
<td>Grade 9-10</td>
<td>4</td>
<td>Student</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; 10 grade</td>
<td>5</td>
<td>Other (specify)</td>
<td>6</td>
</tr>
</tbody>
</table>

General
1. How long have you been in Hides & Skins collecting?
   a. < 1 year  b. 1-5 years  c. 6-10 years  d. above 10 years
2. When did you participate in Hides & Skins collection? a. Every market day  b. Every day  c) Only during holidays  d)Other (specify) ------
3. Who set the purchasing price of hides and skins in the market?
   a. My self  c. By negotiation  b. Buyers (specify)  d) Other (specify) ------
4. What was your average purchasing price and how much did you bought in 1999 E.C?

<table>
<thead>
<tr>
<th>Type of Hides &amp; Skins</th>
<th>During holidays (Birr)</th>
<th>Other than holidays (Birr)</th>
<th>Total (Nq)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh hide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried hide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted hide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh sheep skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried sheep skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted sheep skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh goat skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried goat skin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salted goat skin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Why did not you purchase more than this?
   a. Financial constraints  b. The price is high  c. Lack of market (low demand)  
   d. Could not handle more than this  e. The supply is insufficient  f. Other (specify)
6. Why, how and when as per number 3?
   a) My self
   b) Set by demand and supply (negotiations)
   c) Buyers (specify)
   d) Sellers
   e) Other (specify)
7. What was the impact on the market as per number 3?
   a) My self
   b) Set by demand and supply (negotiations)
   c) Buyers (specify)
   d) Sellers
   e) Other (specify)
8. Which type of Hide is highly demanded in the market in 1999 E.C?
   a. Fresh
   b. Air dried
   c. Salted
   d. Other (specify)
9. Which type of goat Skin is highly demanded in the market in 1999 E.C?
   a. Fresh
   b. Air dried
   c. Salted
   d. Other (specify)
10. Which type of sheep Skin is highly demanded in the market in 1999 E.C?
    a. Fresh
    b. Air dried
    c. Salted
    d. Other (specify)
11. Did you use any preservation method for hides and skins? a) Yes  b) No
12. If yes, what preservation method did you use for Hides?
    a. Air dried
    b. Wet Salted
    c. Other (specify)
13. If yes, what preservation method did you use for goat Skins?
    a. Air dried
    b. Wet Salted
    c. Other (specify)
14. If yes, what preservation method did you use for sheep Skins?
    a. Air dried
    b. Wet Salted
    c. Other (specify)
15. On what basis did you purchase Hides & Skins? a) Cash  b) Credit  c) Both
16. From whom did you mainly purchase Hides & Skins in their order in 1999 E.C?*  
   a. Farmer
   b. Other collector
   c. Hides & Skins Broker
   d. Butcheries
   e. Other (specify) –
17. From where did you purchase Hides & Skins in 1999 E.C?*
    a. From farmers' farm gate
    b. From village market
    c. From wereda market
    d. Other (specify)
18. What parameters did you use to purchase raw hides?
    a. Weight
    c. Substance
    b. Shape/pattern
    d. Source (Origin of breed)
    e. Others (specify)
19. What parameters did you use to purchase raw skins?
    a. Size
    c. Substance
    b. Shape/pattern
    d. Source (Origin of breed)
    e. Others (specify)
20. What is their reaction to your parameters? a) Negative  b) Positive
21. If negative, why?
22. What major defects did you observe in the raw hides you purchased?
    a. Brand
    b. Broses
    c. Poor pattern
    d. Fallen hide
23. What major defects did you observe in the raw goat skins you purchased?
   a. Brand  
   b. Broses  
   c. Poor pattern  
   d. Fallen skin  
   e. Putrefaction  
   f. Dirtiness  
   g. Improper bleeding  
   h. Other (specify)  
24. What major defects did you observe in the raw sheep skins you purchased?
   a. Brand  
   b. Broses  
   c. Poor pattern  
   d. Fallen skin  
   e. Putrefaction  
   f. Dirtiness  
   g. Improper bleeding  
   h. Other (specify)  
25. What do you think the causes of the defects observed?
   a. Hides  
   b. goat skins  
   c. Sheep skins  
26. Did you know the market price before you sell your Hides and Skins?  a) Yes  b) No  
