GOOD PRACTICES & LESSONS IN THE VALUE CHAIN OF HIDES AND SKINS IN IGAD REGION
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### ABBREVIATIONS AND ACRONYMS

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<th>No.</th>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>1.</td>
<td>ADP</td>
<td>Agricultural Domestic Production</td>
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<tr>
<td>2.</td>
<td>COMESA</td>
<td>Common Market for Eastern and Southern Africa</td>
</tr>
<tr>
<td>3.</td>
<td>EAC</td>
<td>East African Community</td>
</tr>
<tr>
<td>4.</td>
<td>EDF</td>
<td>European Development Fund</td>
</tr>
<tr>
<td>5.</td>
<td>FAO UN</td>
<td>Food and Agriculture Organization of the United Nations</td>
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<td>6.</td>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>7.</td>
<td>GORD</td>
<td>Government of the Republic of Djibouti</td>
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<td>8.</td>
<td>ICPALD</td>
<td>IGAD Center for Pastoral Area and Livestock Development</td>
</tr>
<tr>
<td>9.</td>
<td>IFPRI/FAO/ILRI</td>
<td>International Food Policy Research Institute/</td>
</tr>
<tr>
<td>10.</td>
<td>IGAD</td>
<td>Intergovernmental Authority on Development</td>
</tr>
<tr>
<td>11.</td>
<td>IGADD</td>
<td>Intergovernmental Authority on Drought and Development</td>
</tr>
<tr>
<td>12.</td>
<td>IOC</td>
<td>Indian Ocean Commission</td>
</tr>
<tr>
<td>13.</td>
<td>MAEM</td>
<td>Ministry of Agriculture, Livestock and Sea (<em>Minisere de l’ Agriculture, de l’ Elevage et de l’</em>)</td>
</tr>
<tr>
<td>14.</td>
<td>IRCC</td>
<td>Inter-Regional Coordinating Committee</td>
</tr>
<tr>
<td>15.</td>
<td>LSP</td>
<td>Livestock Strategic Plan</td>
</tr>
<tr>
<td>16.</td>
<td>NDGP</td>
<td>National Gross Product</td>
</tr>
<tr>
<td>17.</td>
<td>PPP</td>
<td>Private and Public Partnership</td>
</tr>
<tr>
<td>18.</td>
<td>RHS</td>
<td>Raw Hides and Skins</td>
</tr>
<tr>
<td>19.</td>
<td>RISP</td>
<td>Regional Integration Support Programme</td>
</tr>
<tr>
<td>20.</td>
<td>SPSS</td>
<td>Statistical Package for Social Science</td>
</tr>
<tr>
<td>21.</td>
<td>TLU</td>
<td>Tropical Livestock Units</td>
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</table>
The livestock sector in the region has substantial potential to contribute to food security, general economic growth and integration within the Greater Horn of Africa. The hides and skins and leather industry is also one of the key sub-sectors with a high potential and positive impact on rural development, creation of wealth, employment and generation of hard currency. The contribution of the hides and skins value chain towards achieving economic growth is high and the only way to such success is through embracing value addition initiatives.

Despite the large livestock population in the region, value addition for hides and skins is relatively undeveloped. Most of the producers preserve hides and skins using sun drying, suspension drying etc. which lead to inferior quality products and most processors do partial processing and limited benefit from value addition. This report on good practices and lessons was made possible with the hard work and support of the consultant; Dr. Tadesse Hailemariam, technical support and guidance of Dr. Ameha Sebsibe and ICPALD team and inputs of public and private sectors of IGAD member states and regional partners during the regional validation workshop.

We are grateful to European Union (EU) for the financial support through RISP II. ICPALD believes this report will help to upscale the good practices and lessons and enhance the trade of the sub-sector in the region.

Dr. S.J. Muchina Munyua
Ag. Director, ICPALD
This consultancy report on Assessment and Sharing of Good practices in the Value Chain of Hides and Skins in IGAD region was carried out in three phases. Library work of literature review, fieldwork in the six IGAD countries with the exception of Somalia which took place from 10th of October 2013 to 5th of November 2013 and actual writing and validation work are the three phases. Questionnaires, interviews and observation were tools used to collect data.

The data revealed that slaughterhouses encompass slaughter slabs; municipal slaughterhouses and mechanized, modern abattoirs. Large majority (80%) of them indicated that they slaughter both cattle and shoats (sheep and goats) at a rate of more than 25 animals per day from each category. Furthermore slaughter practices vary according to local culture, customs, religious practices and available facilities. It is obvious that these differences can have a bearings on the quality of hides and skins produced. In most modern slaughter houses animals are first made unconscious and then cut through the jugular veins. Case flaying practices and use of compressed air to detach the skin in sheep and goats, and mechanical dehiders for cattle reduce flaying knives related hides and skins defects.

Respondents from Ethiopian (abattoirs and butcher workers) identified the use of appropriate flaying knives, flaying by mechanical dehider and periodical skill enhancing trainings as their good practices to be shared to the sub-Region. Kenyan abattoir workers, in similar way, mentioned case flaying of sheep, use of cattle dehider, keeping abattoirs premises clean and quick curing of hides and skins after removal from the animal.

Regarding preservation method in use, there are different ways of preservation of hides and skin, the most common ones are air drying and wet salting. Hides and skins destined for market are generally preserved either by air-drying or wet salting unless otherwise tanneries are located at close proximity for fresh Hides/Skins supply.

Respondents from Ministries of Agriculture and other concerned ministries in Ethiopia, Kenya Uganda and Sudan indicated that there is established quality grades for hides and skins in their respective countries but quality based pricing system for hides and skins is not institutionalized so far. Other IGAD member countries (Djibouti, South Sudan and Somali) don’t have any national quality standards grades. In addition, the total number of citation for defects of raw hides and skins were respectively 236 and 201. Flay cut is the most frequently cited defect both in cattle and sheep and goats indicating the extent of slaughtering related problems across the IGAD member States.

Regarding hides and market channels, With Exceptions of Djibouti and Uganda, respondents from all IGAD member States also indicated the existence of unlicensed hides and skins traders that constitute informal marketing group and their degree of influence on the market is considered as medium to high. This shows lack of appropriate and effective institutional framework to regulate the system. The main constraints adversely affecting the production and marketing of hides and skins are indicated as low demand, informal market, low price, low quality, and unfair competition, on the other hand, the main shareable good practices and lessons learnt are very quick buying and selling process between collectors and wholesales, public sector regulating the hides and skins trade related activities, experience exchange between traders, extension service that supports the sector and market oriented training.
The major shareable good practices include value addition to the level of leather products, periodical skill enhancement training offered, recovering and reutilizing. On institutional arrangements IGAD member States, Ministries Quality and Standards Authority, Investment Agency, etc were/are few of the public institutions that are responsible for one or more of the leather sector activities that encompass extension activities, raw hides and skin marketing coordination and regulation, issuance of trade license, supporting the activities of value adding, formulation, approval and issuance of standards, etc. Djibouti and Ethiopia judged the linkages between the institutions not effective.

The contribution the sectors make to national economy was seen as satisfactory by respondents from Ethiopia (70%), Kenya (80%) and Uganda (80%) while the others claimed it as poor or unacceptable.

The IGAD Sub-Region, being predominantly agricultural economy and a livestock rich zone, the leather sector occupies a place of prominence in the sub-Region’s economy in view of its massive potential for employment, growth and exports. However, this comparative advantage is not yet turned into a competitive advantage in the regional as well as global markets and the full potential of hides and skins as a product is not realized in almost all countries of the sub-Region because of several reasons.

The market channels and the number of middlemen involved and the system of trading were identified for setting up of an effective institutional framework that regulates the system and encourage value adding activities and increase opportunities for marketing and trade. Finally, it can be said that despite the constraints that exist today, the possibilities are quite attractive and the IGAD sub Region needs to organize its production base to take advantage of these opportunities. Accordingly, the following few recommendations are forwarded for possible consideration by IGAD member States.

a) A clear policy and strategy for the development of leather sector should be developed by member State that have not done so far.

b) Strong extension service that caters for both proper animal husbandry and raw material management should be in place.

c) In the short and medium term, to make maximum use of low quality hides and skins, use of technologies that converts the poor quality materials to good quality leather products can help value addition to grow.

d) The improvement in hides and skins at animal husbandry stage and its sustainability will rely, primarily, on the benefits it brings to the producer. Thus, in live animal marketing, due consideration of the condition of the hide or skins should form the basis of the agreed price so as to benefit the livestock owners at the very onset of the animal sale.

e) Institutionalizing the management of the leather sector will provide a sustainable approach to growth of the sector. In this respect, the Kenyan and Ethiopian (the Kenyan Leather Development Council (KLDC) and the Ethiopian Leather Industry Development Institute (LIDI)) are good examples to be shared with the rest of IGAD member States.
CHAPTER ONE

INTRODUCTION

1. BACKGROUND OF THE STUDY

1.1 IGAD Regional Context

The hides and skins and leather industry in the region is one of the key agricultural sub-sectors with a high potential towards commodity development that addresses pertinent issues of socio-economic importance and positively impact on rural development, creation of wealth and employment. The contribution of the hides and skins value chain towards achieving economic growth is high and the only way to such success is through embracing value addition initiatives.

Value addition in agricultural commodities can be defined as improving the natural and conventional form, quality and appeal of a product subsequently increasing the consumer valuation beginning from farm level to marketing the finished products.

The potential for value addition within the agricultural sector is enormous for most of the commodities, and so would be the gains from value addition. However, despite the large livestock population in the region, value addition for hides and skins is relatively undeveloped. Most of the producers preserve hides and skins using sun drying, suspension drying etc. which lead to inferior quality products and most processors do partial processing and limited benefit from value addition.

1.2 General Objectives of the Study

The study attempts to identify and find ways of sharing the good practices in the value chain of hides and skins among Member States of the Intergovernmental Authority of Development (IGAD). In lieu of these:

- Assessment and documentation of good practices in hides and skins based on evidences in the IGAD Member States.
- Validation and sharing of the good practices identified in the value chain of the hides and skins, including policy interventions are the general objectives of this study.

1.3 Specific Objectives of the Study

The specific objectives of the study are reiterated as follows:

- Identify and document the present condition of hides and skins value chain in each member states including major constraints and stakeholders along the value chain.
- Asses and review the good practices and lessons grasped from the sub-sector such as animal husbandry, leather processing and value addition,
preservation, marketing, capacity building, policy and legal support among Private and Public Partnership (PPP).

- Make recommendations for major actors at country and regional levels.
- Authenticate and share the major findings through a validation workshop with full participation of stakeholders.

1.4 Background of the Study Area

The study area contains the seven member countries of the Intergovernmental Authority on Development (IGAD). IGAD is a regional organization of East Africa created in 1996 to supersede the Intergovernmental Authority on Drought and Development (IGADD) of the same region founded a decade earlier in 1986. Djibouti, Ethiopia, Kenya, Somalia, South Sudan, Sudan and Uganda are the seven members of this regional organization. (See Map below)

Map 1: Political and Administrative Map of IGAD Member States

IGAD was the result of creating a means to combat at best and at least mitigate the effects of the like of the recurring severe drought that took place for decade between 1974 and 1984.

IGAD with a total area of 5,092,375 square kilometers and a population of 217 million with an average population growth rate of 2.5% per annum assists and complements the effort of its Member States to achieve economic cooperation and integration as one of its missions as well as to achieve.
Food security and environmental protection

Promotion and maintenance of peace and security and humanitarian affairs and economic cooperation and integration.

In addition to these, IGAD strives to promote joint development and gradually harmonize macroeconomic policies and programmes in social, technical and scientific field. The vision of IGAD is to become the premier regional organization for achieving peace, prosperity and regional integration in the region.

IGAD, the East African Community (EAC), the Indian Ocean Commission (IOC), the Common Market for Eastern and Southern Africa (COMESA) and other regional organization strive to attain regional and economic integration through common issues such as trade, investment and macro-economic policies.

This effort to join-up in the programming and implementation of regional programmes and projects through the Inter-Regional Coordinating Committee (IRCC) under the European Development Fund (EDF) was being carried out as it has been decided by the four regional organizations since 2002. Furthermore, development and achievements of the Regional Integration Support Programme (RISP) supports the successful execution of IGAD’s objectives.

As regional institution, the IGAD center for Pastoral Area and Livestock Development (ICPALD) is being established to promote and facilitate sustainable and equitable dry lands and livestock development in IGAD region.

1.5 Limitation of the Study and Constraints

Different constraints encountered throughout the field-work phase could had limited the outcome of the paper. However, diligence of the Study Team has averted the problem.

The study basses its findings on field work carried in all Member States of IGAD except the Republic of Somalia for varied reasons beyond the control of the Study Team. Findings and ensuing suggestions about hides and skins for Republic of Somalia are based on secondary sources derived from earlier works.

