



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)

20833



United  
Nations  
Industrial  
Development  
Organization



---

*Seminar on Hides and Skins  
Improvement, Morogoro,  
Tanzania,  
13 - 16 June 1994*



***SEMINAR REPORT***

---

*Botswana, Ethiopia, Kenya, Malawi, Namibia,  
Sudan, Tanzania, Uganda, Zambia, Zimbabwe*

## TABLE OF CONTENTS

	PAGE
INTRODUCTION	3
OPENING OF THE SEMINAR	3
REMARKS BY THE CHIEF TECHNICAL ADVISER	4
ELECTION OF THE BUREAU	4
REVIEW OF HIDES & SKIN'S IMPROVEMENT PROGRAMMES IN THE REGION	5
BRIEF COUNTRY REPORTS BY THE NATIONAL EXPERTS	6
SALT-FREE CURING METHOD FOR HIDES AND SKINS PRESERVATION	7
CONCLUSIONS AND RECOMMENDATIONS	8
- TRAINING	8
- INCENTIVE SCHEMES	8
GENERAL RECOMMENDATIONS	9
 ANNEXES:	
I - List of Participants in the Hides and Skins Seminar (Morogoro)	
II - Letter to Dr. Kiruthu from Mr. Nes du Plessis on "Evaluation of a Salt-Free Cure on Suspension Dried Hides and Skins"	
III - Country Paper: Ethiopia	
IV - Country Paper: Kenya	
V - Country Paper: Malawi	
VI - Country Paper: The Sudan	
VII - Country Paper: Tanzania	
VIII - Country Paper: Uganda	
IX - Country Paper: Zambia	
X - Country Paper: Zimbabwe	
XI - Questionnaire	

## INTRODUCTION

The Seminar had been organised by the UNIDO Regional Africa Leather and Footwear Scheme RALFIS (US/RAF/92/200) which is the second phase of the large scale Regional Africa hides and skins, Leather and Leather Products Improvement Scheme (US/RAF/88/100) of the Vienna-based United Nations Industrial Development Organization (UNIDO).

The principal aims of these Regional Schemes are:

- increased collection and quality improvement of hides and skins;
- rehabilitation and upgrading the productivity of selected tanneries, shoe factories and leather goods factories;
- development of the leather and leather products sectors to serve home markets and reduce imports;
- enhancement of women's status in the leather and leather products industry;
- assistance in pollution control in selected tanneries.

The Seminar took place at Morogoro Hotel in Morogoro, Tanzania from 13th-17th June 1994 with 33 participants attending.

The main objective of the Seminar was to expose the participants to the various methods of hides and skins flaying, preparation and preservation which are practiced in the region and examine the positive and negative aspects of the various procedures. The Seminar was also intended to highlight important market requirements regarding quality and the likely outlook of the sector in future in terms of its economic contribution to the countries in the region.

Training requirements of hides and skins extension workers and the need to have a self-sustaining hides and skins improvement programme formed the major background of the Seminar's discussions. The Seminar was a participatory one and the participants presented each one's country reports thus giving them a chance to share their experiences with other participants. The participants at the Seminar were:

- National experts of the national projects;
- Hides and skins traders/butchers;
- Extension Officers;
- Target Area counterpart personnel.

List of participants as well as the Seminar programme are attached to this report as ANNEX I.

## OPENING OF THE SEMINAR

The Seminar was officially opened by Mr. Emmanuel D. Mazala, Director for Regional Development in Morogoro. In his opening remarks, Mr. Mazala said that the Seminar was the first of its kind to be held in Tanzania and it was his wish that it would provide an opportunity for hides and skins officers to share ideas. He further said that Tanzania is blessed with vast livestock resources but like in other countries in the region the exploitation of hides and skins for national economic growth has not been successful.

Mr. Mazala identified the following as the constraints being experienced in the region:

1. Improper animal husbandry practices;
2. Poor slaughter facilities and preservation methods of hides and skins.

The consequence has been the reduction of good quality hides available to the industry which is a common feature in the region. He observed that the demand of good quality raw materials is increasing so the technics to improve hides and skins should be tailored to suit the demand.

Mr. Mazala thanked the organizers for having made a Seminar and for selecting Morogoro as the venue.

### REMARKS BY THE CHIEF TECHNICAL ADVISER, MR. G. FELSNER.

The Chief Technical Adviser (CTA) of the Regional Leather Project, Mr. G. Felsner challenged the participants to review the development which has taken place since the Bulawayo hides and skins Seminar of 1981. He pointed out that although hides and skins Improvement was a long-term commitment, present indications are that the quality was deteriorating. He, however, said that the solution to this problem has to be addressed in a commercial manner.