27. If yes, how did you get information on price of Hides and Skins in the market?
   a. Other Hides and Skins trader  
   b. Broker  
   c. personal observation  
   d. Other farmer  
   e. Radio  
   f. Telephone  
   g. Other (specify)  
28. How did you qualify the reliability of the information?  a) high  b) moderate  c) low  
29. How did you qualify the timeliness of the information?  a) timely  b) outdated  
30. How did you qualify the adequacy of the information?  a) adequate  b) moderate  c) inadequate  
31. To whom did you sell the Hides & Skins you purchased in 1999 E.C?*
   a. wholesale (name & address)  
   b. Tannery/Factory (name & address)  
   c. Other (specify)  
32. Are there informal marketing groups taking hides and skins?  a) Yes  b) No  
33. If yes, indicate them and their effect on the market?  
34. How much did you sell as per number 34?
   a. wholesale (name & address)  
   b. Tannery/Factory (name & address)  
   c. Other (specify)  
35. What was the amount and average selling price to your buyers as number 31 in 1999 E.C?
   Cattle hide                      Sheep skin                          Goat skin                      
   quantity | price | quantity | price | quantity | price |
   Fresh    |       |          |       |          |       |
   Air dried|       |          |       |          |       |
   Wet Salted|      |          |       |          |       |
   Other (specify) | |  | | |   |
36. Who set the selling price of hides and skins in the market?  
   a. My self  
   b. Buyers (specify)  
   c. By negotiation  
   d. Other (specify)  
37. Why, how and when as per number 36?
   a) My self  
   b) Set by demand and supply (negotiations)  
   c) Buyers (specify)  
   d) Sellers  
   e) Other (specify)
38. What was the impact on the market as per number 36?
   a) My self --------------  b) Set by demand and supply (negotiations) --------------
   c) Buyers (specify) --------  d) Sellers ---------  e) Other (specify) ---------
39. Did the price of Hides & Skins in this market vary from season to season?  a. Yes  b. No
40. If yes, what was the reason?
   a. Export price variation        b. Factory/Tannery price variation /setting
   c. Wholesalers price setting     d. Other (specify) --------
41. What was the range of the price variation for hides? a.< Birr 5  b.Birr 5-10  c.Birr 11-15
da.> Birr 15
42. What was the range of the price variation for sheep skins?  a. < Birr 5  b. Birr 5-10
c. Birr 11-15 d.> Birr 15  e) Other (specify) ------
43. What was the range of the price variation for goat skins? a. < Birr 5  b. Birr 5-10
c. Birr 11-15 d.> Birr 15  e) Other (specify) ------
44. When the price variation reaches high?  a) during holidays  b) Other than holidays
   c) Other (specify)
45. What mode of transportation did you use from your site to reach as per number 34?*
   a. Carrying           b. Trucking      c. Draft animals    d. Other (specify) ------------
46. If you use trucking, how much did you pay to reach as per number 36?
   a. ------------------Birr  b. ------Birr  c. ------Birr     d. ------Birr
47. How long did it take you to reach resale market as per number 36?
   a. Carrying --------- hours   c. Draft animal --------- hours
   b. Trucking--------- hours   d. Other (specify)--------- hours
48. If you use draft animal, how much did you pay to reach as per number 36?
   a. ------------------Birr  b. ------Birr  c. ------Birr     d. ------Birr
49. How did you do if you cannot sell the Hides & Skins you offered to the market?
   a. Preserving & drying             b. Sell at lower price
   c. Take it to other market(s)     d. Storing          e. Other (specify) ---------
51. If yes, how did you store the Hides and Skins?
   a. Salted       b. dried   c. other (specify) ____
52. If you stored, what was the motive behind storing?
   a. Expecting high price                             c. Collection & Transportation purpose
   b. Lack of market demand                            d. Other (specify)____
53. Was there any change in the quality of the stored Hides and Skins?
   a. decreases     b. No change  c. Other (specify) -------
54. Did the supply of Hides & Skins in this market vary from season to season?  a. Yes  b. No
55. If yes, what was the reason?    a. Price change    b. Transportation problem    c. Drought
d. Disease incidence    e. Other (specify) ---------
56. At what time of the year did Hides & Skins supply, demand and price reach their respective peak?