However, since the operation of economic activities in hides and skins have very little variation from country to country of the region, it is reasonable to assume homogeneity of findings to other member countries, including Somalia.

The Study Team was confronted with time constraints. It is utterly impossible to exhaustively dig out pertinent information and data from all countries, in particular large countries like The Sudan and Ethiopia in addition to their insurmountable chain of bureaucratic shackles within only two days. Absence of efficient means of terrestrial transportation within each member countries of IGAD was another limiting hurdle that the Study Team had to cope with.
Unexpected language barrier in non-Anglo-phone countries was another limitation that forced members of Study Team seek the help of interpreters. Transportation facility for inland travel was a limitation factor that delayed the work of the team. Questionnaires which were sent to respondent by ICPALD were not filled out as planned and the team leader had to travel to these individuals and wait till they are filled out.

1.6 Study (Research) Question

The Study Team in accordance to the ToR has tried to satisfactorily answer the following pertinent research/study questions.

• What are the good practices of hides and skins in each Member States of IGAD?

• How can we disseminate the best practices among other IGAD members?

1.7 Schedule of the Consultancy Work

The Study Team had field-works in all IGAD countries except in Somalia. The actual commencement of assessment and sharing of good practices study is summarized as follows:

• Literature Review: 20\textsuperscript{th} to 30\textsuperscript{th} September
• Field Visits a) 10\textsuperscript{th} to 25\textsuperscript{th} October, 2013
  Ethiopia
  Kenya
  Uganda
  Djibouti
  South Sudan

  b) 4\textsuperscript{th} and 5\textsuperscript{th} November, 2013
  The Sudan

• Synthesis and Report Writing 6\textsuperscript{th} November 2013 to 5\textsuperscript{th} December 2013
• Validation Workshop 15\textsuperscript{th} to 16\textsuperscript{th} December 2013
• Final Report preparation and submission-to be set
2. PRINCIPLES OF ASSESSMENT

The assessment shall focus on the following

- Presentation of preliminary results on the basis of the five criterions and evaluation questions.
- Computation or analysis of data collected is performed using simple and basic Statistical Package for Social Science (SPSS) principles.

Thus the assessment of the good practices is based on the following criterion:

- Relevance
- Efficiency
- Effectiveness
- Impact
- Sustainability

2.1 Proposed Tools of Data Collection

Two types of data collection tools, interviews and questionnaires, are used throughout the field-work mission. The following six stakeholders were identified and relevant questionnaires and guidelines for interview were prepared. (See Annex)

- Butchers and Abattoirs
- Local collectors of hides and skins
- Wholesalers of hides and skins
- Leather Processors (Tanners)
- Representatives of government organization
- Training/ Research Institutions and Associations

At times the Study Team, while in field-work, had kept a vigilant observation hoping to find any information that may have rendered better light to the study.

2.2 Sample Size and Justification of Sample Size Ratio

The total population size of the above mentioned six stakeholders were obtained from pertinent government offices and by field observation in all IGAD Member States except in Republic of Somalia. The average population size was found to be between 10 and 15 tanners (except in Ethiopia which is 32), less than 20 for wholesalers, about an average of 35 recognized local collectors, between 3 to 5 pertinent government offices, etc.

Because the population size of the target study was small, a sample size ratio of 20 – 25 percent was taken. Again, because of time constraints interviews were limited to very few stakeholders.
CHAPTER THREE
LITERATURE REVIEW

3. SOCIAL AND ECONOMIC IMPORTANCE OF THE SECTOR

3.1 Importance of Livestock in General

The importance of the livestock sector in the IGAD region is partly explained by the fact that the major proportion of the land area in the region is classified as arid, with highly variable rainfall making it unsuitable for crop production. This leaves livestock production as the only viable form of land use.

Pasture-based livestock production is the dominant land use in the arid zone and in the lower rainfall areas of the semi-arid zone, involving seasonal or annual mobility of livestock in search of pasture over a large area of rangeland. However, it is worth noting that it is not only the arid and the semi-arid zone that is engaged in the raising of livestock. A favorable climate, relatively moderate disease and pest problems, and high production potential make the highland zone a favorable environment for livestock keeping.

Pastoral production systems can be found at all scales of operation, producing milk, meat, hides and skins and serving as means of transport. Furthermore, livestock serve as a store of wealth, to meet social obligations and to insure against disaster. Livestock products contribute to subsistence means of income, directly via milk and meat for home consumption and indirectly via sales to generate cash or to barter for cereals and other crops.¹

Hides and skins are co-products² of the ruminant livestock which form an important proportion of the livelihood of the majority of people in IGAD region. However, due to widespread livestock health constraints, traditional husbandry practices, sub-optimal nutrition and other problems, the return from the subsector often remained marginal. (Tadesse, April 2005). The social and economic importance of hides and skins within the IGAD region should be viewed in the context of general agricultural industrialization which at present is the dominant direction of economic growth.

The FAO (2012 Statistical Compendium) data shows that livestock production is growing rapidly. This is interpreted to be the result of the increasing demand for animal products. Since 1960, global meat production has more than trebled, milk production has nearly doubled and egg production has increased by nearly four times. This is attributed partly to the rise in population, as well as to the increase in affluence in many countries. A joint IFPRI/FAO/ILRI study³ suggested that global production and consumption of meat will continue to

¹ http://www.fao.org/docrep/600/y5143e/y5143elkhtm
² A redefinition prompted by emerging livestock some of which are particularly kept for the value of their hides/skins
grow from 233 million metric tons (Mt) in the year 2000 to 300 million Mt in 2020, as will that of milk, from 568 to 700 million Mt over the same period. Egg production will also increase further by 30%. This tremendous growth will create an opportunity for IGAD region to take the lion-share of this growth.

In the last fifteen years, the livestock sector has grown at an annual rate of almost 4 percent in the IGAD region, and currently accounts for over 40 percent of the agricultural value added and for about 11 percent of the gross domestic product (GDP) of the region. In spite of this growth, in the Horn of Africa over 61 percent of the poor keep some livestock, as a source of food, cash income, manure, draught power and hauling services, savings, insurance and social status (World Bank, 2010; Thornton et al., 2002). This suggests that the development of the sector has been to date all but inclusive, or unable to improve household livelihoods on a broad scale.

Table 1: Number of Bovine, Sheep and Goats Growth Rate (2003 – 2012)

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<tbody>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>2012</td>
<td>%</td>
<td>2003</td>
<td>2012</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>IGAD</td>
<td>103.2</td>
<td>114.9</td>
<td>11.55</td>
<td>88.2</td>
<td>108.6</td>
<td>23.13</td>
</tr>
<tr>
<td>2</td>
<td>Africa</td>
<td>244.1</td>
<td>284.6</td>
<td>16.59</td>
<td>261.8</td>
<td>316.2</td>
<td>20.78</td>
</tr>
<tr>
<td>3</td>
<td>World</td>
<td>1,510.4</td>
<td>1,632.9</td>
<td>8.11</td>
<td>1,037.7</td>
<td>1,088.9</td>
<td>4.93</td>
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Source: Compiled and Adopted from FAO 2012 Statistical Compendium

From the above Table 1, the average growth rate of bovine animals during the ten years period (2003 – 2012) for the whole of IGAD region is 11.55, 23.13 and 15.23 percents for bovine, sheep and goats respectively. This accounts for annual growth rate of nearly 1.2 percent for bovine, 2.3 percent of the sheep population and 1.5 of goats.

The world’s bovine hides, sheep and goat skins increased by nearly 9, 3 and 2.6 percent per annum respectively.(Table 2)

Table 2: Growth Rate for Bovine Hides, Sheep and Goats Skins for 2003 - 2012

<table>
<thead>
<tr>
<th>No.</th>
<th>Region</th>
<th>Bovine Hides</th>
<th></th>
<th>Sheep Skins</th>
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<th>Goat Skins</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>2012</td>
<td>%</td>
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<td>%</td>
</tr>
<tr>
<td>1</td>
<td>IGAD</td>
<td>10.7</td>
<td>16.6</td>
<td>55.14</td>
<td>32.1</td>
<td>41.1</td>
<td>28.04</td>
</tr>
<tr>
<td>2</td>
<td>Africa</td>
<td>32.3</td>
<td>41.9</td>
<td>29.72</td>
<td>94.0</td>
<td>115.2</td>
<td>22.04</td>
</tr>
<tr>
<td>3</td>
<td>World</td>
<td>325.9</td>
<td>355.2</td>
<td>8.99</td>
<td>515.4</td>
<td>531.5</td>
<td>3.12</td>
</tr>
</tbody>
</table>

It is important to take note of the following extraction from Table 3.

- According to the Food and Agricultural Organization of the United Nations (FAO, 2012), the global population of bovine, sheep and goats is estimated at over 1.6 billion, over 1 billion and 914 million respectively, with the world off-take rates of 21.75 per cent for bovine, 48.81 per cent for sheep and 52.06 per cent for goats. (Table 3).

- Africa’s livestock population represents over 17.43, 29.04 and 35.05 percent of the global cattle, sheep and goats population respectively and with the estimate of nearly 1.6 billion cattle heads, 1.08 billion sheep and 914 million goats (Table 3). Despite the huge livestock population, however, the continent is considered to account for less than 12 per cent world output of hides. Sheep and goat skins productions stand better at nearly 21.7 percent and 24.5 percent of the world hides and skins production.

- Although there is a potential for the industry to contribute to economic growth of the individual countries, problems related to quality remain as major constraints. The most important factors determining output of raw hides and skins are the poor breed of the animal population, the low off-take ratio and the small weight per hide and skin and quality deterioration in general.

Table 4: Distribution of Cattle and Shoats per Head 2011 in IGAD Region

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Population ('000)</th>
<th>Number of Bovine ('000)</th>
<th>Average Bovine/head</th>
<th>Number of sheep ('000)</th>
<th>Average Sheep head</th>
<th>Number of goats ('000)</th>
<th>Average Goats head</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Djibouti</td>
<td>792.4</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>2</td>
<td>Ethiopia</td>
<td>91,196</td>
<td>52,000</td>
<td>0.57</td>
<td>27,096</td>
<td>0.30</td>
<td>22,904</td>
<td>0.25</td>
</tr>
<tr>
<td>3</td>
<td>Kenya</td>
<td>44,038</td>
<td>13,000</td>
<td>0.30</td>
<td>9,872</td>
<td>0.22</td>
<td>13,828</td>
<td>0.31</td>
</tr>
<tr>
<td>4</td>
<td>Somalia</td>
<td>10,000</td>
<td>5,333</td>
<td>0.53</td>
<td>13,149</td>
<td>1.31</td>
<td>12,747</td>
<td>1.27</td>
</tr>
<tr>
<td>5</td>
<td>Sudan</td>
<td>30,894</td>
<td>41,850</td>
<td>1.35</td>
<td>52,194</td>
<td>1.69</td>
<td>43,806</td>
<td>1.42</td>
</tr>
<tr>
<td>6</td>
<td>South Sudan</td>
<td>8,260</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>35,873</td>
<td>7,600</td>
<td>0.21</td>
<td>1,886</td>
<td>0.53</td>
<td>9,197</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Total/Average: 221,053.4 119,783 0.54 104,197 0.47 102,806 0.47

Source: Adopted and compiled from FAO, 2012, World Statistical Compendium
Sudan has the largest bovine per-head with 1.35 followed by Ethiopia with an average per-head possession of 0.57 bovine. The average per-head ownership for the region is 0.54. According to Table 4, the average per-head ownership in the IGAD region for both sheep and goats is 0.47. Sudanese per-head holding by far outshines this average with 1.69 sheep per-head and 1.42 goat ownership for each Sudanese.\(^4\)

Although hides and skins output from developing countries is projected to increase appreciably vis-à-vis developed countries, as in the case in some member countries of IGAD, a number of problems that have plagued the sector in many of those countries need to be addressed in order to enable them to realize their full potential.

Such problems include (but are not limited to) poor quality of hides and skins; poor and deteriorating infrastructure of roads, weak power supply and telecommunication that affect all the components of the supply chain; inadequate levels of technological development; low labor productivity, poor management, and inefficient training services.

Fortunately, many stakeholders realize the need to address these issues as a result of a number of initiatives undertaken in that regard. Thus, with this trend, i.e. growth of hides and skins for developing countries (IGAD included in forefront) and a decline for developed countries, there is a huge economic benefit to be gained.

