DEVELOPMENT POTENTIAL AND CONSTRAINTS OF HIDES AND SKINS MARKETING IN ETHIOPIA

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1. Introduction

Archaeological studies have shown that hides and skins have been used since antiquity as clothes, vessels, bedding, and possibly structurally in ancient dwelling places. At present, leather is used in various applications. Hides and skins, raw materials for the tanning industry, are renewable and easily perishable resources (Arugna, 1995). Their production is dependent on the rearing, management and disposal of the livestock population. The availability of hides and skins through slaughtering or death of livestock is of particular importance to the leather industry. Hides and skins could be obtained from fish, birds, and reptiles as well as wild and domesticated animals. The most important sources are cattle, sheep and goats.

According to MEDaC (1999), the livestock population of the country has risen to 34.1, 30.54, and 21.11 million head of cattle, sheep and goats, respectively, in the year 1998/99, up from the 1993/94 figures of 31.45, 27.5 and 19.76 million head of cattle, sheep and goats, respectively. The annual average growth rate was 1.2, 1.4 and 0.5 %, respectively (MEDaC, 1999).

Based on annual offtake rates of 7% for cattle, 33% for sheep and 35% for goats, the potential production is estimated at 2.38 million cattle hides, 10.07 million sheepskins and 7.38 million goatskins in 1998/99. This raw material of the leather industry is mainly derived from local areas of the country where basic amenities for slaughtering and subsequent marketing are either not in existence or lacking. Additional sources of hides and skins include slaughter slabs, municipal slaughterhouses, the limited number of export abattoirs, and meat and meat product processing plants. The wide dispersion of the slaughtering points across the country, along with the lack of proper slaughtering amenities has a negative impact on the volume and quality of hides and skins entering the formal market chain. As a result, all available raw material is not recovered; a considerable proportion is wasted before reaching the tanneries, the final consumers of the raw hides and skins.

Up until 3 to 4 years ago, hides, skins, leather and leather products provided for the second largest amount of foreign exchange earnings following coffee and accounted for 14 to 16% of the country's total foreign trade revenue. Recently, its share has dropped to nearly 7% in 1998/1999 due to a decreased price for leather in the international market and the deterioration of the raw material quality. Considering the development potential and economic importance of hides and skins, in the last 2 to 3 decades the government has launched different development programs aimed at increasing the supply and improving the quality of the raw material. Despite these development interventions, hides, skins and the leather industry are still constrained by the poor quality of raw materials, lack of an efficient market structure, a weak extension service, competition from local/rural tanning industries, and a lack of price incentive for production of good quality raw material.

2. Historical Development of Hides and Skins Improvement and Marketing in Ethiopia

2.1 Hides and Skins Improvement and Marketing Development

2.1.1

The emergence of modern tanning in Ethiopia dates back to 1918 and 1927 with the establishment of the then ASCO (currently Addis Tannery) and Darmar/Awash (currently ELICO) Tanneries, respectively. Between 1954 and 1976, Dire, Mojo and Combolach tanneries were established (Darge, 1995). The number of tanneries in the country at present has reached 20, of which 16 are private and 4 are government owned.

However, improvements in hides and skins did not keep pace with the beginning of modern tanning in the country and no recommendations were in place until the establishment of the Livestock and Meat Board (LMB) in 1964 by Proclamation No. 212/64. The LMB laid down a foundation for moving the traditional method of preservation of hides and skins to modern preservation technique. The traditional method, which was dominated by ground drying, sun drying, bathing/soaking of hide, pole drying, smoking and pegging of sheep and goat skins on walls, shifted to frame drying of hides and skins. Consequently, two categories were developed, "butchery" for Addis Ababa slaughterhouse hides and "non-butchery" for hides obtained from other sources. A differential price scheme was set for the two categories so as to promote the production and supply of better quality raw material and to discourage the improperly preserved hides from reaching the central market.

These achievements were attained as the result of the activities of the LMB, including the employment, training and assignment of improvement technicians for hides and skins at potential provinces, preparation of hides and skins (HS) preservation manuals, establishment of market centers, monitoring the construction of slaughterhouses and drafting HS regulations.