<table>
<thead>
<tr>
<th>Time</th>
<th>Supply</th>
<th>Demand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. At festival period/holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. At wet time period other than holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. At dry time period other than holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Other (specify) ---------------</td>
<td>--------</td>
<td>--------</td>
<td>-------</td>
</tr>
</tbody>
</table>

57. Did you incur any cost for the hides in 1999 E.C? a. Yes b. No
58. If yes, how much? a. labour ---- b. transport ---- c. preservation ---- d. other (specify) ----

59. Did you incur any cost for the skins in 1999 E.C? a. Yes b. No
60. If yes, how much? a. labour ---- b. transport ---- c. preservation ---- d. other (specify) ----

61. Are there most important marketing facilities and services in this market? a. Yes b. No
62. If yes, please circle the available marketing facilities and services.

Facilities Services
a. Transportation a. Market information
b. Marketing area (controlled) b. Controlling regulations
c. Water supply c. Slaughter houses
d. Others (specify) ---------- d. Others (specify) --------------------

63. If no, what do you think the reason is? -----------------------------------------------

64. How much did you pay to issue Hides & Skins trade certificate? -----------------Birr
65. How much did you pay for the certificate renewal? ---------Birr/6 months
66. Are there people working without certificate? a. Yes b. No
67. If yes, what do you expect the reason?
68. Did you pay tax for the Hides & Skins you purchase? a. Yes b. No
69. If yes, how frequently did you pay tax? a. Yearly b. At every market day c. Other (specify) ---

70. How much tax did you pay as per number 68?
   a. Per year/unit -----Birr b. Per market day/unit ----Birr. c. Other (specify) -----Birr
71. What is your opinion regarding the marketing fees paid in this market as compared to others? a. High b. Low c. Average d. I do not know the others
72. What is your source of capital to start trading?*
   a) From my own income b) From my family/partners c) Borrowing d) Other (specify)-
73. If you borrow, from where did you borrow?*
   a. Bank b. Private money lender c. Relatives d. Friends e. Other financial institutions (specify)----
74. How much did you borrow? ---------------Birr (Please indicate by sources) ---------------
75. How much was the interest rate? ---------------------percent
76. How does the repayment schedule look like? ---------------
   a. Weekly  b. Monthly  c. quarterly  d. half a year  e. Yearly  f. Other (specify) -----
77. What technical and administrative support did you get from concerned Institutions in 1999 E.C?
   a. Training  b. Technical follow up  c. Quality assurance
   d. Different incentives  e. Experience sharing  f. Other (specify) -------------
78. What major problems did you face in hides and skins marketing? *
   a. Low price  c. Black market  e. Traditional tanning
   b. Low demand  d. Low quality  f. Others (specify) -------------
   Indicate according to their order of importance. -----------------------------------------------
79. What is your suggestion to solve each problem accordingly?
   -----------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------
 *

**Annex 16. Hides & Skins Wholesale Traders Survey Interview Schedule**

Enumerator’s name ______________________________
Signature_______________
Date of data collection _________________
Name and Address of Respondent
   Name______________________
   Region-------------------------
   Zone--------------------------
   Woreda------------------------
   Kebele/Village ------------------
   Occupation/Licensed ---------------

Demographic Characteristics of the respondent
   Age ----------
   Gender --------  a) Female  b) Male
   Religion -------  a) Orthodox  b) Muslim  c) Protestant  d) Catholic  e) Other
   Household/Family size ---------  Male---------  Female--------

Characteristics of household members (including the head)

<table>
<thead>
<tr>
<th>S. no</th>
<th>Age (in years)</th>
<th>Sex</th>
<th>Level of Education</th>
<th>Occupation (see code)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Codes for sex, level of education and occupation

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Code</th>
<th>Type of occupation</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>0</td>
<td>Farming</td>
<td>1</td>
</tr>
<tr>
<td>Read and write (non formal)</td>
<td>1</td>
<td>Trade or retail</td>
<td>2</td>
</tr>
<tr>
<td>Grade 1-4</td>
<td>2</td>
<td>Handicraft</td>
<td>3</td>
</tr>
<tr>
<td>Grade 5-8</td>
<td>3</td>
<td>Wage labor</td>
<td>4</td>
</tr>
<tr>
<td>Grade 9-10</td>
<td>4</td>
<td>Broker</td>
<td>5</td>
</tr>
<tr>
<td>&gt; 10 grade</td>
<td>5</td>
<td>Hide &amp;skin trader</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bucher</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Student</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other (specify)</td>
<td>9</td>
</tr>
</tbody>
</table>

Ownership of resources

<table>
<thead>
<tr>
<th>Resource</th>
<th>1=Yes</th>
<th>2=No</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of house owned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-1 = Soil &amp; Wood roofed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 = Iron sheet roofed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-3 = Both types</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other capital assets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hides and Skins store</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hides and Skins materials</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

General

1. How long have you been in Hides & Skins trading?
   a) Less than a year  b) 1 to 3 years  c) 4 to 6 years  d) Over 6 years
2. At what time did the supply of hides and skins became high?
   a) Ethiopian new year (Meskerem)  b) Ethiopian X-mass and 'Timket'
   c) Ethiopian Easter  d) Other (specify)  
3. Where is the purchasing price higher? a) Adigrat  b) Wukro  c) Atsbi  d) Other (specify)  
4. Why?  
5. From whom did you buy Hides & Skins?
   a) Wholesaler  b) Rural collector  c) Farmer/Consumer  d) Other (specify)  
6. In what form did you pay to the seller? a) In cash  b) On credit  c) Both  d) Other (specify)  
7. How much Hides & Skins did you buy and what was the average price in 1999 E.C?
   a) local collector

<table>
<thead>
<tr>
<th>Type</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>quantity</td>
<td>price(birr)</td>
<td>quantity</td>
</tr>
<tr>
<td>Fresh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet Salted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
b) Wholesaler

<table>
<thead>
<tr>
<th>Type</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>quantity</td>
<td>price(birr)</td>
<td>quantity</td>
</tr>
<tr>
<td>Fresh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet Salted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

c) Other (specify) --------------

<table>
<thead>
<tr>
<th>Type</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>quantity</td>
<td>price(birr)</td>
<td>quantity</td>
</tr>
<tr>
<td>Fresh</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wet Salted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Why did not buy more than these?
   a) Financial constraints   b) Some times price will be high   c) Some times supply is low   d) Some Hides & Skins supplied are of low quality to be demanded  
   e) Lack of market (low demand)  f) Other (specify) -----------