Mr. Felsner further gave a background to the project as follows:

- that Phase One has operationally and financially been phased out;
- that Phase Two in Ethiopia, Tanzania, Uganda and Zimbabwe has already started;
- that 55 tanneries have benefitted from UNIDO assistance in the Region with close to US\$6.2 million having been spent to rehabilitate dilapidated tannery infrastructure on a pay-back arrangement to a revolving fund which has been established in various countries;
- that 170 people have been trained on short-term courses and/or have participated in seminars.

Mr. Felsner also told the participants that a Leather Finishing Seminar is being planned to take place in November in Nairobi, Kenya. Participants will be 2 senior technicians from each country and the national experts. It is hoped that by this time the Leather Association for East and Southern Africa (ESALIA) has been formed. He also said that traditional donors have requested UNIDO to explore possibilities of sourcing funds from non-traditional donors like the European Union (EU). UNIDO, he said has already requested EU for funding.

### ELECTION OF THE BUREAU

Dr. Mbuza (Uganda) was unanimously elected as Chairman of the session, Dr. Millinga (Tanzania) rapporteur and Mr. Charles Siulapwa (Zambia) Secretary.

In his opening remarks, the Chairman thanked the participants for having shown confidence in him and asked for cooperation during the deliberations.

## REVIEW OF HIDES AND SKINS IMPROVEMENT PROGRAMMES IN THE REGION BY DR. S. KIRUTHU

Dr. Kiruthu gave a general overview of the project's regional activities. He said that in order to have meaningful development in the region's leather sector, the region's first phase project activities addressed the then existing constraints in the sector starting from hides and skins improvement to rehabilitation of run down tanneries. Whereas it has been recognized that rehabilitation of tanneries have mostly been successful, hides and skins improvement activities recorded generally mixed achievement.

During the implementation of the first phase the downturn experienced in Hides & Skins/leather overseas market reduced demand for hides & skins. At the same time, local tanneries especially state enterprises (except those in Ethiopia) could not provide local outlet for the raw materials. All these contributed to some extent to raw hides & skins producers paying less attention to the raw materials. However, the improved market changes towards the end of 1991 with increased demand for African raw materials as well as the significant changes in management in some tanneries after liberalization and privatization are expected to promote hides and skins improvement.

He said that the objectives for hides & skins improvement of the programme phase largely remain the same as those of Phase One. The hides and skins improvement activities utilizing UNIDO funds under the second phase are going on in Ethiopia, Tanzania and Uganda while the revolving funds have continued to support hides and skins improvement activities through trade associations in some of the other countries. Operationally, hides and skins improvement has been left largely under the care of national experts with the regional office maintaining a co-ordinating role. A lot of emphasis has been placed on getting the user industry (tanners and footwear manufacturers) involved in hides and skins improvement activities.

Looking at what is happening in individual countries, he highlighted points of interest as regards hides and skins improvement:-

- In Ethiopia, Government owned tanneries are operated as individual entities. However although prices for raw materials are liberalized, the prices of raw hides and skins paid to producers remain low compared to those paid in neighbouring countries. This is expected to result in increased quantities of hides and skins being smuggled out of Ethiopia.
- In Kenya, all the tanneries are owned by the private sector. The biggest handicap facing these tanneries at present is the shortage of raw hides and skins.

Prices of raw hides and skins are very high and some tanners are already finding difficulties in financing raw material purchases.

- In Malawi, hides continue to be purchased at extremely low prices, so producer incentives are lacking. The monopoly enjoyed by the Cold Storage Commission in the past has not continued because of other buyers in the market, but the fact that the Cold Storage still owns most of the hides and skins buying centers means most producers are compelled to dispose the raw materials through CSC. There are reports of hides being smuggled from Malawi to Tanzania.
- In Uganda, hides and skins improvement activities have just been started. It is hoped that improvement of quality of hides and skins will be recorded once ULATI is privatized and other proposed new tanneries are established. There are plans to construct hides and skins drying sheds and upgrading of slaughter facilities in the target area.