The Second Livestock Development Project (SLDP), which was an IDA supported project (1973 - 1981) aimed to improve the livestock marketing infrastructure and quality of HS, has played a significant role in establishing the HS extension and regulatory service. The project's major achievement was the construction and supervision of 58 slaughterhouses with attached HS sheds throughout the country and the deployment of staff for the HS improvement and monitoring. To facilitate the trading of HS, Legal Notice No. 433 of 1973 was brought into law by the Ethiopian Standard Authority (ESA). The Ministry of Agriculture (MOA) was delegated by ESA to implement the standards. The MOA issued its trade regulation Legal Notice No. 25 of 1975 to regulate and license HS traders and their premises, to conduct routine inspections and to provide certificates for raw hides, skins and pickled products destined for local and export markets.

2.1.2 Institutions Involved in HS Improvement & Marketing.

a. Ministry of Agriculture

The responsibility of the hides and skins extension and regulatory service was vested on the MOA after LMB and SLDP ceased operation. The Animal Resources Marketing Department (ARMD) of MOA took over this responsibility together with the HS improvement staff of SLDP that were transferred to MOA. The focus of ARMD was to strengthen the HS extension service by employing HS technicians and experts working all over the country. Apart from the normal development efforts made through the regular program, a number of technical cooperation programs and pilot projects that were fully or partially funded by FAO, EEC/EU and UNDP/UNIDO were designed and implemented.

These development programs by and large concentrated on assisting the regular HS improvement activity of ARMD. These include: capacity building; launching the training program for HS traders, artisans and butchers; provision of inputs such as field vehicles, computer facilities and HS preparation equipment; fielding of international consultants to carryout studies; and construction of rural slaughter slabs and hides and skins drying sheds. Such development efforts moved the supply and quality of raw material a step forward, thereby increasing the contribution of hides, skins and the leather industry to the national economy.

b. Ministry of Trade and Industry (MOTI)

Before the nationalization of private tanneries in 1975, the ministry, in addition to issuing trade license for HS traders was also responsible for the overall development and supervision of the leather industry.

c. Hides and Skins Marketing Corporation (HSMC)

The Hides and Skins Marketing Corporation (HSMC), operating under the supervision of the MOTI, was

involved in the procurement and subsequent export of air-dried raw HS until raw HS export was banned in 1986. The HSMC was collecting HS from the different regions of the country through its branch offices located in the northern, central, southern and eastern zones.

d. National Leather and Shoe Corporation (NLSC)

During the period of 1974/75-1992/93 following the nationalization of private tanneries by the government, the National Leather and Shoe Corporation was responsible for administering the leather sector (8 tanneries, 6 shoe factories and 1 garment factory). It was supervised by the then Ministry of Industry (MOI) currently by MOTI. Due to the introduction of market economy policy, NLSC was dissolved in 1992/93 to give management autonomy for the tanneries and factories.

e. Ethiopian Tanners Association (ETA)

Following the dissolution of NLSC, a new body known as the Ethiopian Tanners Association (ETA) was founded in 1992/93 to promote the development of the leather sector and to resolve common issues of the sector. Currently, ETA has 19 member tanneries out of the 20 tanneries existing in the country. It is also a member of the Eastern and Southern Africa Leather Industry Association (ESALIA). At present, ETA is implementing a pilot project funded by Common Fund for Commodities (CFC) in the southern part of the country to introduce a HS pricing scheme based on quality.

f. Quality & Standard Authority of Ethiopia (QSAE)

The Authority issued Raw Hides and Skins Standards No. 433/1973 and delegated MOA as the implementing agency the same year the standards were issued. Since then the Authority has not been involved in raw HS improvement and trade promotion. A quality certification service for semi-processed and finished leather ready for export is provided by QSAE.

g. Livestock Marketing Authority (LMA)

The Livestock Marketing Authority (LMA), established in 1998 by proclamation No. 117/98 to promote the local and export marketing of animals and animal products, is engaged in devising development strategies for HS quality improvement. At present, surveys and studies that help to assess the overall situation and constraints are underway.

h. National Productivity Improvement Center (NPIC)

The NPIC, currently an autonomous body, has played a significant role in the development of the country's HS and leather sub-sector. In the last two decades the center in collaboration with MOA and tanneries conducted numerous training courses on HS quality improvement, grading and leather technology for HS technicians, supervisors and experts of the MOA residing all over the country.

i. Leather and Leather Product Technology Institute (LLPTI)

The institute was established in 1998 by Proclamation No. 4/98 with the objective of providing short and medium term training on leather technology for B.Sc., diploma and high school graduates and tannery technicians.