9. Did you know the market price before you sold your Hides and Skins?  a) Yes   b) No

10. If yes, how did you get information on price of Hides and Skins in the market?
    a) Other Hides and Skins trader   b) Tannery   c) personal observation   
    d) Radio   e) Other (specify) -----------

11. How did you qualify the reliability of the information? a) high   b) moderate   c) low

12. How did you qualify the timeliness of the information? a) timely   b) outdated

13. How did you qualify the adequacy of the information? a) adequate   b) moderate   c) inadequate


15. If yes, what could be the reasons you think?*
    a) Tannery price variation/setting   b) Price increases on holiday's   c) Price decreases or increases seasonally   d) Traders having big capital can increase or decrease the price of the day   
    e) Export price variation   f) I do not know   g) Other (specify) -----------

16. Who sets the price of hides and skins in the market during purchasing?  a) My self  
    b) Set by demand and supply (negotiations)   c) Sellers   d) Other (specify) -

17. Why as per number 16?

18. How as per number 16?

19. When as per number 16?

20. What is your interaction on the price on the market? a) Unsatisfied   b) Moderate   
    c) Satisfied

21. Are there informal marketing groups taking hides and skins? a) Yes   b) No

22. If yes, indicate them and their degree of influence on the market? a) High   b) Medium   c) Low

23. Who take care of your tradable Hides & Skins? a) My self   b) Laborer   c) My family
24. If you use laborers, on what basis did you pay them?
   a) On daily basis   b) On monthly basis   c) On yearly basis   d) On per Hides & Skins
   basis
25. How much did you pay for the labourer as per No 24?
26. Who buys Hides & Skins for you?*
   a) My self   b) Friends   c) Partners   d) commission agent   e) Others (specify) ----- 
27. If commission agent, on what basis did you pay?
   a) On unit Hides & Skins basis   b) On market day basis   c) On monthly basis   d) On
   yearly basis   e) Other (specify) " "
28. How much did you pay to the commission agent as per number 29?
   Hide " " Birr, Sheep skin " " Birr, Goat skin " " Birr
29. Did commission agents facilitate activities in the market? 1) Yes   b) No
30. If yes, state the activities facilitate for the market. " "
31. Did commission agent create any problem in the market? 1) Yes   b) No
32. If yes, state problems commission agent created on your business?
   a) I cannot sale with out their participation especially in terminal market 
   b) They bring low quality hides and skins   c) Other (specify) " "
33. What quality parameters did you use to purchase raw hides from your suppliers*?
   a) Weight   c) Substance   e) Defects 
   b) Shape/pattern   d) Source (Origin of breed)   f) Others (specify) " 
34. What quality parameters did you use to purchase raw skins from your suppliers*?
   a) Size   c) Substance   e) Defects 
   b) Shape/pattern   d) Source (Origin of breed)   f) Others (specify) " "
35. What is their reaction to your parameters?  a) positive   b) negative
36. If negative, why? " "
37. What defects did you observe in the raw hides you purchased?
   a. Brand   b. Bruise   c. Poor pattern   d. Fallen hide / skin 
   e. Putrefaction   f. Dirtiness   g. Improper bleeding   h. Other (specify) " "
38. What defects did you observe in the raw skins you purchased?
   a. Brand   b. Bruise   c. Poor pattern   d. Fallen hide / skin 
   e. Putrefaction   f. Dirtiness   g. Improper bleeding   h. Other (specify) " "
39. What did you think the causes of the defects observed?
40. Did you use additional Preservation to Hides & Skins before taking to terminal market?
   a) Yes   b) No
41. If no, Why?
42. If yes, what method of preservation did you use?*   a) Salted   b) Sun dried 
   c) Other (specify) " "
43. What preservation material did you use for each method you use as per number 39?
44. Average cost /price for the preservation per Hides?
   a) In average up to 0.50 Birr       c) In average 1 up to 2 Birr
   b) “ 0.55 - 1 “ d) Other (specify) -----------------------

45. Average cost /price for the preservation per Skins?
   a) In average up to 0.50 Birr       c) In average 1 up to 2 Birr
   b) “ 0.55 - 1 “ d) Other (specify) -----------------------

46. Where is your selling market?  a) Wukro  b) Mekelle  c) Addis Ababa
   d) Other (specify) ------

47. What type of transport did you use to reach selling market as per number 46?
   a) Draft animals  b) Trucking  c) Other (specify) -------

48. What is the basis of payment of transport as per number 46?
   a) per unit  ----------   b) per truck  ----------   c) Other (specify) --------------

49. Distance to reach terminal market as per number 46?
   a) Less than 10 km  b) 11 km to 20 km  c) 21 km to 50 km  d) Over 50 km (specify) ----

50. The time required for Hides & Skins to reach terminal market as per number 46?
   a) Up to half a day  b) 1 day  c) 2 days  d) More than 2 days