### 3.2 Socio-economic Importance of Livestock in each IGAD Countries

#### 3.2.1 Kenya

The livestock sector contributes about 12% of Kenya’s Gross Domestic Product (GDP), 40% to the agricultural GDP and employs 50% of agricultural labor force. About 60% of Kenya’s livestock herd is found in the arid and semi-arid lands (ASALs), which consist about 80% of the country. It is estimated that 10 million Kenyans living in the ASALs derive their livelihood largely from livestock.\(^5\) Livestock play important roles in Kenya’s socio-economic development and contribute towards household food and nutritional security among pastoralists and vulnerable members of the society such as women and children. It is also used as a medium for social exchange in the payment of bride price, fines and gifts to strengthen kinship ties. The livestock sector has the potential to provide adequate supply of all animal products and by-products to meet domestic needs and generate surplus for export. The country has about 13 million heads of cattle, 8 million sheep and 10 million goats.\(^6\)

#### 3.2.2 Ethiopia

Ethiopia is the second populous country in Africa. The ruminant livestock

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\(^4\) Compiled and adopted by the Study Team using FAO, 2012 *World Statistical Compendium*


population in the country is estimated at 91.2 million according to the recent national census (CSA, 2004). The ruminant livestock, apart from being a source of wealth to the farming communities, also provides draught power, milk, fiber, fuel and organic fertilizer. By-products such as hides and skins have long been regarded as the second, next only to coffee, largest foreign exchange earnings for the country. However, in recent years, this rank has been relegated to a fifth level, because of rejection and downgrading inflicted on hides and skins defect due to infestation by external parasites.7

The Ethiopian Leather Industry Development Institute 2012 released information shows that all Ethiopian tanneries receive on average 38% of the cattle hides, 92% goats skins and 86% of sheep skins produced in the country.

3.2.3 Sudan

The Sudan which is one of the largest countries of Africa in terms of the area it covers is rich with livestock population of about 39 million heads, 42 million sheep and 40 million goats8. The following table shows another and a different estimate of hides and skins production for 2003.

Table 5: Hides and Skins Production Estimate in 2003 in Sudan (X1, 000)

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Bovine</th>
<th>Sheep</th>
<th>Goats</th>
<th>Camel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of Animal Resource</td>
<td>3,510</td>
<td>13,497</td>
<td>13,483</td>
<td>200</td>
</tr>
<tr>
<td>Leather Chamber(Tanneries)</td>
<td>1,800</td>
<td>8,000</td>
<td>7,000</td>
<td>2,000</td>
</tr>
<tr>
<td>F.A.O.</td>
<td>2,700</td>
<td>9,100</td>
<td>9,000</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Source: Country Paper-Sudan, Proceedings of a Regional Workshop, National Animal Health Research Center (NAHRC) Agricultural Research Organization (EARO), Awad Elkarim Abdella Mohamed, April 18-20,2005

Lack of accurate information, as shown in Table 7, on livestock population, hides and skins production, damages, defects and losses, lack of trained manpower especially in remote sites and very high percentage of unsupervised slaughter carried out in backyards (50%) are some of the predominant constraints that hamper full utilization of the benefits of the sector (Mohammed,2005). This still is apparent in many instances. As evidenced in Table 4, Sudan leads the rest of IGAD Region as far as per-head possession of ruminant livestock is considered.

7 Country Paper-Ethiopia, Proceedings of a Regional Workshop, National Animal Health Research Center (NAHRC) Agricultural Research Organization (EARO), Kassa Bayou (PhD), April 18-20,2005
8 Country Paper-Sudan, Proceedings of a Regional Workshop, National Animal Health Research Center (NAHRC) Agricultural Research Organization (EARO), Awad Elkarim Abdella Mohamed, April 18-20,2005
3.2.4 Somali

Livestock sub-sector in Somalia denotes the basis of the national economy, and not only contributes the livelihood of the nomadic population but also supplements the food requirement of the nation’s nutrition as a whole. Moreover, livestock export contributes nearly 80% of the foreign exchange. In addition to meet many other important by-product such as hides and skins, offal and bones are obtained. These by-products are used in various ways for making different products.9

3.2.5 Djibouti

The Republic of Djibouti is located on the Horn of African bordering Ethiopia on the west, Eritrea on the north and Somalia on the south. The animal slaughter statistics10 in Djibouti is 59,450 heads for shoats, 22,033 heads for cattle and 20 for camels.

In 1990, using financial assistance from German Cooperation, GTZ, a modern drying facility with a maximum daily capacity of 4,000 skins and 1,500 hides was built. Prior to that, drying of hides and skins was carried out in open air and without any shelter. The exposure to the sun and the prevailing excessive heat had a negative impact on the quality of hides and skins.

After the establishment of the above-mentioned drying facility, however, hides and skins are put pallets, flesh side up. Each hide/skin is separated from the others with salts for two weeks; the amount of salt being used is equal to half of the weight of the hide/skin. After two weeks of drying, the hides/skins are shaken, drained, folded and stacked in piles (Ibrahim, 2005).

The agriculture sector, including livestock production, makes up only 3-5% of GDP and provides only 10% of food requirements in Djibouti, yet it is the primary or sole means of livelihood for between a quarter and a third of the population. While many people are involved in the sub-sector, the true number of animals in Djibouti appears to be almost completely unknown, since there has not been an animal census since 197811. At that time, there were said to be approximately 1.2mn animals, the majority of which were small ruminants, followed by camels, cattle and donkeys.

For lack of a better estimate, these 30-year old numbers are still nearly always cited, even though cattle and sheep numbers are considered to be rapidly on the decline, as they and their feed species have shown low resistance to persistent drought and over-grazing. In order for the

---

11 1978 census saw 550,000 goats, 410,000 sheep, 40,000 cattle, 50,000 camels, 6500 donkeys and 3000 birds.
GORD and MAEM to improve their planning and policy-making capacity in the livestock sector, a new animal census (or less-expensive targeted or aerial-based estimates) are necessary.

Livestock are reared in three manners in Djibouti: extensive nomadic pastoralist, semi-extensive (semi-sedentary/semi-nomadic), and intensive (sedentary). Extensive production is the most common type – until very recently, 90% of Djibouti’s pastoralists raised their animals in this manner. These nomads “don’t know borders: borders are irrelevant to them” as they travel with their herds throughout Djibouti, Eastern Ethiopia and Northern Somalia, covering 100-300 km in transhumance. Thus the Djiboutian production system is intimately tied with that of neighboring countries, where Djiboutian herders spend much of the year, as climatic and pasture conditions are better.

The implication is that it is often impossible to determine an animal’s true origin. Second, semi-extensive production has been rapidly developed in the past three decades, with about half of Djibouti’s herders now semi-sedentarised around water points and villages. These pastoralists still roam considerably, approximately 20-100kms, but they return to a base camp, where they often leave their families to tend a small garden and attend school. The semi-sedentarisation of pastoralists has been a policy of MAEM since before independence, as the GORD believes this allows people access to social services, particularly education and health.\(^\text{12}\)

### 3.2.6 Uganda

The livestock population in Uganda is an important renewable resource supporting the hides, skins and leather industry, 7.4% of the National Gross Domestic Product (NGDP) is generated by this sector. This contribution to the GDP is 17% of the Agricultural Domestic Production (ADP). The livestock population is estimated at about 7.6 million cattle and 11.1 million sheep. The greatest concentration of livestock in the country is found in the “cattle corridor extending from South Western Region of the country through the Central Region, to the North-Eastern parts\(^\text{13}\).

If the Livestock Strategic Plan (LSP) is implemented there is high possibility to reasonable predict a production of adequate and quality meat, milk and other animal products to meet a part domestic and some export needs. The following table indicates current, projected production and expected animal related exports.

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Table 6: Current and Projected Animal and Hides and Skins Production

<table>
<thead>
<tr>
<th>Product Item</th>
<th>Current Production</th>
<th>Targeted Production</th>
<th>Targeted Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef (Metric Tons)</td>
<td>107,000</td>
<td>150,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Goat meat and mutton (Metric Tons)</td>
<td>17,000</td>
<td>26,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Poultry meat</td>
<td>18,000</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Eggs (Metric Tons)</td>
<td>21,000</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>Milk (Liters)</td>
<td>1 billion</td>
<td>1.4 billion</td>
<td>400 million</td>
</tr>
<tr>
<td>Hides (kg)</td>
<td>6.7 million</td>
<td>15 million</td>
<td>10 million</td>
</tr>
<tr>
<td>Skins (kg)</td>
<td>1.1 million</td>
<td>2 million</td>
<td>1.5 million</td>
</tr>
</tbody>
</table>

Source: Country Paper-Uganda, Proceedings of a Regional Workshop, National Animal Health Research Center (NAHRC) Agricultural Research Organization (EARO), W.S.N. Wesonga, April 18-20,2005

The hides and skins industry in Uganda should overcome the following challenges in order to bring the above projection depicted in Table 6 into a reality. (Wesonga, 2005).

- The low quality of hides and skins due to a multiple factors such as institutional weakness, inadequate production methods, animal husbandry practices, storage and preservation techniques,
- Inadequate infrastructure in animal industry in general and for processing and value addition of hides and skins in particular,
- Fears of high investment costs with possible low internal rates of return on investment,
- Poor marketing system.

3.2.7 South Sudan

The new nation, Southern Sudan, has yet to establish means or tools for data collection. Data, up to data, of South Sudan is often encapsulated within Sudan’s data. This tends to exaggerate information rendered. This is evidenced by the conflicting data released now and then by different offices and individuals. For instance, a report once delivered by Peter Lokale Nakimangole, quoting The South Sudan Tribune, states that “South Sudan leads the world in livestock wealth per capita. (January 24, 2013, JUBA) – Statistics on the wealth of livestock per capita in South Sudan has indicated that the region is leading the world in the underutilized economic sector. With the population of 8.2 million people according to the 2008 disputed population census, South Sudan has over 31 million heads of cattle, sheep and goats, making it a world leading nation when the animal wealth is calculated per capita.” In contrast to this stated population, Jones wrote “Southern Sudan has approximately 5.9 million head of cattle and an almost similar number of sheep and goats. This translates in to a domestic ruminant livestock biomass of 5.4 million Tropical Livestock Units (1 TLU=250 kg live weight). The cattle population increases from fairly small herds of 5 – 50 animals in

http://www.sudantribune.com/spip.php?article45286
the higher rainfall counties bordering Uganda to herds of 500 or more in the drier pastoral areas of Kapotta."\textsuperscript{15}

In addition, \textit{Investor’s Guide}, Republic of South Sudan claimed that the 2009 cattle population is 11,735,000. FAO’s 2007 \textit{Enhance Livelihood in Pastoral Areas} supplies with additional information regarding 12.1 million sheep and 12.4 goats.

### 3.3 Sources of Hides and Skins in IGAD Region

The hides and skins of principal species of domesticated animals such as cattle, goats and sheep are the main sources of raw material for conversion into various types of leather. These types of raw stock can be obtained regularly in commercial quantities and the supply is more or less inelastic. Although there are other sources of hides and skins such as horses, camels and exotic animals and these vary from country to country, this paper will mainly concentrate at the former, i.e. cattle, sheep and goats.

As meat is one of the major source of food, its by-products, hides and skins, are the raw source materials for the production of leather and leather products. The region has a fair share of this animal population. The IGAD countries have more than 114.9 million cattle including 207.7 million shoats (Table 1). Animal ownership is ubiquitous throughout the region.

Animals contribute in many ways to household incomes and food security, as draught animals and through milk production. They are only sold or slaughtered at an advanced age, or in case of urgent needs. If slaughtered, the animal provides the family with meat and income from hides and skins.

Recently the production of these animals for commercial purpose is on the rise. However, with this immense and potentially productive resource, with such influence on household incomes as well as the national economy, it is imperative for the region to maximize the economic value of their animal assets, including use of the animal for value added products. Yet by most economic measurement, this is not yet happening as it could. Animals are not managed for high off-take, or to maximize their value for meat production. Hides and skins are not adequately preserved for fine leather production or international competitiveness, nor are they effectively collected to reach the tanneries and eventual leather products manufacturing. The following tables depict the potential of the region.