3. Production and Utilization of Hides and Skins

3.1 Production

The estimated annual potential production of hides and skins projected from livestock population data of MEDaC (Table 1), based on annual off-take rates of 7, 33 and 35 % for cattle, sheep and goats, respectively, is depicted in Table 2.

Table 1. Livestock population data of Ethiopia ('000)

Year	Cattle	Sheep	Goats
1993/94	31450	27529	19762
1994/95	31985	28243	20133
1995/96	32624	28977	20512
1996/97	33293	29760	20898
1997/98	33692	30177	21002
1998/99	34096	30539	21107
Annual avg. growth rate (%)	1.2	1.4	0.5

Source: MEDaC

Despite the recurrent drought, prevalence of many killer livestock diseases and feed shortages that have adverse effects on the population of livestock, the annual livestock population and HS data presented in Tables 1 and 2 reveal a constant increment over the 6-year period (1993/94-1998/1999). This ambiguity is attributable to the lack of an accurate source of information and the failure of concerned institutions to conduct a comprehensive livestock survey of the country. The estimated annual production of HS, which stood at 2.2 million hides, 9.08 million sheep skins and 6.92 million goatskins in 1993/94, rose to 2.38, 10.07 and 7.38 million pieces, respectively, in the year 1998/1999.

The main sources of hides and skins are in rural areas where the major proportion of slaughtering is carried out at the household level or in backyards that are not equipped with any amenities for undertaking and following proper slaughtering, ripping and flaying procedures. A considerable number of the raw material is derived from slaughter slabs constructed either by local communities, regional governments or HS development projects. Municipal slaughterhouses, local and export abattoirs and meat and meat products processing plants are other sources of HS. The regional distribution of the slaughtering premises is shown in Table 3 below. According to the information obtained from regional agricultural bureaus during a field survey conducted by the livestock marketing authority staff in 1999, there are 113 municipal slaughter houses, 53 rural slaughter slabs, 5 meat and meat products processing plants and 5 export abattoirs in the country.

In the absence of accurate and reliable data on the slaughter rate on these premises, the generally accepted estimates of the 1980's reveal that urban slaughterhouses account for only 20% of the production of hides while the remaining 80% is accounted for by rural areas. At the number of municipal slaughterhouses, rural slaughter slabs and export abattoirs has increased, their supply of hides is expected to increase as well. The current estimate of the hide supply from rural areas falls in the range of 50 to 60% of the country's annual total production.

Table 2. Production of hides and skins ('000 head)

Year	Hides	Sheep Skins	Goat Skins
1993/94	2201	9084	6917
1994/95	2239	9320	7046
1995/96	2284	9562	7179
1996/97	2330	9821	7314
1997/98	2358	9958	7350
1998/99	2386	10078	7387
Annual average growth rate	1.0	2.2	1.4

Source: MEDaC, 1999

With regard to skin production, except the export abattoirs engaged in the production of fresh, chilled mutton and goat meat for export, the contribution of other slaughtering premises in terms of skin supply is very negligible. About 90 to 95% of the skin production is derived from urban as well as rural backyard slaughters and the remaining 5 to 10% from major urban slaughterhouses and export abattoirs.

Table 3. Distribution of slaughter premises by region.