51. The average trucking cost per Hide up to terminal market as per number 46?
   a) 1-5 Birr  b) 5-10 Birr  c) >10 Birr  d) Other (specify) ---------------

52. The average trucking cost per Skin up to terminal market as per number 46?
   a) 1-5 Birr  b) 5-10 Birr  c) >10 Birr  d) Other (specify) ---------------

53. How long did you take to clear Hides & Skins in the market?
   a) One single market day  b) Within 1 week  c) 2 - 4 weeks  d) Over 4 weeks

54. The fastest time you clear the market?  a) During holidays  b) Wet season  c) Dry season
   d) No difference  e) Other (specify) ------------------------

55. To whom did you sell your raw hides and skins?
   a) Tannery (Name and address) ----------------------------------------
   b) Regional wholesalers (Name and address) ---------------------------------
   c) Other (specify) -------------------------------------------------------

56. On what basis did you sell the raw hides and skins?*  a) In cash  b) On credit
   c) Other (specify) --

57. Why did you sold as per number 55?  a) lesser transport cost
   b) better price offer  c) fair quality scaling/grading  d) other (specify) ------

58. What was the amount and average selling price/unit to your buyers as per number 55?

<table>
<thead>
<tr>
<th>Type</th>
<th>Cattle hide</th>
<th>Sheep skin</th>
<th>Goat skin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>quantity</td>
<td>price(birr)</td>
<td>quantity</td>
</tr>
<tr>
<td>Wet salted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air dried</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

104
59. Is the selling price fair? a) Yes       b) No

60. If no, why?

61. What was the quality graded of your raw hides and skins sold to your buyers as per number 58 in 1999 E.C?

<table>
<thead>
<tr>
<th>Product type</th>
<th>Grade (qnty)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>Cattle hide - wet salted</td>
<td></td>
</tr>
<tr>
<td>- Dry washed</td>
<td></td>
</tr>
<tr>
<td>Sheep skin - Wet salted</td>
<td></td>
</tr>
<tr>
<td>Goat skin - Wet salted</td>
<td></td>
</tr>
</tbody>
</table>

62. How much Hides you lost or remove averagely in 1999 E.C?
   a) 1 to 5 units   b) 6 to 10 units   c) 11 to 15 units   d) >15 units   e) Nothing lost
   f) Other (specify) ----

63. How many Skins you lost or remove averagely in 1999 E.C?
   a) 1 to 5 units   b) 6 to 10 units   c) 11 to 15 units   d) >15 units   e) Nothing lost
   f) Other (specify) ----

64. What were you done with rejected quality Hides & Skins?
   a) Sold with low price   b) Removed them   c) I did not have Rejected quality Hides & Skins   d) Other (specify) ----------------------

65. At what time of the year does Hides & Skins supply, demand and price reach their respective peak?

<table>
<thead>
<tr>
<th>Time</th>
<th>Supply</th>
<th>Demand</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. At festival period/holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. At wet time period other than holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. At dry time period other than holidays</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

66. Did you pay tax for the Hides & Skins you purchase? a) Yes       b) No

67. How frequently did you pay tax? a) Yearly     b) At every market
   c) Other (please specify) --

68. How much tax did you pay as per number 67?
   a) Per year------Birr  b) Per market day ----Birr.  c) Other (please specify) -----Birr

69. Have you ever quit this business? a) Yes       b) No

70. If yes, what were reasons to quit?
   a) Due to price variation I faced loss   b) I could not get working capital   c) No organization lending money   d) All of the above   e) Other (specify)

71. State all problems you faced to run this business?
   a) Due to price variation, there was entry and exit from the business
   b) Unreasonable government tax payment   c) Problems of getting license
   d) Shortage of working capital   e) Low quality, lost and rejected
   f) All of the above   g) No problem faced   h) Other (specify) --

72. Are you obliged to trading license? a) Yes       b) No
73. Have you licensed of trading now?  
   a) Yes  b) No

74. What was the minimum capital requirement to enter into Hides & Skins trading? ----Birr

75. What was your source of capital?  
   a) From my own income  b) From my family/partners  c) Borrowing  
   d) Other (please specify)

76. If you borrow, from where do you borrow?  
   a) Bank  b) Private money lender c) Relatives  
   d) Friends e) Other financial institutions (specify) 

77. How much did you borrow?  
   --------Birr (Please indicate by sources) 

78. How much was the interest rate?  
   ----------------------percent

79. How does the repayment schedule looks like?  

80. What are the major requirements to issue the license? 

81. How does the procedure look like to get the license?  
   a) Complicated b) Easy  
   c) Moderate

82. How much did you pay for Hides & Skins trade license?  
   ------------------Birr

83. How much did you pay for renewal?  
   -------------Birr

84. Are there most important marketing facilities and services in this market? a) Yes  b) No

85. If yes, please circle the available marketing facilities and services.

   Facilities                      Services
   a. Hides and skins store       a. Market information
   b. Marketing area (controlled) b. exit and entry Controlling regulations
   c. Water supply                c. Technical support
   d. Slaughter houses            d. Training
   e. Others (specify) ---------  e. Others (specify) 

86. If no as per number 84, what did you think the reason is?  

87. Is there any government or non government organization ever advised you about Hides & Skins quality and trading? a) Yes  b) No

88. What technical and administrative support do you get from concerned Institutions?  
   a) Training b) Technical follow up c) Quality assurance  
   d) Different incentives e) Experience sharing f) Other (specify) 

89. What major problems did you face in hides and skins marketing?  
   a) Low price c) Informal market e) Un fair competition  
   b) Low demand d) Low quality f) Others (specify) 

   Indicate according to their order of importance.  