\textsuperscript{15} Murdock Jones, \textit{Survey of Livestock and Livestock Production of South Sudan}, Sudan country paper, 1. Agricultural Research Council, Wad Medani, Sudan, 2012
Table 7: Bovine, Sheep and Goats Population of IGAD Compared to Africa and the World

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Bovine Population</th>
<th>% of IGAD Region</th>
<th>% of Africa (230,022)</th>
<th>% of the World (1,617,213)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Djibouti</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>2</td>
<td>Ethiopia</td>
<td>52,000</td>
<td>43.41</td>
<td>22.61</td>
<td>3.22</td>
</tr>
<tr>
<td>3</td>
<td>Kenya</td>
<td>13,000</td>
<td>10.85</td>
<td>5.65</td>
<td>0.80</td>
</tr>
<tr>
<td>4</td>
<td>Somalia</td>
<td>5,333</td>
<td>4.45</td>
<td>2.32</td>
<td>0.33</td>
</tr>
<tr>
<td>5</td>
<td>Sudan</td>
<td>41,850</td>
<td>34.94</td>
<td>18.19</td>
<td>2.59</td>
</tr>
<tr>
<td>6</td>
<td>South Sudan</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>7,600</td>
<td>6.35</td>
<td>3.30</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Total for IGAD Region: 119,783

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Sheep/Lambs Population</th>
<th>% of IGAD Region</th>
<th>% of Africa (210,528)</th>
<th>% of the World (1,098,479)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Djibouti</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>2</td>
<td>Ethiopia</td>
<td>27,096</td>
<td>26.0</td>
<td>12.87</td>
<td>2.47</td>
</tr>
<tr>
<td>3</td>
<td>Kenya</td>
<td>9,872</td>
<td>9.47</td>
<td>4.69</td>
<td>0.90</td>
</tr>
<tr>
<td>4</td>
<td>Somalia</td>
<td>13,149</td>
<td>12.63</td>
<td>6.25</td>
<td>1.20</td>
</tr>
<tr>
<td>5</td>
<td>Sudan</td>
<td>52,194</td>
<td>50.09</td>
<td>27.79</td>
<td>4.75</td>
</tr>
<tr>
<td>6</td>
<td>South Sudan</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>1,886</td>
<td>1.81</td>
<td>0.90</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Total for IGAD Region: 104,197

<table>
<thead>
<tr>
<th>No.</th>
<th>Country</th>
<th>Goats/Kids Population</th>
<th>% of IGAD Region</th>
<th>% of Africa (247,645)</th>
<th>% of the World (902,479)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Djibouti</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>2</td>
<td>Ethiopia</td>
<td>22,904</td>
<td>22.32</td>
<td>9.25</td>
<td>2.54</td>
</tr>
<tr>
<td>3</td>
<td>Kenya</td>
<td>13,828</td>
<td>13.48</td>
<td>5.58</td>
<td>1.53</td>
</tr>
<tr>
<td>4</td>
<td>Somalia</td>
<td>12,747</td>
<td>12.49</td>
<td>5.15</td>
<td>1.41</td>
</tr>
<tr>
<td>5</td>
<td>Sudan</td>
<td>43,806</td>
<td>42.75</td>
<td>17.69</td>
<td>4.85</td>
</tr>
<tr>
<td>6</td>
<td>South Sudan</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>9,197</td>
<td>8.96</td>
<td>3.71</td>
<td>1.02</td>
</tr>
</tbody>
</table>

Total for IGAD Region: 102,482

@ Official data is not available. However, literature review of various publication have released some data and these are noted in concerned country profile

The average distributions of bovine, sheep/ lambs and goats/ kids per head for the whole IGAD region are 0.54, 0.47 and 0.046 respectively. In this respect, Somalia and Sudan have average per head ownership of these animals greater than the average at 1.31 and 1.69 for sheep/lambs respectively. 1.27 and 1.42 for goats/kids are per-head ownership of Somalia and Sudan respectively. Ethiopia with average 0.57 bovine animals per head has slightly greater possession rate than the average.

IGAD Region (mainly only five countries out of the seven) has more than half (52.07%) of Africa’s bovine population share. A considerable percentage (7.41) of the world bovine head count is again found in these five countries of IGAD. This clearly indicates the potential to retain food security and economic hegemony if managed properly.
More than half (52.5%) of the sheep of Africa is distributed among the five countries of IGAD Region. This accounts for 9.49% of the world sheep/lambs resource. The picture is nearly the same for goats and kids distribution. About 41.38% and 11.38% of the goats and kids of Africa and the world respectively are found in the IGAD Member States.

3.3.1 Hides and skins Value Chain

The value chain components of hides and skins are the livestock, which was broadly dealt above, and the slaughter of animals, slaughter slabs, slaughterhouses and abattoirs and others. The table below summarizes the hide and skins supply chain. Among the major inputs, human resources and quality of live animals are very basic and essential. The human resource input can be improved through proper training. The quality of live animals can also be enhanced by extending relevant extension services and carrying out modern techniques of animal husbandry.

Table 8: Hides and Skins Value Chain

<table>
<thead>
<tr>
<th>Stages</th>
<th>Important Inputs</th>
<th>Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock Production</td>
<td>• Human resource</td>
<td>• Milk</td>
</tr>
<tr>
<td></td>
<td>• Live animals</td>
<td>• Pulling power</td>
</tr>
<tr>
<td></td>
<td>• Breeding techniques</td>
<td>• Mature animals for slaughter</td>
</tr>
<tr>
<td></td>
<td>• Animal health service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Animal feed</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Breeding techniques</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Animal health service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Animal feed</td>
<td></td>
</tr>
<tr>
<td>Slaughter – Hides and skins Recovery</td>
<td>• Human resource – technical and managerial skills</td>
<td>• Heavy bovine hides</td>
</tr>
<tr>
<td></td>
<td>• Equipment and spare parts</td>
<td>• Light bovine hides</td>
</tr>
<tr>
<td></td>
<td>• Slaughter facilities</td>
<td>• Goat and sheep skins</td>
</tr>
<tr>
<td>Tannery</td>
<td>• Raw hides and skins</td>
<td>• heavy and light bovine leather</td>
</tr>
<tr>
<td></td>
<td>• Human resource – technical and managerial skills</td>
<td>• light (sheep and goats) leather</td>
</tr>
<tr>
<td></td>
<td>• Chemical</td>
<td>• (pickled, wet blue, crust, finished) leather</td>
</tr>
<tr>
<td></td>
<td>• Machinery</td>
<td></td>
</tr>
</tbody>
</table>

Source: Extracted from COMESA Regional Strategy for the Leather and Leather Products Value Chain
### 3.3.2 Hides and Skins Production

Table 9: Average Growth Rate of Bovine Hides, Sheep Skins and Goat Skins (2003-2012)

<table>
<thead>
<tr>
<th>No.</th>
<th>Country Region</th>
<th>Bovine Hides</th>
<th></th>
<th>Sheep/Lambs Skins</th>
<th></th>
<th>Goat/Kids Skins</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td>2012</td>
<td>%</td>
<td>2003</td>
<td>2012</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Djibouti</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>2</td>
<td>Ethiopia</td>
<td>3.1</td>
<td>3.8</td>
<td>22.59</td>
<td>5.3</td>
<td>8.3</td>
<td>56.60</td>
</tr>
<tr>
<td>3</td>
<td>Kenya</td>
<td>2.3</td>
<td>3.0</td>
<td>30.43</td>
<td>3.0</td>
<td>2.9</td>
<td>-3.33</td>
</tr>
<tr>
<td>4</td>
<td>Somalia</td>
<td>0.6</td>
<td>0.5</td>
<td>-16.7</td>
<td>3.7</td>
<td>3.5</td>
<td>-5.41</td>
</tr>
<tr>
<td>5</td>
<td>Sudan</td>
<td>4.0</td>
<td>8.4</td>
<td>110</td>
<td>19.7</td>
<td>25.7</td>
<td>30.46</td>
</tr>
<tr>
<td>6</td>
<td>South Sudan</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Uganda</td>
<td>0.7</td>
<td>0.9</td>
<td>28.57</td>
<td>0.4</td>
<td>0.7</td>
<td>75.00</td>
</tr>
<tr>
<td>8</td>
<td>IGAD</td>
<td>10.7</td>
<td>16.6</td>
<td>55.14</td>
<td>32.1</td>
<td>41.1</td>
<td>28.04</td>
</tr>
<tr>
<td>9</td>
<td>Africa</td>
<td>32.3</td>
<td>41.9</td>
<td>29.72</td>
<td>94.0</td>
<td>115.2</td>
<td>22.55</td>
</tr>
<tr>
<td>10</td>
<td>World</td>
<td>325.9</td>
<td>355.2</td>
<td>8.99</td>
<td>515.4</td>
<td>531.5</td>
<td>3.12</td>
</tr>
</tbody>
</table>

Source: Adopted and compiled from FAO, World Statistical Compendium, 2012
4 ANALYSIS OF DATA

208 concerned stakeholders graciously participated in responding the different questionnaires. The distribution of this participant is summarized in Table 12.

Table 10: Distribution of Study Participants

<table>
<thead>
<tr>
<th>Country</th>
<th>Djibouti</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Somalia</th>
<th>South Sudan</th>
<th>Sudan</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>56</td>
<td>42</td>
<td>3</td>
<td>18</td>
<td>30</td>
<td>40</td>
<td>208</td>
</tr>
</tbody>
</table>

4.1 Production of Hides and Skins

The main sources of hides and skins are cattle, sheep and goats. Hides and skins are produced in a number of ways in IGAD member countries. These may include homestead slaughtering, rural slaughter slabs; municipal slaughter houses and mechanized, modern abattoirs. The various rates on production and differing practices of slaughter may be associated with the quality problems of hides and skins that constitute major constraint of the sector.

The present data is generated by studies conducted in capital cities of IGAD member States. Thus cautiousness is requested in national extrapolation of results.

4.2 Types of Slaughter Houses

Slaughter houses encompass slaughter slabs; municipal slaughter houses and mechanized, modern abattoirs. All interviewed butchers/abattoirs in the six IGAD member States indicated that they have special area for slaughtering animals. Large majority (80%) of them indicated that they slaughter both cattle and shoats (sheep and goats) at a rate of more than 25 animals per day from each category.

Homestead slaughtering of sheep and goats for household consumption is the dominant practice in all IGAD member States and as slaughtering is done in individual household backyards without any appropriate slaughtering facility, damages of hides and skins, like deep cuts, holes and/or poor patterns were also mentioned very commonly. Conversation with local collectors also let the team understand that during religious and festive times many more defects (cuts, holes and other) are encountered due to, most likely, the very large number of animals slaughtered by unskilled individuals. A loss from damages to raw hides/skins affect both abattoirs operators and tanners. However, as informal slaughtering activities are largely beyond the reach of government considerations, determination of losses with reasonable accuracy is very difficult.
Figure 1 illustrates distance of slaughtering site from collection centers as indicated by respondents

**Figure 1:** Distance of Slaughtering Sites from Nearest Market or Collection Center as cited by respondents (in %)

Data on household/informal slaughtering activities were not available. However, it is possible to consider that further the site from urban areas the much higher the proportion of homestead slaughtering.

### 4.3 Slaughter Practices

Slaughter practices vary according to local culture, customs, religious practices and available facilities. It is obvious that these differences can have a bearings on the quality of hides and skins produced. In most modern slaughter houses animals are first made unconscious and then cut through the jugular veins. Case flaying practices and use of compressed air to detach the skin in sheep and goats, and mechanical dehiders for cattle reduce flaying knives related hides and skins defects.

Easiness of flaying has also positive association with the time interval between flaying and animal death; the tougher the flaying the higher the chance of damaging the hide/skin. The slaughtering practice has also effect on completeness of bleeding of the animal. Hides and skins recovered from incompletely bled animals show visible defects on finished leather.

In backyard slaughtering, animals are, generally, flayed on the ground on horizontal position and hides/skins recovered manually from the carcass. In such slaughtering practices, risks of incomplete bleeding, cuts and other damages to hides/skins are highly probable.

### 4.4 Technical Staff Skillfulness

Availability of training institutions and extension support in hides and skins production and handling is varying between IGAD member States. Figure 2 illustrates proportion of respondents that have indicate that they have learned new method of hides and skins production through courses attendance and/or from extension staff.
The majority respondents from Kenya indicated that they learned new methods of hides and skins production by attending courses and from extension agents. Comparable responses were also recorded for Ugandan butcher/abattoir workers. Regarding Ethiopia it was extension serve that was frequently cited by respondents as source of information for new production methods. Other cited means of learning were experience sharing from family, friends and neighbors, printed media and educational tours.

4.5 Major Constraints

A total number of 29 constraints with varying frequency, were cited as constraints of quality hides and skins production. Figure 3 shows the distribution of the more frequently cited constraints.
4.6 Shareable Good Practices

Respondents from Ethiopian (abattoirs and butcher workers) identified the use of appropriate flaying knives, flaying by mechanical dehider and periodical skill enhancing trainings as their good practices to be shared to the sub-Region.

Kenyan abattoir workers, in similar way, mentioned case flaying of sheep, use of cattle dehider, keeping abattoirs premises clean and quick curing of hides and skins after removal from the animal. There was no response obtained from other IGAD member States butchers/abattoir workers on this issue.

4.7 Collection and Preservation of Hides and Skins

The IGAD member States experience considerable losses of hides and skins from poor flaying and handling (preservation) practices and also prolonged storage of untreated hides and skins at various points in its way to the tanneries. The wastage caused by non-collection and damage due to absence of proper preservation is widely recognized as a major problem in the region.

4.7.1 Preservation Methods in Use

Hides and skins, if not properly preserved, are easily perishable and will have very little economic and commercial value. As soon as the skin is removed from the animal it is susceptible to deterioration, and the rate of degradation increases with the ambient temperature.