- In Tanzania, it was recorded a remarkable increase in the collection of hides and skins, and this has been attributed mainly to trade liberalization. At the moment, the three state-owned tanneries Mwanza, Morogoro, and Moshi are either privatized or in the process of privatization.
- In Zambia, the non-utilization of air suspension dried hides brought about a situation of severe shortage of raw hides for the tanneries. At the same time, there is wastage of hides in centres outside the main cities due to the fact that salt is too expensive to be afforded by producers for hide wet-salt curing.
- In the case of Zimbabwe and Sudan, the national experts were requested to present hides and skins improvement country papers.

Dr. Kiruthu said that the *Key to sustainability of regional hides and skins improvement efforts should be through the following:*

- (1) Dissemination of information on raw material supply, technical information and market news. Publication of a news letter would greatly enhance flow of regular information through the region;
- (2) Strengthening of revolving funds;
- (3) Support of extension services through training and greater involvement of industry associations;
- (4) Producers of hides and skins must be provided with sufficient incentives in order for them to put more efforts in hides and skins quality improvement.

The consultant requested the meeting to recognize that hides and skins improvement is a gradual process requiring long-term strategy and considerable resources, and therefore, the Seminar was expected to come up with practical and concrete recommendations.

He expressed hope that Data collection will be conducted by the national experts with more vigour than in the past and this was supported by the CTA who emphasized the importance of good, correct information being passed on to the donors.

## **BRIEF COUNTRY REPORTS BY NATIONAL EXPERTS.**

The national experts presented individual country reports. These reports are annexed to this report (See annexes iii-X).

During these presentations, it became clear that data on livestock offtake rates for most countries did not seem correct. The chairman Dr. Mbuza explained that the issues to be considered when describing off-take rates include:

- Potential off-take
- Real off-take
- Voluntary off-take
- Involuntary off-take
- National off-take
- Commercial off-take

Increases in livestock population occur due to births, purchases, immigration, and imports while losses occur due to deaths, immigration, export, and national kill (commercial)

During the presentation of the Tanzania report, the operations of the revolving fund generated a lot of interest. The issue of illegal cross-border trade of raw hides from Zambia into Tanzania was raised by the chairman of the Leather Industries Association of Zambia Mr. Spyron. He indicated that smuggling of raw hides was increasing, and this is damaging the leather tanning sector in Zambia. The majority of the seminar participants felt that this situation is unlikely to change unless there is almost uniform pricing of raw hides and skins.

*Flaying techniques of small stock and preservation of skins practiced in Sudan:*

The national expert from Sudan Dr. A.H. Abbo made a presentation on flaying methods used when slaughtering small stock in Sudan. He also discussed the common preservation methods and the newly introduced use of biocide by Afro-tan tannery in skins preservation. The full text of the presentation is hereby enclosed as ANNEX II.

## SALT-FREE CURING METHOD FOR HIDES AND SKINS PRESERVATION

This presentation by Mr. Nes du Plessis of Buckman Laboratories generated a lot of interest and discussion. The presentation was accompanied with viewing of slides and a video show.

The Video showed modern cattle hide processing in stages starting with:-

- (a) Hide removal in a mechanized abattoir
- (b) Preservation and curing
- (c) Fleshing (before and after curing)
- (d) Trimming
- (e) Salting and Grading
- (f) Storage and shipping

Mr. du Plessis discussed different methods of salt curing as follows:-

- Raceway curing
- Mixer curing (in a drum rotating 6-12 hours)
- Salt Pack curing ( 20-30 days)

He talked about proper fleshing before and after curing as well as the sorting of hides into four categories, Bull, Cow, Heifer and Calves.

On salt free curing using biocides, his presentation centered on areas of microbiological concern when the hide is prone to bacterial attack during curing-soaking in a tannery and further processing up to finishing. He discussed the various methods of salt-free curing which are used and these include:-

- Short term dipping (effective 12-24 hours)
- Spraying (effective 24 hours)
- Drum curing (effective 2-3 weeks)



After this presentation, it was felt by most of the participants that use of environmental friendly biocide combined with air-suspension if cost effective may provide a solution towards minimizing post slaughter defects. It was also noted that availability of salt and its high cost even in countries where tanners are reluctant to use air-suspension dried hides like Zambia presents particular problems to the producers. The tanners noted that salted hides are heavy to transport and time is spent on salt removal during processing as it is not environmental friendly.

It was agreed in principle that the merits of salt-free curing would be investigated by conducting trials within the region. See ANNEX II on the proposed trials in Kenya.