90. What is your suggestion to solve each problem accordingly? 

   * Multiple answers are possible
Annex 17. Interview Schedule for Sheba Tannery

Name of person responding __________________________
Position of respondent in the Tannery __________________

Tannery’s Address
Region----------------------------------- Zone--------------------------------------
Woreda---------------------------------- Town --------------------------------

1. How much raw Hides & Skins did you buy in 1999 E.C?

<table>
<thead>
<tr>
<th>Product type</th>
<th>Grade (qty)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>Fresh hide</td>
<td></td>
</tr>
<tr>
<td>Fresh goat skin</td>
<td></td>
</tr>
<tr>
<td>Fresh sheep skin</td>
<td></td>
</tr>
<tr>
<td>Cattle hide - wet salted</td>
<td></td>
</tr>
<tr>
<td>- Air dried (dry washed)</td>
<td></td>
</tr>
<tr>
<td>Wet salted sheep skin</td>
<td></td>
</tr>
<tr>
<td>Wet salted goat skin</td>
<td></td>
</tr>
<tr>
<td>Air dried goat skin</td>
<td></td>
</tr>
</tbody>
</table>

2. Why did not buy more as per No 1?
   a. Financial constraints   b. Some times price was high   c. Some times supply is low
d. Supply are of low quality Hides & Skins   e. Low demand of market
f. Preferred to use from stock   g. Other (specify) ---------------------

3. What was the purchasing price as per number 1?

<table>
<thead>
<tr>
<th>Product type</th>
<th>Grade (price in Birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st</td>
</tr>
<tr>
<td>Fresh goat skin</td>
<td></td>
</tr>
<tr>
<td>Fresh sheep skin</td>
<td></td>
</tr>
<tr>
<td>Cattle hide – fresh/kg</td>
<td></td>
</tr>
<tr>
<td>- wet salted/kg</td>
<td></td>
</tr>
<tr>
<td>- Air dried/kg (dry washed)</td>
<td></td>
</tr>
<tr>
<td>Wet salted sheep skin</td>
<td></td>
</tr>
<tr>
<td>Wet salted goat skin</td>
<td></td>
</tr>
<tr>
<td>Air dried goat skin</td>
<td></td>
</tr>
</tbody>
</table>

4. In what form did you pay to the sellers?
   a. In cash   b. On credit   c. Both   d. Other (specify) ---------------------

5. Who buys raw Hides & Skins for you? *

6. If agents, on what basis did you pay?
   a. On unit Hides & Skins basis   b. On market day basis c. On monthly basis
d. On yearly basis   e. Other (specify) ---------------------

7. Did agents facilitate your marketing process? a. yes   b. No

8. If yes, describe?
9. How much did you pay to the agents as per No 5?
   a. Hide --------- Birr, Sheep skin --------- Birr, Goat skin --------- Birr
   b. Hide --------- Birr, Sheep skin --------- Birr, Goat skin --------- Birr
   c. Hide --------- Birr, Sheep skin --------- Birr, Goat skin --------- Birr
   d. Hide --------- Birr, Sheep skin --------- Birr, Goat skin --------- Birr
   e. Hide --------- Birr, Sheep skin --------- Birr, Goat skin --------- Birr

10. Did agents create any problem in the market? 1. Yes  b. No

11. If yes, state problems, agents created on your business?
   a. We cannot buy with out their participation in the market
   b. They bring low quality hides and skins   c. Other (specify) -----------------------

12. Did you use additional Preservation method to raw Hides & Skins before processing?
   a. Yes    b. No

13. If yes, what method of preservation do you use?*  a. Wet salting  b. Air drying  c. Other -

14. What preservation material did you use for each method you use?

15. What was the cost of preservation for each?  A. hide --- b. sheep skin --- c. goat skin ----


17. If yes, what could be the reasons you think?*
   a. International price variation  b. Price increases on holiday's  c. Price decreases or
   increases seasonally  d. Traders having big capital can increase or decrease the price
   of the market  e. Price setting  f. Other (specify) -----------------------

18. Did you use additional processing to Hides & Skins before taking to terminal market?
   a. Yes    b. No

   c. Crust  d. Leather

20. What processing material did you use for each method you use as per No 26?
   a. Pickling ______________________________
   b. Wet blue ______________________________
   c. Crust ________________________________
   d. Leather ______________________________