There are different ways of preservation of hides and skin, the most common ones are air drying and wet salting. Hides and skins destined for market are generally preserved either by air-drying or wet salting unless otherwise tanneries are located at close proximity for fresh state supply.

Wet salting, although relatively more expensive, results in better quality compared to air-drying. The preserved hides and skins should also be properly stored until they are supplied to tanneries.

Preserving hides and skins within four hours after the animal is skinned has paramount importance to obtain good quality leather at the final stage. However in good number of cases particularly in homestead slaughtering, the raw hides and skins may stay longer hours or even a day or more in the hands of the household without being preserved until it reached the trader.

Table 11 shows the experiences of hides and skins traders in IGAD region with regard to preservation. It is also important to note that if there is a delay before treatment, the preservation method(s) used will be less effective than expected.
Table 11: Experiences in IGAD member States in Preserving Hides and Skins at Local Collectors’ Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>Djibouti</th>
<th>Ethiopia</th>
<th>Kenya</th>
<th>Sudan</th>
<th>Southern Sudan</th>
<th>Uganda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hides and skins regularly preserved at local collectors’ level [% yes]</td>
<td>100</td>
<td>20</td>
<td>85.7</td>
<td>100</td>
<td>85.7</td>
<td>87.5</td>
</tr>
</tbody>
</table>

Nearly 95% of the “Yes” category indicated that they were using wet salting preservation method while the remaining 5% mentioned air drying. In wet salted hides and skins, salt can represent up to about 20% of the raw material's weight. When processing salted hides and skin, recovering salt, at least partially, will help to minimize its effect on the environment. In this regard, the consultant appreciated the works of few tanneries in Ethiopia that are recovering and reutilizing salt used for preservation.

4.7.2 Transportation methods and Means

The large majority butchers/abattoirs (82% of respondents) were using trucks to transport hides and skins from site of production to wholesaler or tannery. Most of the times, the buyers were the ones who come to the production site to collect the hides and skins.

Method of transportation use by local collectors to move hides and skins from the place of production to wholesalers or local tanneries sites were by trucking, draft animal, carrying (on foot), and others (like bicycle, carthorse). Table 12 shows the responses of local collectors from different IGAD member States regarding their transport means.

Table 12: Means of Transport used by Local Collectors to Transport Hides and Skins, as Cited by Respondents

<table>
<thead>
<tr>
<th></th>
<th>Carrying</th>
<th>Trucking</th>
<th>Draft animals</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti (N-5)</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia (N=16)</td>
<td>47.6</td>
<td>28.6</td>
<td></td>
<td>23.8</td>
</tr>
<tr>
<td>Kenya (N=7)</td>
<td>71.4</td>
<td></td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Sudan (N= 5)</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan (N=7)</td>
<td>71.4</td>
<td>14.6</td>
<td></td>
<td>14.6</td>
</tr>
<tr>
<td>Uganda (=8)</td>
<td>62.5</td>
<td></td>
<td></td>
<td>37.5</td>
</tr>
</tbody>
</table>
4.7.3 Hides and Skins Quality Issues and Grading Standards

Respondents from Ministries of Agriculture and other concerned ministries in Ethiopia, Kenya Uganda and Sudan indicated that there is established quality grades for hides and skins in their respective countries but quality based pricing system for hides and skins is not institutionalized so far. Other IGAD member countries (Djibouti, South Sudan and Somali) don’t have any national quality standards grades.

In the absence of quality grade pricing system, the parameters commonly considered for the transaction of hides and skins by the different actors in the value chain, were/are weight, shape/pattern, substance and others as shown in Figure--.
4.7.4 Defects, Extent and Origin

Tables 13 and 14 present summaries of raw hides and skins major defects as cited by respondents. The total number of citation for defects of raw hides and skins were respectively 236 and 201. Flay cut is the most frequently cited defect both in cattle and sheep and goats indicating the extent of slaughtering related problems across the IGAD member States.

Table 13: Raw hides major defects as cited by respondents from IGAD Member States

<table>
<thead>
<tr>
<th></th>
<th>Bruise</th>
<th>Poor pattern</th>
<th>Fallen skin</th>
<th>Brand</th>
<th>Putrefaction</th>
<th>Dirt</th>
<th>Improper bleeding</th>
<th>Disease/parasite</th>
<th>Flay Cut</th>
<th>Others</th>
<th>Total Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>20</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>12</td>
<td>18</td>
<td>7</td>
<td>11</td>
<td>11</td>
<td>21</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>118</td>
</tr>
<tr>
<td>Kenya</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>13</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>54</td>
</tr>
<tr>
<td>Sudan</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>29</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>South Sudan</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td>54</td>
</tr>
<tr>
<td>Uganda</td>
<td>9</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>48</td>
<td>33</td>
<td>19</td>
<td>42</td>
<td>21</td>
<td>41</td>
<td>32</td>
<td>14</td>
<td>80</td>
<td>29</td>
<td>236</td>
</tr>
</tbody>
</table>

Table 14: Raw Skins Major Defects as cited by respondents from member countries

<table>
<thead>
<tr>
<th></th>
<th>Bruise</th>
<th>Poor pattern</th>
<th>Fallen skin</th>
<th>Scare</th>
<th>Putrefaction</th>
<th>Dirt</th>
<th>Improper bleeding</th>
<th>Disease/parasite</th>
<th>Flay Cut</th>
<th>Others</th>
<th>Total Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>6</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>35</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>3</td>
<td>12</td>
<td>18</td>
<td>13</td>
<td>16</td>
<td>21</td>
<td>15</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>112</td>
</tr>
<tr>
<td>Kenya</td>
<td>8</td>
<td>11</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>10</td>
<td>67</td>
</tr>
<tr>
<td>Sudan</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>31</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Southern Sudan</td>
<td>7</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>25</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Uganda</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>12</td>
<td>20</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>65</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
<td>45</td>
<td>47</td>
<td>57</td>
<td>57</td>
<td>60</td>
<td>25</td>
<td>24</td>
<td>111</td>
<td>94</td>
<td>201</td>
</tr>
</tbody>
</table>
4.7.5 Shareable Good Practices

Respondents (Wholesalers) from Ethiopia, Kenya, Sudan and Uganda made mention of salt preservation of hides and skins as good practice to be shared to others. Other good practices cited were close collaboration with concerned institutions (Ethiopia), participating in awareness creation of livestock keepers (Kenya), fish hide collection from abattoir (Sudan) and arranging transport facility (Uganda)

4.7.6 Marketing and Market Channels

The marketing of hides and skins starts at the point of slaughtering
the animal and passes through a chain of middlemen until it reaches the tanneries for conversion into leather and leather products. The number of middlemen involved and the system of trading may differ from country to country and even from place to place. As all we know, meat consumption drives the supply of hides and skins to market. Thus during holidays and festival periods where more meat is consumed, there will be also more supply of fresh hides.

In IGAD region identifying the marketing channel, and the resulting pricing system, will have a great use for setting up of an effective institutional framework that regulate the system and encourage value adding activities and increase opportunities for marketing and trade within the region as well as to foreign markets.

4.7.7 Access to Market Information

Regular, timely and accurate market information is crucial for informed decision making in planning, implementing and control of hides and skins marketing activities. Table 15 illustrates sources of market information as cited by hides and skins primary producers and local traders. The large majority (87.5%) of traders who participated in the questionnaire survey had more than 5 years of experience in hides and skins trading.

Table 15: Hides and Skins Price Information Sources as Cited by Primary Producers (N=--)

<table>
<thead>
<tr>
<th>Country</th>
<th>Broker</th>
<th>Personal Observation</th>
<th>H&amp;S Traders</th>
<th>Other Producers</th>
<th>Radio</th>
<th>Telephone</th>
<th>Others</th>
<th>Total Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti</td>
<td>16.7</td>
<td>33.3</td>
<td>33.3</td>
<td>16.7</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethiopia</td>
<td>18.2</td>
<td>27.3</td>
<td>27.3</td>
<td>18.2</td>
<td>9.1</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>22.2</td>
<td>66.7</td>
<td>11.1</td>
<td>11</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudan</td>
<td>7.1</td>
<td>28.6</td>
<td>35.7</td>
<td>21.4</td>
<td>7.1</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Sudan</td>
<td>45.5</td>
<td>36.4</td>
<td>18.2</td>
<td>11</td>
<td></td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>66.7</td>
<td>11.1</td>
<td></td>
<td>22.2</td>
<td></td>
<td>9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The majority of respondents from Ethiopia, Kenya, Southern Sudan and Uganda judged the reliability of the information as moderate while in other IGAD member States (Djibouti and Sudan) the majority considered it as high. The overall average was 44.4% for high, 52.8% for moderate and 2.8% for low level of information reliability.

As to the Timeliness of the information, all respondents across the region with Djibouti as exception judged it timely.

4.7.8 Hides and Skins Markets and Price of Hides and Skins

In all IGAD member States hides and skins change hands several times before they reach the tanneries. The hides and skins produced in slaughter houses and abattoirs are, generally, auctioned to big traders and to tanneries, both public and private, while individual consumers who kill animals in their backyard sell the hides and skins.
either to agents, local collectors, or directly to wholesalers. Figure 8 illustrates distance of producers (butchers/abattoirs) from hides and skins markets and/or collection centers. Producers in Ethiopia, Kenya and Sudan are, apparently, at further distance from market/collection sites compared the other IGAD member States.

**Figure 8: Distance from market place or collection centers of primary producers**

Figure 9 shows time of taking to market of hides and skins as cited by respondents (butchers/abattoirs). Large majority of producers (73%) take to market shortly after slaughter. The majority of producers (61% for hides and 63% for skins) sell fresh hide while the remaining sell wetsalted ones.

**Figure 9: Time of taking hides and skins to market since slaughtering**
Marketing facilities (transportation, controlled marketing area, water supply etc) and services (applying regulations, market information, etc) are said to be very inadequate or inexistent in all IGAD member States with the exception of Kenya and Ethiopia where at least half of the respondents mentioned the adequacy of these services.

4.8 Price of Hides and Skins

Price is a central mechanism by which market functions. Figure 10 illustrates the price structure of hides and skins in IGAD member countries. Raw sheep skin price varies from 1.6 to 4.2 US$ per piece. In all countries except Kenya, sheep skin sold at higher price than goat skin.

Figure 10: Price comparison of hides and skins in IGAD member States

Problems in selling hides and skins were indicated as price fall, lack of competitive market, lack of price information and other factors with lower frequency. Figure 11 shows the frequency of each problem category based on the number of citations made by respondents.

Figure 11: Problems of selling hides and skins as cited by producers

LCM: lack of competitive market; LPI: lack of price information
Figure 12: Percentage responses of producers as who sets the selling price of hides and skins

Figure 12 shows that in Ethiopia and South Sudan, the majority of producers (60% or more) do not set price for their hide or skin; the buyers decide the purchasing price. As per the respondents from Djibouti, Kenya and Uganda, most of (>60%) of the transactions between producers and buyers (traders) follow the negotiating style. Lack of competitive pricing was indicated as the major problem of marketing and particularly as there was no payment of better price for hides and skins of better quality, producers are not encouraged to improve the quality by paying more care and attention in the raw material handling. The transaction between collectors and wholesalers was mostly payment of a commission of fixed sum on top of the collectors purchase price and other expenses up to delivery to the wholesaler site.

4.9 Hides and Skins Market Channels

In IGAD member States, different market channels exist, in the trade of raw hides and skins prior to their reaching a tannery/export, and the chain connecting both producers and tanneries/export was found to be varied. The market channels encompass primary producers (butchers, abattoirs and individual households who kill animals at home or backyards), agents, brokers, local collectors, wholesalers and tanners.

With Exceptions of Djibouti and Uganda, respondents from all IGAD member States also indicated the existence of unlicensed hides and skins traders that constitute informal marketing group and their degree of influence on the market is considered as medium to high. This shows lack of appropriate and effective institutional framework to regulate the system.
The most common channels are:

Channel 1: Producer _____ Local tannery
Channel 2: Producer _____ Wholesaler _____ Tannery
Channel 3: Producer _____ Wholesaler _____ Wholesaler _____ Tannery
Channel 4: Producer _____ Agent _____ Wholesaler _____ Tannery/Export
Channel 5: Producer _____ Collector –Wholesaler _____ Tannery/Export
Channel 6: Producer _____ Collector – Collector _____ Tannery/Export
Channel 7: Producer _____ Broker – Collector – Wholesaler _____ Tannery/Export

**Figure 13: The Hides and Skins Market Channels In IGA member States**

<table>
<thead>
<tr>
<th>Channel</th>
<th>Djibouti</th>
<th>Kenya</th>
<th>Ethiopia</th>
<th>Sudan</th>
<th>South Sudan</th>
<th>Uganda</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>10</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>2 &amp; 3</td>
<td></td>
<td></td>
<td>3</td>
<td>5</td>
<td>5</td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>11</td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>11</td>
<td></td>
<td>71</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>3</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>23</td>
<td>7</td>
<td>71</td>
<td>11</td>
<td></td>
<td>124</td>
</tr>
</tbody>
</table>

**Table 16: Hides and skins market channels in IGAD member States as cited by respondents**
Channels 5 and 6 were the dominant ones (57% of the citation) followed by Channel 1 (18.5%) across the region. Djibouti and South Sudan are exporting raw hides while in the remaining IGAD member States raw hides and skins export is forbidden or sanctioned with high taxes in order to encourage value addition.