Region	Slaughter House	Slaughter Slab	Meat Processing plant	Export Abattoir
SNNPR	31	27	1	-
Oromiya	42	20	-	5
Amhara	15	6	2	-
Tigrai	15	-	-	-
A. Ababa	3	-	1	-
Afar	1	-	-	-
Somali	1	-	-	-
Harari	1	-	-	-
Dire Dawa	1	-	1	-
Others	3	-	-	-
Total	113	53	5	5

Source: LMA, 1999/2000

3.2 Supply and Utilization of Hides and Skins

The actual market supply of hides and goatskins, unlike sheepskins, is far below the production potential. This can be seen from 1994/95 production and tannery purchase data. Based on the estimated production of HS (1994/95), which stands at 2.23 million hides, 9.32 million sheepskins and 7.04 million goatskins, the amount captured by tannery purchase in the same year is 48, 75 and 97% of the available potential of cattle hides and goat and sheep skins respectively. The balance is either utilized by local tanners, left unutilized or smuggled into neighboring countries. On the other hand, the raw material supplied to the existing tanneries of the country is further processed to semi-finished or finished leather for local and export market.

Because reliable information is lacking, the respective proportions of the non-recovered hides and skin, i.e., utilized by local tanners, wasted without any use and directed to illicit trade, could not be indicated. However, according to one field survey report of LMA conducted in 1999 in Amhara region, there were 5,299 local tanners that consumed some 85% of the region's annual hide production, amounting to 626,569 hides. Moreover, the 865 local tanners in Tigrai region use on average 8 hides and 8 to 10 goatskins per month for converting the raw material into different household or farming input items. It is believed that quite a considerable number of local tanners found in other regions of the country make use of the raw material as well. It is therefore important to investigate the pros and cons of the local tanning industry when designing any development strategy/program for hides and skins.

With regard to regional contribution of HS supplied to tanneries, in the 1995/96 fiscal year, data collected from regional agriculture bureaus reveal that Ormoyia accounts for 38.9%, SNNPR for 28.9%, Addis Ababa for 19.2% and Amhara for 7.3% of the total cattle hide supply. The balance is collected from the remaining regions of the country. Some 80% of Addis Ababa's hide supply is accounted for by Addis Ababa Abattoir, Kara and Akaki Slaughterhouses (Addis Ababa Agricultural Bureau, 1998).

The major suppliers of sheepskins are Amhara, Oromiya and the Southern Nations Nationalities and Peoples Regions (SNNPR) accounting for 34.5, 32.9 and 16.6%, respectively, of the total sheepskins

supplied to tanneries. Addis Ababa's share is 7.9 % while Tigray's is 7 %. On the other hand 45.4, 26.4, 11.7 and 11.6% of the total goatskins supplied to tanneries are collected from Amhara, Oromiya, Tigray and SNNPR, respectively. The other region's contribution is in the range of 0.02 to 2% (MOA, 1997). Although recent data on HS supply covering all regions of the country is not available, the market share of the major HS supplying regions is not expected to show much variation over the last 4 to 5 year period.

3.3 Preservation of Hides and Skins

Hides and skins ready for market are preserved either by air-drying or wet salting. In areas like Addis Ababa where the tanneries are located close to the sources of the raw material, it is supplied directly to the tanneries in a fresh state without being preserved. Air-drying is the traditional system of preservation in Ethiopia, while wet salting was introduced to the country about two decades ago (Devasy, 1990). According to the 1990 National Leather and Shoe Corporation annual report, 77.8% of the hides purchased by tanneries in that year were air-dried, 4.4% wet salted and 17.8% fresh. Likewise, of the total sheepskins 14.4, 80 and 5.6% were air-dried, wet salted and fresh, respectively. With regard to goatskins that reached central market only 0.8% were fresh, 25.6% wet salted and 73.6% air-dried.

At present, since the demand for wet salted raw material by tanneries has grown over the last two decades, the proportion of skins reaching tannery gates in wet salted form has shown a significant growth. It is estimated that 20% of the county's total hide supply is green/fresh, (from Addis Ababa Abattoir and slaughterhouses) and the remaining 80% air-dried. In the case of sheepskins, 8 and 92% are fresh and wet salted, respectively, while 2% of the total goatskins collection by tanneries is green, 75% wet salted and 23% air-dried.