21. What was the cost of processing for hide?
   a. Pickling Birr ____________
   b. Wet blue Birr ____________
   c. Crust Birr ________________
   d. Leather Birr ____________

22. What was the cost of processing for sheepskin?
   a. Pickling Birr ____________
   b. Wet blue Birr ____________
   c. Crust Birr ________________
   d. Leather Birr ____________
23. What was the cost of processing for goatskin?
   a. Pickling Birr _____________
   b. Wet blue Birr _____________
   c. Crust Birr __________
   d. Leather Birr __________

24. To whom did you sell your hides and skins in 1999 E.C?
   a. Name, --------------------------- b. Name, ---------------------------
      Address -------------------------- Address --------------------------
      Quantity ------------------------ Quantity ------------------------
   c. Name, --------------------------- d. Name, ---------------------------
      Address -------------------------- Address --------------------------
      Quantity ------------------------ Quantity ------------------------

25. What was the amount and selling price of the hides and skins you sold in 1999 E.C?
   average unit price          Quantity (No)
   a. Cattle hide
      Pickled                          _________     _________
      Wet blue                         _________     _________
      Crust                            _________     _________
      Leather                          _________     _________
   b. Sheep skin
      Pickled                          _________     _________
      Wet blue                         _________     _________
      Crust                            _________     _________
      Leather                          _________     _________
   c. Goat skin
      Pickled                          _________     _________
      Wet blue                         _________     _________
      Crust                            _________     _________
      Leather                          _________     _________


27. If yes, what could be the reasons you think?*   
   a. International price variation   b. Price increases on holiday's   c. Price decreases or
      increases seasonally   d. Traders having big capital can increase or decrease the price
      of the market   e. Price setting   f. Other (specify) -------------------------

28. Who set the price of processed hides and skins in the market?
   a. Ourselves                                         c. Set by demand and supply (negotiations)
   b. Buyers (indicate) ---------------------- d. Sellers                           e. Other (specify) ----------------------

29. Why, how and when as per number 28?
   a. Ourselves ---------------------- c. Buyers (specify) ----------------------
   b. Set by demand and supply (negotiations) ---------------------- d. Sellers ----------------------
   e. Other (specify) ----------------------
30. What was the impact on the market as per number 28?
31. Where is your terminal market?  a. Addis Ababa  b. Export  c. Other (specify)  
32. How did you transport hides and skins to reach as per number 24?  
   a. truck  b. Others (specify)  
33. How much did you pay as per number 32?  
   a. per unit  b. per truck  c. Other (specify)  
34. Did you face any transportation problem in 1999 E.C?  a. yes  b. no  
35. If yes, what was the problem you faced?  
36. Are there any informal marketing groups in the marketing system?  a. yes  b. no  
37. If yes, what was their impact on the market?  
38. What quality parameters did you use to purchase raw hides from your suppliers?  
   a. Weight  c. Substance  e. Others (specify)  
   b. Shape/pattern  d. Source (Origin of breed)  
39. What quality parameters did you use to purchase raw skins from your suppliers?  
   a. Weight  c. Substance  e. Others (specify)  
   b. Shape/pattern  d. Source (Origin of breed)  
40. How do you measure the parameters?  
41. What is their reaction to your parameters?  a. positive  b. negative  
42. If negative, why?  
43. What major defects did you observe in the raw hides you purchased?*  
   a. Brand  b. Flay cut  c. Poor pattern  d. Fallen hide  
   e. Putrefaction  f. Dirtiness  g. Improper bleeding  
   h. disease and Parasite  i. Other (specify)  
   Put in their order of occurrence  
44. What major defects did you observe in the raw skins you purchased?*  
   a. Brand  b. Flay cut  c. Poor pattern  d. Fallen skin  
   e. Putrefaction  f. Dirtiness  g. Improper bleeding  
   h. disease and Parasite  i. Other (specify)  
   Put in their order of occurrence  
45. What do you think the causes of the defects observed?  
46. What were you doing with low quality/ rejected Hides & Skins?  
   a. Buy with low price  b. did not accept  c. No rejected quality Hides & Skins  
   d. Other (specify)  
47. Did you know the market price before you sold your Hides and Skins?  a. Yes  b. No  
48. If yes, how did you get information on price of Hides and Skins in the market?  
   a. Other tanneries  b. Hides and Skins trader  c. our institutional observation  
   d. Radio  e. Telephone  f. Other (specify)  
49. How did you qualify the reliability of the information?  a. high  b. moderate  c. low  
50. How did you qualify the timeliness of the information?  a. timely  b. outdated
51. How did you qualify the adequacy of the information?  a. adequate b. moderate  
c. inadequate  
52. Are there most important marketing facilities and services in this market? a. Yes  b. No  
53. If yes, please circle the available marketing facilities and services.  