4.10 Constraints of Hides and Skins Marketing

The main constraints adversely affecting the production and marketing of hides and skins are indicated as low demand, informal market, low price, low quality, and unfair competition, among others. Table 17 shows the importance of the constraints based on the frequency of citations by the respondents.

Table 17: Major problems faced in hides and skins marketing, as cited by respondents

<table>
<thead>
<tr>
<th></th>
<th>Low price (% of citation)</th>
<th>Low demand(% of citation)</th>
<th>Informal market(% of citation)</th>
<th>Low quality(% of citation)</th>
<th>Unfair Completion (% of citation)</th>
<th>Others (% of citation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Djibouti</td>
<td>33.3</td>
<td>33.3</td>
<td>0.0</td>
<td>16.7</td>
<td>0.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>15.6</td>
<td>12.5</td>
<td>15.6</td>
<td>21.9</td>
<td>31.3</td>
<td>3.1</td>
</tr>
<tr>
<td>Kenya</td>
<td>16.7</td>
<td>8.3</td>
<td>8.3</td>
<td>25.0</td>
<td>33.3</td>
<td>8.3</td>
</tr>
<tr>
<td>Sudan</td>
<td>33.3</td>
<td>33.3</td>
<td>22.2</td>
<td>0.0</td>
<td>11.1</td>
<td>0.0</td>
</tr>
<tr>
<td>South Sudan</td>
<td>0.0</td>
<td>0.0</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Uganda</td>
<td>44.4</td>
<td>11.1</td>
<td>11.1</td>
<td>0.0</td>
<td>33.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Unfair competition is the major problem of marketing in Ethiopia, Kenya and South Sudan. Djibouti and South Sudan respondents frequently cited low demand and low price as dominant constraints.

Being price taker and the non-consideration of quality in price setting were also constraints of hides and skins marketing system at producers level. Other problems include capital shortage, work space problem and inadequate facilities and services at market site that all having effect on the efficiency and effectiveness of the marketing system. Local traders complained about work space unavailability and capital problem.

The tanneries receiving raw hides and skins are often complaining the decline in the quality and quantity from time to time and lack/inadequate awareness by public and private sectors on the importance of the leather sector.

4.10.1 Shareable Good Practices and Lessons Learnt in Hides and Skins Marketing

Hides and skins wholesalers identified the following activities as their good practice to be shared with others.
a) **Ethiopian hides and skins wholesalers cited good practices**

- Strong economic tie among traders from higher to lower level
- Well organized association that supports its members
- Daily purchase by tanners that allows timely delivery of hides and skins in fresh state
- Very quick buying and selling process between collectors and wholesalers
- Regular contact and good communication with concerned institutions

b) **The Kenya hides and skins wholesalers cited good practices were:**

- Public sector regulating the hides and skins trade related activities
- Appreciable inter-firm linkages that can be a remarkable source of technology diffusion and mastery.

c) **Sudanese hides and skins wholesalers cited good practices:**

- Experience exchange between traders
- Extension service that supports the sector

d) **Uganda hides and skins wholesalers cited good practices:**

- Market oriented training
- Access to transport facility

### 4.11 Hides and Skins Tanning

Tanneries transform the raw hides and skins into a product called leather through a series of process, commonly identified as pickling, tanning, re-tanning and finishing with corresponding products named pickled pelt, wet-blue, crud leather and finished leather, in that order. All the four stages (pickling, tanning, re-tanning and finishing) may or may not be conducted in the same tannery, and depending on the available technology and skilled manpower a tannery could limit its activity to one or more of the stages and sell the product(s).

#### 4.11.1 Tanneries size and Processing Capacity

IGAD member states having functional tanneries, during the present study period, were Kenya, Ethiopia, Sudan and Uganda. The number of tanneries operating were 27 for Ethiopia, 14 Kenya, ---Sudan and 8 for Uganda.

A case study from Ethiopia regarding tanneries size and processing capacity shows that all the 27 tanneries process an average of 16 million skins and 2.4 million hides per year.

Table 18 illustrates the capacity utilization of Ethiopian tanneries of raw hides and skins. As the Ethiopian leather industry is known to be
in a relatively advanced development staged in the IGAD region, it is highly improbable to expect something better in other IGAD member States.

Table 18: Capacity Utilization of Raw Hides and Skins (RHS), in ‘000 pieces

<table>
<thead>
<tr>
<th>Ethiopia Tanneries</th>
<th>Hide</th>
<th>Sheep</th>
<th>Goat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity - Soaking</td>
<td>2,340</td>
<td>28,208</td>
<td>12,629</td>
<td>43,177</td>
</tr>
<tr>
<td>Capacity - Crust</td>
<td>2,238</td>
<td>22,291</td>
<td>10,649</td>
<td>35,178</td>
</tr>
<tr>
<td>Capacity – Finished leather</td>
<td>2,240</td>
<td>16,351</td>
<td>7,231</td>
<td>25,822</td>
</tr>
<tr>
<td>RHS Produced by Farmer</td>
<td>3,649</td>
<td>8,700</td>
<td>8,100</td>
<td>20,449</td>
</tr>
<tr>
<td>RHS Supplied to Tanneries</td>
<td>1,400</td>
<td>8,000</td>
<td>7,000</td>
<td>16,400</td>
</tr>
<tr>
<td>Rate of RHS Supplied to Amount Produced</td>
<td>38.4%</td>
<td>92.0%</td>
<td>86.4%</td>
<td>80.2%</td>
</tr>
<tr>
<td>Rate of RHS Supplied to Finished Leather Capacity</td>
<td>62.5%</td>
<td>48.9%</td>
<td>96.8%</td>
<td>63.5%</td>
</tr>
</tbody>
</table>

Source: CSA March 2012 cited by AGP-Livestock Market Development Project
RHS: raw hides and skins

4.11.2 Available Technologies

Technology capacity building is one of the main drivers for growth, competitiveness and sustainable development. Technologies in use for the first two stages of hides and skins processing (pickling and tanning) are similar across tanneries, that are the drum machines. Respondents from tanneries mentioned of the existence of some degree of benchmarking exercise to assess the available technologies and work practices. The countries used for the benchmarking were China for Kenya and Sudan; India for Ethiopia and Indonesia for Uganda. Summary of responses of tannery representatives on Benchmarking and its streamlining is presented in Table 19

The benefits obtained from the benchmarking exercise were indicated as better process, quality assurance, market link and effectiveness and efficiency enhancement for Ethiopia, and more and good quality product and good return for Kenya and Uganda,

Table 19: Summary of responses of tannery representatives on benchmarking and streamlining tannery activities

<table>
<thead>
<tr>
<th></th>
<th>Ethiopia (N=8)</th>
<th>Kenya (N=4)</th>
<th>Sudan (N=5)</th>
<th>Uganda (N=8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any benchmarking done? [% yes]</td>
<td>50</td>
<td>25</td>
<td>40</td>
<td>37.5</td>
</tr>
<tr>
<td>Benchmarking streamlined in to the company work? [% yes]</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>60</td>
</tr>
</tbody>
</table>

4.12 Qualified Manpower

Shortage of skilled manpower is a major constraint of tanneries and frequently raised issue during discussions with tannery representatives. Figure 14 illustrates variability within IGAD member states with regard to
technical supports provided to tannery workers from different concerned institutions.

Figure 14: Variation of Technical Support within IGAD Member States

4.13 Level of Conversion of Hides and Skins

Figure 15 illustrate proportion of tanneries at different level of conversion of hides and skins computed based on sampled tanneries responses. Tanneries in Sudan seem to limit their hides and skins value addition activities at wet-blue stage. For Kenya also most tanneries value addition activity stops at wet-blue level. Ethiopia seems doing well in value addition.

Figure 15: Sampled tanneries distribution at different levels of conversion of hides and skins
4.14 Environmental Issues

From the four stages of hides and skins processing (pickling, tanning, retanning and finishing), the first two (stages up to wet-blue process) are far more polluting and said to generate 90% of the water pollution associated with leather tanning. In most IGAD member State tanneries, hazardous and solid waste treatment facilities are scarce and environmental regulatory institutions are weak. Ethiopia and Kenya are showing some progress with respect to strengthening regulatory mechanisms, encouraging cleaner technology adoption and establishing common effluent treatment plants.

4.15 Major Constraints

Tanneries are currently operating very much below capacity. Limited supply and poor quality hides and skins and shortage in skilled manpower were the frequently mentioned constraints.

4.16 Shareable Good Practices

4.16.1 Ethiopian Tanneries Good Practices that could be shared to other IGAD Member Countries may include:

- Value addition to the level of leather products.
- Periodical skill enhancement training offered to tannery workers.
- Quick and efficient raw hide purchase system that minimizes salt utilization for preserving.
- Recovering and reutilizing salt by using evaporation pond system.
- Establishment of common effluent treatment plant underway.

4.16.2 Kenyan good practices:

- Training employees on tanning and use of modern technology

4.16.3 Ugandan Tanneries good practices:

- Hides and skins and leather sector importance awareness creation activities.
- Value addition to poor quality hides and skins, off cuts and wasted limed splits by using them like for sandals.

4.17 Institutional Arrangements

4.17.1 Public Institutions Involved in Hides and Skins Improvement and Marketing

IGAD member States, Ministries (Ministries of Agriculture, Trade and Industry) Quality and Standards Authority, Investment Agency, etc were/are few of the public institutions that are responsible for one or more of the leather sector activities that encompass extension activities, raw hides and skin marketing coordination and regulation,
issuance of trade license, supporting the activities of value adding, formulation, approval and issuance of Standards, etc.

Table 20 shows summaries of the responses made to some of the survey questions by sampled public institutions (Ministry of Agriculture, Trade and Industry,) of IGAD member States. Collaborative activities between different institutions, to support the leather sector got yes response from large majority of the respondents with exception from Southern Sudan.

However the majority of respondents from Djibouti and Ethiopia judged the linkages between the institutions not effective. From a total of 11 “yes/no” questions considered to be useful for the development of the leather sector, the ones that had “yes” response by majority of respondents (>50% of respondents) were only 2 for Djibouti and Southern Sudan, 6 for Ethiopia, 7 for Uganda, 9 for Sudan and 10 for Kenya.(Table20).

In another related question that asks to rate the contribution of the leather sector to their respective country’s economy, the majority of respondents from Ethiopia (70%), Kenya (80%) and Uganda (80%) rated as satisfactory to good while for Djibouti, Sudan and South Sudan respondents the sectors performance was judged poor to unacceptable levels. it is not clear why the respondents from Sudan (the same respondents who gave positive responses for most of the “Yes/No “questions in Table 20) found the sector performance poor to unacceptable.
Table 20: Summary of responses to some of the survey questions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Djibouti (N=6)</th>
<th>Ethiopia (N=10)</th>
<th>Kenya (N=5)</th>
<th>Sudan (N=5)</th>
<th>S. Sudan (N=5)</th>
<th>Uganda (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborating with other institutions in supporting leather sector [% yes]</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>Visible change/improvement in the leather sector [% yes]</td>
<td>33</td>
<td>90</td>
<td>100</td>
<td>100</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>More could have been done to support the leather sector? [% yes]</td>
<td>100</td>
<td>80</td>
<td>100</td>
<td>80</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Any hides and skins improvement related projects? [% yes]</td>
<td>17</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Effective linkage between actors involved in leather sector? [% yes]</td>
<td>17</td>
<td>30</td>
<td>80</td>
<td>60</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>Forum for exchange of knowledge/good practices in leather sector? [% yes]</td>
<td>17</td>
<td>50</td>
<td>80</td>
<td>80</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>Your staff equipped with knowledge, skills to bring about improvement in the leather sector? [% yes]</td>
<td>0</td>
<td>40</td>
<td>60</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Established quality grades for hides and skins? [% yes]</td>
<td>17</td>
<td>60</td>
<td>100</td>
<td>80</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Quality based pricing system for hides and skins? [% yes]</td>
<td>0</td>
<td>10</td>
<td>40</td>
<td>80</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Incentive packages to attract and maintain the private sector including FDI? [% yes]</td>
<td>17</td>
<td>50</td>
<td>60</td>
<td>80</td>
<td>60</td>
<td>20</td>
</tr>
<tr>
<td>SMEs recognized as important players for the development of the leather sector? [% yes]</td>
<td>50</td>
<td>70</td>
<td>100</td>
<td>40</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>
Respondents from public institutions also cited a long list of problems along the leather value chain that they considered as a bottleneck for the development of the leather sector (Tables 21–24).