3.4 Unique Features of Ethiopian Hides and Skins

Ethiopian HS have good reputations in the international leather market for their unique natural substance of fitness, cleanness, compactness of texture, thickness, flexibility and strength. The cattle hides, identified as "Zebu type", are popular for their fine grain pattern and fiber structure that are well suited for the production of quality upper leather. The highland sheepskins known as "hair sheep/selale type" are considered to be the world's finest and have a highly compacted texture. They are excellent raw material for high quality leather for dresses, gloves, sports gloves and other garments. This unique feature of the Ethiopian sheepskins enables them to fetch higher prices in the international leather market. Goatskins from the highlands are categorized as "bati-genuine" and those from the lowlands as "bati-type" in the international market. "Bati-genuine" is associated with highest quality class goatskins in the world. The particular characteristics of Ethiopian bati-genuine goatskins are their thicker, highly flexible and clean inner surface and are known world-wide for being excellent raw material for producing high quality suede leather.

4. Marketing of Hides and Skins

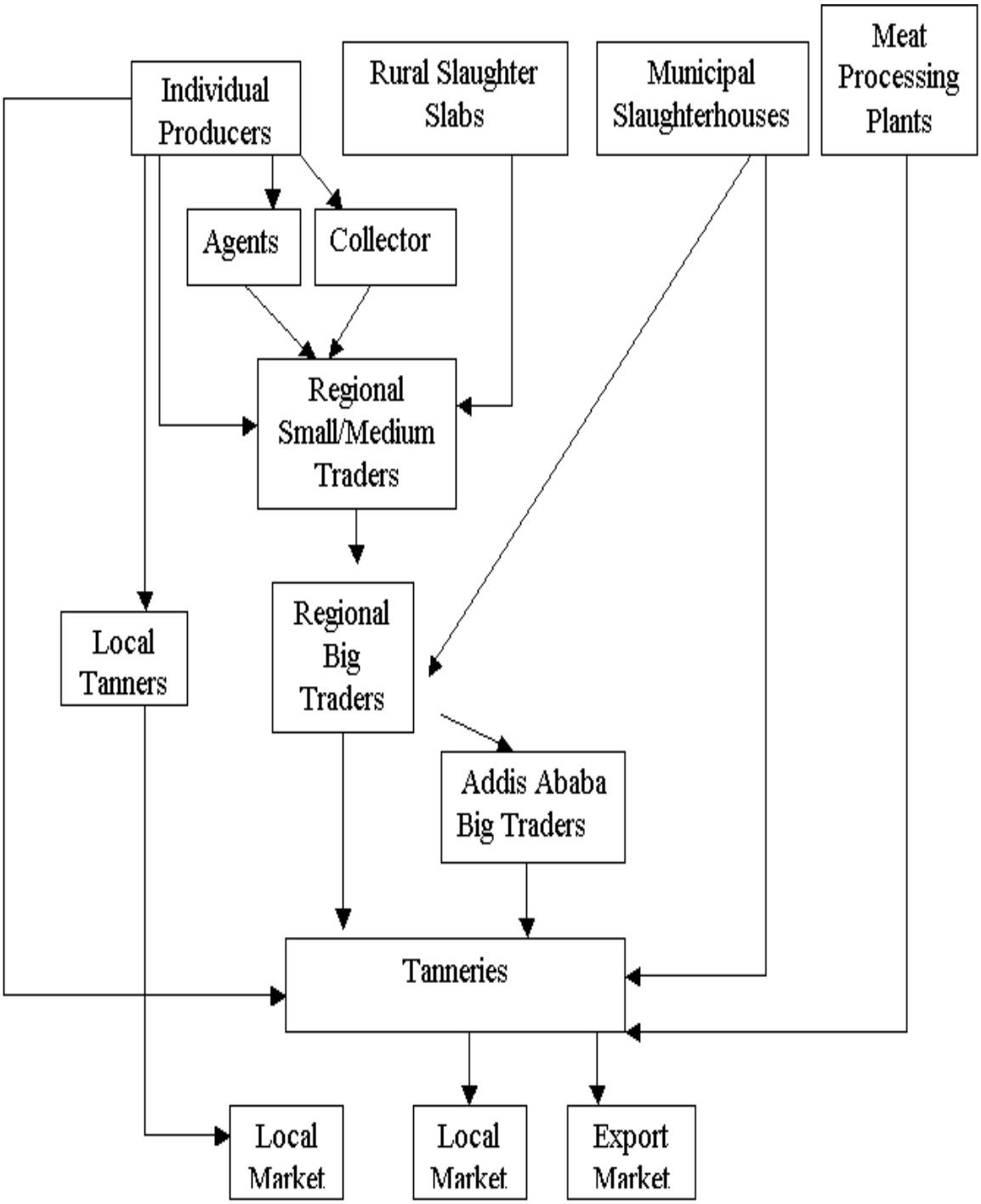
4.1 Market Structure

The marketing of HS starts at the producer/consumer level and passes through a chain of middlemen until it reaches the tanneries (Fig.1). The market chain for raw HS consists of the primary producers/consumers, who are the initial sources (individual meat consumers, rural slaughter slabs, municipal slaughter houses, abattoirs, meat processing plants), agents of traders, collectors, local tanners, regional medium/small traders, regional/Addis Ababa big traders and tanneries. The individual consumers who kill animals in their backyard sell the HS either to agents, collectors, or directly to regional small/medium traders. After preservation by air-drying or wet salting, the HS are passed on to big traders and then to the tanneries. The tanneries can be supplied directly from the slaughter premises, regional big traders or Addis Ababa big traders as well.

The tanneries process the HS received from their suppliers either in the green (fresh), air-dried or wet salted states to semi-finished or finished stages for both local and export markets. The market structure for raw

HS is illustrated in Figure 1.