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Hides and skins store</td>
<td>a. Market information</td>
</tr>
<tr>
<td>b. Marketing area (controlled)</td>
<td>b. exit and entry Controlling regulations</td>
</tr>
<tr>
<td>c. Water supply</td>
<td>c. Technical support/advice</td>
</tr>
<tr>
<td>d. Butcheries/Slaughter houses</td>
<td>d. Training</td>
</tr>
<tr>
<td>e. Others (specify)</td>
<td>e. Others (specify) -------------------------</td>
</tr>
</tbody>
</table>

54. If no, what did you think the reason?  

55. Is there any government or non government organization advised you about Hides & Skins quality and trading?   a. Yes   b. No  
56. What technical and administrative support did you get from concerned Institutions?  
a. Training  
b. Technical follow up  
c. Quality assurance  
d. Different incentives  
e. Experience sharing  
f. Other (specify)  
57. What major problems did you face in hides and skins marketing?  
a. Low price  
b. Low demand  
c. Informal market  
d. Low quality  
e. Traditional tanning  
f. Others (specify)  
Indicate according to their order of importance.  
58. What is your suggestion to solve each problem you faced in the marketing system accordingly?  

* Multiple answers are possible  

Annex 18. Check Lists for Government Organizations  
A:  Tigrai Region Bureau of Agriculture and Rural Development  
Name of person responding ____________________________________  
Position of respondent in the organization ____________________________  
1. What is the latest agricultural development regional structure?  
2. What are the frameworks of the bureau to structure itself with weredas?  
3. How much hides and skins supplied to the market yearly? (5 years data)  
4. How many hides and skins traders in the region?  
   a) Rural collectors _________  b) Wholesalers _________  c) Others -------  
5. Is there any study of your bureau conducted about the region Hides & Skins market problems? Which needs policy issues?  
6. Does it have a legal criterion to enter in Hides & Skins trading?   a. Yes   b. No  
7. If yes, what is the criterion, please specify?  
8. Does your organization register Hides & Skins Traders?   a) Yes   b) No  
9. What are the major problems of Hides & Skins marketing identified in the region?  
1. How many Hides & Skins traders registered in the Wereda at present (1999 E.C)?
   a) Rural collectors ------------ b) Wholesalers ------------
2. Did you say really farmers are benefiting from the existing Hides & Skins markets?
   State your reasons for yes or no answers?
3. Is there any study of your office conducted about the wereda Hides & Skins market
   problems? Which needs policy issues?
4. Does your organization certify Hides & Skins Traders? a) Yes b) No
5. What service did you provide to Hides & Skins markets in the wereda?
6. What extension service did you provide to farmers, service givers and traders
   regarding hides and skins?
7. Mention the main Hides & Skins markets according their standards?
   a) Village market ___ b) Town /Wereda market c) Other (specify)___
8. How much hides supplied to the market in 1999E.C?
   a) Local/village market ___ b) Wereda market ___ c) Terminal market _____
9. What are the major problems of Hides & Skins marketing identified in the wereda?
10. Mention the areas usually supplying Hides & Skins to this market?
11. State the importance or impact of commission agents in the transactions of the
    market?
12. Are there local/traditional tanners in the wereda? a) Yes b) No
13. If yes, how many?
14. If no, state the actions you are taking to eliminate the unnecessary market participants
    such as local tanners (traditional), etc?
15. What are the major quality defects of hides and skins, identified in the wereda?
16. What are the causes of the defects?
17. Are there any slaughter house/butcher in the wereda? a) yes b) No
18. If yes, how many?
19. If yes, what is its impact on quality of hides and skins?
20. If no, why?
21. Either any entry or exit regulatory system of the Hides & Skins marketing? a) yes
    b) no
22. If yes, please indicate?
C: Atsbi Wemberta Office of Trade, Industry and Transport

Name of person responding ________________________________
Position of respondent in the organization ________________________________

1. Does it have a legal criterion to enter in Hides & Skins trading? a. Yes b. No
2. If yes, what are the criteria please specify?
   a) Rural collectors ------------
   b) Wholesalers ---------------
3. When is the time for license renewed?
   a) Rural collectors ----------- b) Wholesalers -----------
4. How much payment for renewal?
   a) Rural collectors ----------- b) Wholesalers -----------
5. What are the actions to be taken if an individual will not renew his license?
6. Are there traders returned their license in 1999 E.C? a) Yes b) No
7. If yes, why?
8. Who pay tax in the market? A) trader b) producer c) Other --------------
9. How was the tax payment system of the traders?
10. What are the major problems of Hides & Skins marketing identified in the wreda?
11. Either any entry or exit regulatory system of the Hides & Skins marketing? a) yes b) no
12. If yes, please indicate?
ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

COLLEGE OF DEVELOPMENT STUDIES

INSTITUTE OF REGIONAL AND LOCAL DEVELOPMENT STUDIES

DECLARATION

The undersigned declare that this thesis is my original work and has not been presented for a degree in any other university, and that all sources of material used for the thesis been dully acknowledgment.

______________________________________________

Berhe Arkebe Negusse

This Thesis has been submitted for examination with my approval as a university advisor.

______________________________________________

Berhanu Gebremedhin (PhD)

June, 2009