### Table 21: Major constraints of the leather sector (By Ethiopian Public Institution)

<table>
<thead>
<tr>
<th>Constraints</th>
<th>Animal Production</th>
<th>Hides and Skins</th>
<th>Leather</th>
<th>Leather Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of proper grading system in marketing (2)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Inadequate extension Support</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Market linkage</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Skilled manpower shortage</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Market place</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less attention</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Price fluctuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment pollution</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Informal trading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of incentive</td>
<td>X</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Inadequate coordination between government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>institutions</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

### Table 22: Major constraints of the leather sector (By Kenyan Public Institution)

<table>
<thead>
<tr>
<th>Constraints</th>
<th>Animal Production</th>
<th>Hides and Skins</th>
<th>Leather</th>
<th>Leather Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate extension Support</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market linkage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skilled manpower shortage</td>
<td>xx</td>
<td>xx</td>
<td>Xx</td>
<td></td>
</tr>
<tr>
<td>Price fluctuation</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment pollution</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of incentive</td>
<td>xx</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cost of production</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very few Kenyans involved in the tanning industry (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion from related products</td>
<td></td>
<td></td>
<td></td>
<td>Xx</td>
</tr>
<tr>
<td>Lack of some components necessary in value addition</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Capital cost</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Outdated laws and regulations</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imports of secondhand and synthetic cheap leather products</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Table 23: Major constraints of the leather sector (By Ugandan Public Institution)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Animal Production</th>
<th>Hides and Skins</th>
<th>Leather</th>
<th>Leather Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little value addition by public sector</td>
<td></td>
<td></td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Inadequate extension Support</td>
<td>X</td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Market linkage/information</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Skilled manpower shortage</td>
<td></td>
<td></td>
<td>xx</td>
<td>xx</td>
</tr>
<tr>
<td>Price fluctuation</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Environment pollution</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lack of incentive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cost of production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack/inadequate awareness</td>
<td>X</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Completion from related products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology transfer</td>
<td></td>
<td></td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Capital cost</td>
<td></td>
<td></td>
<td>xx</td>
<td>Xx</td>
</tr>
<tr>
<td>Outdated laws and regulations</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Low attention by the public sector</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Imports of secondhand and synthetic cheap leather products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few modern leather processing plant</td>
<td></td>
<td></td>
<td>x</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 24: Major constraints of the leather sector (By Sudanese Public Institution)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Animal Production</th>
<th>Hides and Skins</th>
<th>Leather</th>
<th>Leather Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate extension Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market linkage/information</td>
<td></td>
<td></td>
<td>x</td>
<td>xx</td>
</tr>
<tr>
<td>Skilled manpower shortage</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Price fluctuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment pollution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of incentive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High cost of production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack/inadequate awareness</td>
<td>X</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Completion from related products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology transfer</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Capital cost</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Outdated laws and regulations</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Low attention by the public sector</td>
<td></td>
<td></td>
<td>x</td>
<td>xx</td>
</tr>
<tr>
<td>Imports of secondhand and synthetic cheap leather products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Few modern leather processing plant</td>
<td></td>
<td></td>
<td>x</td>
<td>X</td>
</tr>
<tr>
<td>Raw hide export for human consumption and butchers not worried about quality</td>
<td></td>
<td></td>
<td></td>
<td>xx</td>
</tr>
<tr>
<td>Camel hides are not considered as product</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Lack of Strategy</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
4.18 Training/Research Institutions and Associations

Training/Research Institutions and Associations in the leather sector were interviewed in four IGAD member countries (Ethiopia, Kenya, Sudan and Uganda). These institutions were/are supporting the develop the leather industry through conducting training and research activities in leather processing technology and footwear and leather goods manufacturing, providing information service, promoting and protecting the interest of the industry, creating awareness on the importance of the sector and influencing public policies.

Table 25 illustrates the relationship and collaborative activities between research/training institutions and Association, and the different actors in the leather sector.

Table 25: Summary of “Yes”/”No” responses from Research/Training institutions and Associations in leather sector

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ethiopia (N=4)</th>
<th>Kenya (N=7)</th>
<th>Sudan (N=3)</th>
<th>Uganda (N=5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In planning of the leather sector activities of your organization, involved actors at grass root level? [% yes]</td>
<td>75</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Forum/platform for exchange knowledge and good practices within and between the private sector? [% yes]</td>
<td>75</td>
<td>28.6</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Assisted the producers/ tanners/manufacturers to uptake new technologies[% yes]</td>
<td>25</td>
<td>71.4</td>
<td>33</td>
<td>100</td>
</tr>
<tr>
<td>Confidence and trust of the private sector in your organization[% yes]</td>
<td>75</td>
<td>85.7</td>
<td>33</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on survey results, in all IGAD member States, livestock producers had limited access to or contact with the Training/Research Institutions and Associations while hides and skins traders, tanners and leather goods manufacturers seemed to have better access to these institutions. Training/Research Institutions and Associations also cited a long list of constraints to the leather sector development that are in most cases similar to what were cited by government institutions representatives. The few additional constraints mentioned by Training/Research Institutions and Associations were:

- **Ethiopia:** Skin diseases and excessive domestic (traditional) use of hides and skins
- **Sudan:** Absence of industry area for the sector and smuggling of raw hides
- **Uganda:** Absence of Leather policy and strategy

4.19 Conclusion and Recommendation

The IGAD Sub-Region, being predominantly agricultural economy and a livestock rich zone, the leather sector occupies a place of prominence in
the sub-Region’s economy in view of its massive potential for employment, growth and exports. However, this comparative advantage is not yet turned into a competitive advantage in the regional as well as global markets and the full potential of hides and skins as a product is not realized in almost all countries of the sub-Region because of several reasons. The present study was undertaken to assess and document the good practices in hides and skins, along the value chain in the sub-region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. Accordingly good practices and major constraints were identified and presented along the value chain starting from hides and skins production to tanning.

The market channels and the number of middlemen involved and the system of trading were identified for setting up of an effective institutional framework that regulates the system and encourage value adding activities and increase opportunities for marketing and trade. Finally, it can be said that despite the constraints that exist today, the possibilities are quite attractive and the IGAD sub Region needs to organize its production base to take advantage of these opportunities. Accordingly, the following few recommendations are forwarded for possible consideration by IGAD member States.

4.19.1 Recommendations

a) A clear policy and strategy for the development of leather sector should be developed by member State that have not done so far.

b) Strong extension service that caters for both proper animal husbandry and raw material management should be in place.

c) In the short and medium term, to make maximum use of low quality hides and skins, use of technologies that converts the poor quality materials to good quality leather products can help value addition to grow.

d) The improvement in hides and skins at animal husbandry stage and its sustainability will rely, primarily, on the benefits it brings to the producer. Thus, in live animal marketing, due consideration of the condition of the hide or skins should form the basis of the agreed price so as to benefit the livestock owners at the very onset of the animal sale.

e) Institutionalizing the management of the leather sector will provide a sustainable approach to growth of the sector. In this respect, the Kenyan and Ethiopian (the Kenyan Leather Development Council (KLDC) and the Ethiopian Leather Industry Development Institute (LIDI)) are good examples to be shared with the rest of IGAD Member States.

f) The member states need to develop the leather industry in general and promote industrialization and value addition in the sub-sector as it has the potential for increasing income livelihood diversification and employment generation in the region.
Dear Respondent,

IGAD is assessing the good practices in hides and skins, along the value chain in the region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose.

1. Did you slaughter any animal in 2013?  
   a) Yes  
   b) No

2. What kind of animal did you slaughter?
   a) Only bovine  
   b) Sheep  
   c) Goats  
   d) Other (Specify)

3. If yes, how many for hides per day?
   a) More than 25  
   b) 15 to 25  
   c) 5 to 15  
   d) less than 5

4. If yes, how many for skins per day?
   a) more than 25  
   b) 15 to 25  
   c) 5 to 15  
   d) less than 5

5. What was the primary purpose of the slaughter?
   1. For commercial purpose
   2. For festivities and occasions
   3. For personal consumption
   4. For other purpose (Please specify)

6. Do you have special place to slaughter the animals?  
   a) Yes  
   b) No

7. If “No”, where do slaughter them?

8. Did you sell Hides or Skins to market in 2013?  
   a) yes  
   b) No

9. If no, why?

10. If yes, where did you sell your Hides or Skins?
    a) at village market  
    b) at district market  
    c) Other (specify)

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

13. What type of Hides did you sell in 2013  
   a) Fresh  b) Sun dried  c) Salted 

14. What type of skins did you sell in 2013  
   a) Fresh  b) Sun dried  c) Salted 

15. How quick do you usually take your Hides and Skins to the market? 
   a) Immediately after slaughtering  b) within a day  c) within 2 days 
   d) After 3 days 

16. What was the average selling price of hides and skins in 2013? 
   a) Hides ____________  b) Sheep Skin ________  c) Goat skin__________ 

17. What transport method did you use to deliver hides and skins to the market or collection center? 
   a) Man power  b) Pack animals  c) Bicycle  d) Vehicle 

18. How far is your slaughtering site from market or collection center 
   a) Less than 5 km  b) Between 6 and 10 km  c) More than 11 km 

19. Did you face difficulty in finding buyers when you wanted to sell? 
   a) Yes  b) No 

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

21. Have you ever learnt new methods of production of hides and skins? 
   a) Yes  b) No 

22. If yes, from where? 
   a). Publications (printed material)  b). Seeing neighbors or friends 
   c) Talking to neighbors  d) Salesmen  e) Own family 
   f) Attendance at a course  g) Extension agents  h) Educational tours 

23. Were you aware of the market price before you sell your Hides and Skins? 
   a) Yes  b) No 

24. If yes, how did you get price information of Hides and Skins?
25. How did you qualify the reliability of the information?
   a) high  
   b) moderate  
   c) low

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

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

28. What did you do if 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  
   e) Sell on other market day  
   f) other (specify)

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

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

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

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

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

34. What problems did you face while selling your hides and skins in 2013?
   a) Price fall  
   b) lack of competitive market  
   c) lack of price information  
   d) Other (specify)

35. Please indicate major constraints to hides and skins quality problems in their order of importance.
   a)  
   b)  
   c)  
   d)  
   e)  
   f)  

Dear Respondent,

IGAD is assessing the good practices in hides and skins, along the value chain in the region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose.

1. How long have you been in Hides and Skins collecting?
   a) For more than 10 years b) 6-10 years c) 1-5 years d) less than 1 year

2. When did you participate in Hides and Skins collection 2013?
   a) Every day b) Every market day c) Only during holidays d) Other (specify) ------

3. Who set price of hides and skins when you sell in the market?
   a) Myself b) Buyers (specify) c) By negotiation d) Other (specify)

   ___ Who set price of hides and skins when you buy in the market?
   a) Myself b) Buyers (specify) c) By negotiation d) Other (specify)

4. Which type of goat Skin is highly demanded in the market in 2013?
   a) Fresh b) Air dried c) Salted d) Other (specify)

5. Which type of sheep Skin is highly demanded in the market in 2013?
   a) Fresh b) Air dried c) Salted d) Other (specify)

   What was the average selling price of hides and skins in 2013?
   a) Hides ___ b) Sheep skin c) Goat skins ___

6. Did you use any preservation method for hides and skins?
   a) Yes b) No
7. If yes, what preservation method did you use for hides?
   a) Air dried  b) Wet Salted  c) Other (specify) 

8. If yes, what preservation method did you use for goat Skins?
   a) Air dried  b) Wet Salted  c) Other (specify) 

9. If yes, what preservation method did you use for sheep Skins?
   a) Air dried  b) Wet Salted  c) Other (specify) 

10. From whom did you mainly purchase Hides & Skins in their order in 2013?
    a) Butcheries  b) Hides & Skins Broker  c) Other collector  d) Farmer
    e) Other (specify) – 

11. What parameters did you use to purchase raw hides?
    a) Weight  b) Shape/pattern,  c) Substance
    d) Source (Origin of breed)  e) Others (specify) 

12. What parameters did you use to purchase raw skins?
    a) Size  b) Shape/pattern  c) Substance  d) Source (Origin of breed)
    e) Others (specify) 

13. What were the major defects observed in the raw hides you purchased?
    a) Brand  b) Broses  c) Poor pattern  d) Fallen hide
    e) Putrefaction  f) Dirtiness  g) Improper bleeding  h) Other (specify) 

14. What were the major defects observed in the raw goat skin you purchased
    a) Broses  b) Poor pattern  c) Fallen skin  d) brand
    e) Putrefaction  f) Dirtiness  g) Improper bleeding  h) Other (specify) 