The outcome of the Seminar as evidenced by the filled questionnaire indicated that most of the participants were not pleased with the venue of the Seminar as it did not allow exposure to the practical aspects of hides and skins improvement. This was, however, deliberately given less prominence as the participants were expected to have extensive exposure in practical aspects of hides and skins improvement in their own countries. As regards organization, content and substance as well as the theoretical aspects of the Seminar, most of the participants felt these were either good or excellent (See annex XI).

## CONCLUSIONS AND RECOMMENDATIONS.

### *Training*

1. It was noted that training is an essential component for hides and skins improvement in the region.
2. It was also noted that a wide range of livestock extension staff involved in hides and skins improvement are not adequately trained or are not trained at all for the purpose.
3. Because of the above, interest groups such as farmers, butchers, flayers, hides and skins dealers etc. have often not been adequately sensitized and trained for effecting hides and skins improvement programs.
4. The Seminar therefore recommends the following:-
  - Adequate training programs be instituted immediately for livestock extension staff and interested groups involved in hides and skins improvement programs.
  - Training institutions in livestock science should include hides and skins improvement in their curricula (where it does not exist) and should be encouraged to initiate research programs in the production and utilization of hides and skins.
5. The leather and related industries should play an active role in hides and skins improvement programs such as training, research, and publicity. Training could be in the form of regular seminars, symposia, study tours and extension services to the target groups: farmers, butchers, flayers, dealers etc.

### *Incentive Schemes*

1. The Seminar noted that incentive schemes will be necessary to encourage and enforce grading systems for hides and skins improvement.

2. A wide range of possible incentive schemes was identified to include the following:
  - (a) Discriminatory licensing whereby only dealers who abide by rules and regulations are favored
  - (b) Preferential treatment for good performers
  - (c) Differential pricing based on grades
  - (d) Award of certificates and prizes to good performers
  - (e) Use of competitions to encourage grading
  - (f) strengthening of associations
  - (g) Membership to associations be pegged to the practicing of grading
  - (h) External support to be extended to only those practicing grading
3. In view of the above, it was recommended that:
  - (a) Proper legislation, where it does not exist yet, should be put in place to regulate the practice of slaughter and the hides and skins trade to bring it in consonance with current industry requirements.
  - (b) Associations of interested groups should be strengthened to supplement government efforts in enforcing legislation and concentrate on training programs.
4. It was also noted that slaughter houses, abattoirs, slaughter slabs etc. in the region are in sorry state especially those owned by governments and municipal councils. This has led to the deterioration of the quality of hides and skins in the region.

It was therefore recommended that these facilities should be privatized as soon as possible to enhance the improvement of hides and skins in the region.

## GENERAL RECOMMENDATIONS

1. In view of the regional nature of the problems facing hides and skins industry, it was recommended that national associations of leather and related industries form an umbrella regional association to ensure a concerted effort in solving problems of the sector.
2. Regional seminars and symposia of this nature should be regularly held to review and update problems and successes of national efforts towards hides and skins improvement.
3. The Seminar noted that there was lack of empirical information for evaluating the cost effectiveness of the various methods of preserving hides and skins in the region. It was therefore recommended that as a matter of urgency, trials be conducted in selected representative countries to generate the necessary information for the evaluation.
4. Individual governments and national associations should be urged to seek external assistance for capacity building towards the hides and skins sector to ensure long-term sustainability.

ANNEX I

HIDES AND SKINS SEMINAR  
MOROGORO 13TH-17TH JUNE 1994.

LIST OF PARTICIPANTS

NAME	COUNTRY
1. J.B. Barantanda	Tanzania
2. J.M. Majab	"
3. A. Masemele	"
4. A. Al-Baitt	"
5. H.S. Muro	"
6. W.A. Millinga	"
7. S.W. Massay	"
8. Issa M. Said	"
9. E.J. Muyinga	"
10.V.I. Akim	"
11.J.D. Vogtlander	"
12.D. Kimaryo	"
13.Bahram Chaaker	"
14.Charles Siulapwa	Zambia
15.Julius Mkandawire	"
16.Kweleka N. Mubita	"
17.Chris Spyron	"
18.M.B.B. Kasowanjete	Malawi
19.A.N. Jumbe	"
20.Kalumba Katongole	Uganda
21.John Ediau	"
22.Nanyolo Milly	"
23.Francis Mbura	"
24.E.Z. Mwebe	"
25.Zewdu Kebebe	Ethiopia
26.Asrat Hailu	"
27.Ahmed Mahmud	"
28.R. Darck	Zimbabwe
29.R.L. O'Shaughnessy	"
30.Ismail A. Rahama	Sudan
31.Michael Wanjohi	Kenya
32.John Muriuki	Regional Office, Nairobi
33.G. Felsner	CTA Regional Project
34.S. Kiruthu	UNIDO Consultant
35.Nes Du Plessis	South Africa