Figure 1. Market structure for hides and skins



4.2 Tanneries

The tanneries are at the final end of the marketing chain of raw HS. As they are the end users of the raw material, their role in the trade is decisive all the way along the market chain. There are 20 tanneries of which 17 are operational in the country. (Table 4).

Based on 300 working days per year, the computed annual tanning capacity of the 17 tanneries is 1.65 million hides and 36.49 million skins. With reference to capacity utilization, taking the annual total purchase of tanneries as 1.07 million hides and 14.3 million skins, the capacity utilization for hides is 64.8%, while for skins it is only 38.6%. It is worth mentioning here that the demand of tanneries for raw material does not have any impact on the supply of hides and skins. The supply rather solely depends on the slaughtering capacity of the meat consuming population of the country. It is evident that the new emerging tanneries as well as those already in the business will face a challenge to utilize even a certain percentage of their skin tanning capacity.

4.3 Export performance of hides and skins

As indicated earlier, until recently the export of hides, skin, leather and leather products was the second largest source of foreign exchange earnings of the country next to coffee. During the year 1989/1990 the share of HS in total exports and in livestock and livestock products exports was 17.6 and 91.9%, respectively.

As shown in Table 5, HS accounted for over 91% of the total livestock and livestock products export in 1989/90, and this share has gone up to 98.7% in 1992/1993. The increase in value of HS as compared with livestock and livestock products is partly attributable to the relative fall of livestock and livestock products exports and to an increase in international market prices for hides, skins, leather and leather products. From the year 1992/93 onward, the share of hides, skins, leather and leather products export in both livestock and livestock products export and total export has shown a continuos drop from 98.7 and 14.2% in 1992/93 to 87.3 and 6.8%, respectively, in 1999/2000. The decrease in the value of HS is partly attributable to the drop in demand for Ethiopian leather and leather products as the result of the Asian economic crisis. The quality deterioration of sheepskins registered during this period has also contributed to the fall of HS export value.