15. What were the major defects observed in the raw sheep skin you purchased?
    a) Brand  b) Broses  c) Poor pattern  d) Fallen skin
    e) Putrefaction  f) Dirtiness  g) Improper bleeding  h) Other (specify) 

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

17. 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) 

18. How did you qualify the reliability of the information?
    a) High  b) moderate  c) low
19. How did you qualify the timeliness of the information?  
a) Timely  
b) outdated

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

21. To whom did you sell the Hides & Skins you purchased in 2013?  
a) wholesale (name & address)  
b) Tannery/Factory (name & address)  
c) Other (specify)

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

23. Who set the selling price of hides and skins in the market?  
a) Myself  
b) Buyers (specify)  
c) By negotiation  
d) Other (specify)

24. Did the price of Hides & Skins in this market vary from season to season?  
a) Yes  
b) No

25. If yes, what was the reason?  
a) Export price variation  
b) Factory/Tannery price variation /setting  
c) Wholesalers price setting  
d) Other (specify)

26. What mode of transportation did you use for the hides and skins?  
a) Carrying  
b) Trucking  
c) Draft animals  
d) Other (specify)

27. What did you do when 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)

28. Did you store Hides and Skins in 2013?  
a) Yes  
b) No

29. If yes, how did you store the Hides and Skins?  
a) Salted  
b) dried  
c) other (specify)

30. If you stored, what was the motive behind storing?  
a) Expecting high price  
b) Lack of market demand  
c) Collection and Transportation purpose  
d) Other (specify)

31. Was there any change in the quality of the stored Hides and Skins?
32. Are there most important marketing facilities and services in this market?
   a) Yes   b) No

33. 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) Transportation</td>
<td>a) Market information</td>
</tr>
<tr>
<td>b) Marketing area (controlled)</td>
<td>b) Controlling regulations</td>
</tr>
<tr>
<td>c) Water supply</td>
<td>c) Slaughter houses</td>
</tr>
<tr>
<td>d) Others (specify) -------------</td>
<td>d) Others (specify)</td>
</tr>
</tbody>
</table>

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

35. What technical and administrative support did you get from concerned Institutions in 2013?
   a) Training   b) Technical follow up   c) Quality assurance
   d) Different incentives  e) Experience sharing  f) Other (specify)  

Survey Questionnaire for Hides and Skins
Wholesale Traders

Dear Respondent,

IGAD is assessing the good practices in hides and skins, along the value chain in the region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose.

1. How long have you been in Hides & Skins trading?
   a) Over 6 years  b) 4 to 6 years  c) 1 to 3 years  d) Less than a year

2. From whom did you buy Hides & Skins?
   a) Wholesaler  b) Rural collector  c) Farmer/Consumer  d) Other (specify)

3. Do you get information on prices of hides and skins in the market? a) Yes  b) No
   __ if yes, what was the source of information?
   a) Other Hides and Skins traders  b) Tannery  c) personal observation
   d) Mass media  e) Other (specify)

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

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

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

7. Is there price variation of Hides and Skins in the market? a) Yes  b) No.

8. If yes, what could be the reasons?
   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)

9. Are there informal marketing groups buying/selling hides and skins?
   a) Yes  b) No
10. If yes, indicate their degree of influence on the market?  
   a) High    b) Medium    c) Low

11. Who buys Hides & Skins for you?  
   a) Myself    b) Friends    c) Partners    d) commission agent    e) Others (specify)

12. 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)

13. What defects did you observe in the raw skins you purchased?  
   a) Bruise    b) Poor pattern    c) Fallen hide/skin    d) Putrefaction    e) Dirtiness    f) Improper bleeding    g) Brand    h) Other (specify)

14. What did you think the causes of the defects observed?  
   a) Pre-slaughter    b) Peri-slaughter    c) Pos-slaughter    d) Other Specify

15. Did you use additional Preservation to Hides & Skins before taking to terminal market?  
   a) Yes    b) No

16. If no, Why?______________________________________________________________

17. If yes, what method of preservation did you use?  
   a) Salted    b) Sun dried    c) Air dried    d) Other (specify)

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

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

20. Have you ever been advised by any governmental or non-governmental organizations about Hide and Skins quality and trading?  
   a) Yes    b) No

22 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)

23. What major problems did you face in hides and skins marketing? If you have more than one problem, please number them in order of severity from mild to severe.  
   a) Low price    c) Informal market    e) Unfair competition    b) Low demand    d) Low quality    f) Others (specify)

24. Indicate according to their order of importance.-------------------------------------------------------
Survey Questionnaire for Hides and Skins
Leather Processors (Tanners)

Dear Respondent,

IGAD is assessing the good practices in hides and skins, along the value chain in the region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose.

1. How much raw Hides and Skins did you buy in 2013?

<table>
<thead>
<tr>
<th>Product type</th>
<th>Grade (qnty)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1&lt;sup&gt;st&lt;/sup&gt;</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. Who buys raw Hides & Skins for you?*
   a) Our self   b) Commission agents c) Partners   d) Others (specify)

3. 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)

4. 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 ---------------------
5. What major defects did you observe in the raw skins 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
   -------------------------------------------------------------

6. 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)
   -------------------------------------------------------------

7. What are the major products obtained after processing?

   e) other (please specify)
   ______________________
Dear Respondent,

IGAD is assessing the good practices in hides and skins, along the value chain in the region, in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose. Please read the following instruction before you start responding to the statements given below.

Please make √ in the box of your choice. The scale 1-5 denotes the following. If you strongly disagree with the given statement because you can make a statement that can disqualify the suggested comment, please choose number 1. If you just disagree with the statement, please choose number 2. If you are not sure to agree or disagree with the statement because you have enough evidences to justify both choices (agree/disagree) or because you don’t have enough information to make decision, please choose number 3. If you just agree with the statement choose number 4. If you have a particular reason or supporting evidence to strongly agree with the suggested statement please choose number 5.

You are also kindly requested to give explanation for your choice in the space provided below the statements. This is very important for us to fully understand your thoughts and opinions on the issues raised. We expect explanations for all your choices but our expectation is much higher if your choices are number 1 or number 5.

Position of respondent in the organization ______________________________

1. In the absence of effective linkages between actors involved in leather technology generation, transfer, marketing and utilization, effective and quicker development is unlikely to happen.
   1______ 2______ 3______ 4______ 5______
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________

2. My responsibility is restricted by law/by job description and I don’t want to cross that boundary even if I come across with a new and important work, which is not essentially part of my job description.
   1______ 2______ 3______ 4______ 5______
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
3. These days (when compared to the situation before twenty years) the number of actors that deals with leather sector development at grassroots level, has increased significantly.

4. The research and extension system is not responding to the changing situation in the grassroots environment (mentioned under question 3), because their interaction and engagement is still limited to a few actors (usually farmers) despite the growing number and complexity of actors.

5. Our main source of agricultural knowledge/technology (> 95%) is the formal research system and we will continue to depend on that.

6. Although it is important and timely, we have a blurred vision on how to align our works with the developing market situation.

7. Civil servants (Researchers and extension workers) are not yet equipped with the necessary knowledge, skills, attitude, and approaches to realize market oriented business in leather sector.

8. I don’t think SMEs could generate knowledge or new idea that could make meaningful impacts in the leather sector.
9. Planning of extension activities in leather sector is still mainly done at regional level, allowing the grassroots extension actors little chance of flexibility to try new ideas.

10. I don’t think the private sector has enough confidence and trust in the capacity of researchers in the leather sector, to enter into research partnerships to solve their practical problems.

11. The quickly growing media technology in the world has significantly increased our access to knowledge (example internet). Gradually, this will make the role of public research in knowledge production less relevant.

12. It is only the low level of hides and skins production in the region/country that causes lower market in the region for the sector.

13. Because there is no inspection mechanism for quality in the market, the hides and skins sold in the informal market is highly of inferior quality.
14. It is highly unlikely to improve the livelihood of the SMEs in the leather sector unless new technologies are introduced and replace the existing traditional practice

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

15. There is no forum created or platform to nurture exchange of knowledge between the private sector, state agencies, civil society organizations and leather sector associations.

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

16. The shortage of skilled human power in the leather sector, particularly on tanning and leather goods manufacturing related activities has hindered the growth of leather industry in the country/region

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

17. Most of the hides and skins collected from the rural producers goes to the formal market

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

18. Unless quality based pricing system is institutionalized in the country, fair grounds of competition among the hides and skins buyers is unlikely to take place

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

19. The main reason why the number of people involved in hides and skins processing is low in the region/country, is because of the low level of hides and skins production in the system.

1____ 2____ 3____ 4____ 5____

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
20. Do you assist the producer to uptake the new hides and skins technology?
   a) yes      b) No

21. If yes, mention the types of technologies that are transferred to the producer?

1. ___________________________ 5. ___________________________
2. ___________________________ 6. ___________________________
3. ___________________________ 7. ___________________________
4. ___________________________ 8. ___________________________
Annex VI

Survey Questionnaire for Hides and Skins
Training/Research Institutions and Associations

Dear Respondent,

IGAD is assessing and documenting the good practices in hides and skins, along the value chain in the region in order to share information for the purpose of improving the performance and in turn income from the sub-sector. The study team strongly believes that you are one of the stakeholders who will provide valuable information for the study.

Your sincere response is highly appreciated and will be used only for this study purpose. Please read the following instruction before you start responding to the statements given below.

1. Is the planning of the leather sector activities of your Institution/association participative, involving actors at grass root level?
   a) Yes b) No

2. To carry out your leather related activities, does your institution/association usually work alone or with other institutions?
   a) Alone b) With other institutions

3. If the answer is “With other institutions” is it in monodisciplinary or multidisciplinary teams?
   a) Mono-disciplinary b) multi-disciplinary

4. How often do you communicate with the following people/institutions regarding your leather related activities (1 = never 2 = rarely 3 = annually 4 = monthly 5= more often)?

<table>
<thead>
<tr>
<th>People / Institutions</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>4</td>
<td>5</td>
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<tr>
<td>Business men/women in hides and skins trading</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Tanners</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Leather goods manufacturers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Non- governmental organizations (NGOs)</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Government regulatory bodies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Other Professional Associations</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>Consultancy groups in leather sector</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Scientists/institutions in other countries</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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</tbody>
</table>

5. Is there forum or platform created to nurture/exchange knowledge and good practices within and between the private sector, state agencies, civil society organizations and leather sector associations?
   a) yes b) No
6. Does your institute/association assist the producers/tanners/manufacturers to uptake new technologies in hides and skins, leather and leather products?
   a) yes  
   b) No

7. If yes, mention the types of technologies that are transferred to the producers/tanners/manufacturers?
   1. ________________________________  
   2. ________________________________  
   3. ________________________________  
   4. ________________________________  
   5. ________________________________  
   6. ________________________________  
   7. ________________________________  
   8. ________________________________

8. Do you think that the private sector has enough confidence and trust in the capacity of your institute/association, to enter into partnership - to solve their practical problems in leather sector?
   a) Yes  
   b) No

9. If the answer is no, what is expected from your institution to get full confidence and cooperation of the private sector?
   ________________________________
   ________________________________
   ________________________________
   ________________________________

10. In your opinion what are the major problems of the leather sector that requires urgent action. (Please list them in order of importance, problem no1 being the most important).
    ________________________________
    ________________________________
    ________________________________
    ________________________________

11. In your opinion, what are the good practices from your institute/association to be shared to others?
    ________________________________
    ________________________________

12. Any recommendations for the growth of the sub-sector and better income? .......
    ...........................................................................................................

Thank You for Your Cooperation
<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Position and Name of Organization</th>
<th>City, Country</th>
<th>Contact Address</th>
<th>Telephone</th>
<th>Mobile/Cell</th>
<th>Email</th>
</tr>
</thead>
<tbody>
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<td>17</td>
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<td>19</td>
<td>Ombui Jackson (PhD. Prof.)</td>
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<td>25</td>
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<td>29</td>
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<tr>
<td>30</td>
<td>Morris Batali (Ambassador)</td>
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<tr>
<td>31</td>
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<tr>
<td>32</td>
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<td>Manager, Djibouti Municipal Abattoir</td>
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<tr>
<td>33</td>
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<tr>
<td>34</td>
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<tr>
<td>35</td>
<td>Peter Andrea Samuel (Ms.)</td>
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<tr>
<td>36</td>
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<tr>
<td>38</td>
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Guidelines Used for Interviews

1. Based on your experience, what are the major problems the sector that you face?

2. In regards to the GDP, do you think the hides and skins industries in your country have substantially contributed to country?

3. Do officials concerned or related to your sector offer you support and encouragement in times of your needs?
References


13. COMESA Regional Strategy for the Leather and Leather Products Value Chain.

(Footnotes)

1 * All these tables were compiled by the Study Team using data from World Statistical Compendium for raw hides and skins, leather and footwear 1992-2011