Table 4. Daily processing capacity of tanneries and processed products

Tanneries	Year established	Location	Ownership	Theoretical capacity		Product type
				Hides	Skins	
Addis Ababa	1918	Addis Ababa	Government	950	-	WBCFL
Mojo	1964	Mojo	"		9,500	PWBCFL
Combolcha	1967	Combolcha	"		6,000	WBGS,PSS
Dire	1972	Addis Ababa	private	500	5,000	PSS,WBGS, CH,FL
Ethiopia	1976	KoKa-Ejersa	Government	1,200	13,000	PSS,WBGS, CH,FL
Walia	1989	Addis Ababa	Private	600	18,000	PSS,WBGS, CH,FL
Hora	1992	Debrezeit	"		4,500	PSS,WBGS
Blue Nile	1992	Sebeta	"		3,000	PSS,WBGS
Bale	1992	"	"	300	2,000	PSS,CH
Shoa	1994	Mojo	"		2,500	PSS,WBGS
Dessie	1996	Dessie-Haik	"		6,000	PSS,WBGS
Mersa	1996	Mersa	"	500	10,000	PSS, WBGS, CH
ELICO	1997	Addis Ababa	"	1,500	27,800	PSS,WBGS,
Abay	1997	Baher Dar	"		3,000	"
HAFDE	1997	Addis Ababa	"		6,000	"
Debre Berhan	1999	Debre Berhan	"		3,000	"
Bahir Dar	1997	Baher Dar	"		4,000	"
Batu	2000	Kaliti	"	900	2,000	Not Operating

Sheba	1999	Mekele	"			Not yet operational
Kolba	2000	Mojo	"			"
Total				5,500	123,300	

Source: ETA Brochure and personal communication

WB= Wet blue, GS= goat skins, C= Crust, SS= sheep skins, P= Pickled, CH= Crust hide, FL= Finished leather.

Table 5. Value and share of hides and skins in Livestock & Livestock Products and Total Export ('000 Birr and percentage)

Year	Hides & Skins (HS)	Livestock & Livestock Products (LLP)	%HS from LLP Export	Total Export Value	% HS from total export
1989/90	13,3298	145,060	91.9	756,860	17.6
1990/91	92,206	98,390	93.7	572,142	16.1
1991/92	58,646	59,131	99.2	318,387	18.4
1992/93	134,515	136,255	98.7	949,164	14.2
1993/94	203,610	215,039	94.7	1,419,229	14.3
1994/95	373,549	387,277	96.4	2,834,844	13.2
1995/96	309,701	322,640	96.0	2,607,156	11.4
1996/97	372,253	407,629	91.0	3,891,533	9.6
1997/98	347,699	387,601	89.7	4,141,580	8.4
1998/99	242,551	277,702	87.3	3,540,423	6.8

Source: Customs Authority

5. Constraints of Hides and Skins Marketing

The main constraints adversely affecting the production and marketing of hides and skins are outlined below.

a) Shortage of raw material

The expansion of artisans (local tanners) and the utilization of HS for traditional household items, the existence of cross border illicit trade and misuse of the raw material due to lack of awareness, result in a low recovery rate and ultimately shortages of raw HS in the central market.

b) Quality deterioration

The limited number of slaughter facilities, inadequacies in preservation techniques, and other man-made and natural defects inflicted on the raw hides and skins downgrades quality.

c) Inadequate numbers of slaughterhouses and slabs

The number of slaughterhouses in the country is very limited. Thus, the majority of cattle, sheep and goat slaughter is carried out in the backyard that results in poor quality raw HS.

d) Gap between demand and potential supply

The increasing number of tanneries has increased raw material demand far beyond the existing potential supply. This leads to unhealthy competition among tanneries and an escalation of price in the domestic market.

e) Lack of incentive to quality raw material suppliers

The failure of tanners and traders to implement procurement of raw HS on the basis of quality grades developed by quality and standard Authority of Ethiopia. (QSAE) discourages hide and skins suppliers.

6. Conclusions

The limited number of slaughter premises dispersed all over the country, coupled with the existence of a weak extension service, and improper preservation techniques result in poor quality raw material that in turn produces low quality leather and leather products. There is more potential to improve quality than to increase the recovery rate of hides and skins. A main challenge the tanning industry is facing is a shortage of raw material due to competition for HS by rural tanners, misuse of the raw material prior to it reaching the market and the increasing number of industrial tanning facilities. These factors together are resulting in a demand for raw HS that is beyond the potential supply. Strengthening the extension system along with a system of quality-based pricing, should lead to higher quality raw materials supplied by butchers, flayers and traders. It is necessary to design an appropriate HS development program to increase the contribution of hides, skins, leather and leather products to the country's exports. Such a program should focus on improving the quality and increasing the recovery rate at the central market.

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