FILE NO. 3357/94 H.S. SEHANI

**BUCKMAN**  
LABORATORIES  
(PTY) LTD.

Reg. No. 71/07012/07

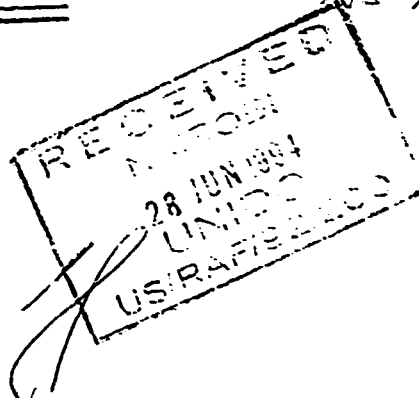
FOLLOW UP  
ACTION AS RECOMMENDED.  
\*\*\*\*\*

28TH JUNE 1994

OUR REF : 3357/94

UNIDO, NAIROBI FAX NO : 445-344

ATTENTION : DR S M KIRUTHU

RE : EVALUATION OF A SALT-FREE CURE ON SUSPENSION DRIED HIDES AND SKINS

THE FOLLOWING IS PROPOSED FOR THE TRIALS IN KENYA:-

- 1) SELECT HIDES, GOAT SKINS AND SHEEP SKINS FROM ONE PARTICULAR REGION IN KENYA.
- 2) AFTER SLAUGHTERING THE MATERIAL SHOULD BE FLESHED IN THE NORMAL WAY AND AS SOON AS POSSIBLE BE DIPPED IN A 1% SOLUTION OF BUSAN 1046 FOR 2-10 SECONDS.
- 3) THE MATERIAL SHOULD THEN BE SUSPENSION AIR-DRIED IN THE NORMAL MANNER.
- 4) WE PROPOSE THAT A 200L DRUM BE CUT OPEN AND THAT, 1L OF BUSAN 1046 BE ADDED TO 100L OF WATER. THIS WILL THEN BECOME THE DIP-SOLUTION.
- 5) TWENTY LITRES OF BUSAN 1046 WILL BE SUPPLIED FREE OF CHARGE.

THE FOLLOWING ARE GIVEN AS GUIDELINES:-

- ONE LITRE OF BUSAN 1046 DILUTED INTO 100L OF WATER WILL BE SUFFICIENT FOR 50 RAW HIDES OR - 1000 RAW SKINS.
- ONE LITRE OF BUSAN 1046 COST APPROX. \$3,00/L. IT IS SUGGESTED THAT THE DRYING PROCESS BE MICROBIOLOGICALLY MONITORED BY BUCKMAN LABS AND THAT ALL NECESSARY DATA BE KEPT DURING THE TANNING AND FINISHING OF THE HIDE/SKINS.
- THE TREATED HIDES/SKINS MUST BE COMPARED WITH THE UNTREATED MATERIAL.

A SUGGESTED PROGRAMME WILL THEREFORE BE:-

- 1) TREAT 300 HIDES (THAT MEANS 6L OF BUSAN 1046 REQUIRED)
- 2) DO MICROBIOLOGICAL TESTS DURING DRYING.
- 3) COMPARE LIME LOSSES OF TREATED AND UNTREATED HIDES.
- 4) COMPARE WET-BLUES OF TREATED AND UNTREATED HIDES-SCIENTIFICALLY BY LABORATORY MEANS.
- 5) PUBLISH RESULTS AT SOONEST OPPORTUNITY.
- 6) DECIDE IF PROGRAMME IS JUSTIFIABLE.

.... /2 CONT'D

.... /2 CONT'D

UNIDO/NAIROBI

THIS PROGRAMME CAN BE DUPLICATED IN THE VARIOUS UNIDO COUNTRIES EXCLUDING POINT 2.

THE SAME PROCEDURE IS SUGGESTED FOR 3000 GOAT SKINS AND 3000 SHEEP SKINS.

THE STARTING DATE, CURING TIME, TANNING DATE AND DATES FOR EVALUATION AND FEED BACK WILL HAVE TO BE DETERMINED AND SET.

THE PARAMETERS TO BE SET WILL HAVE TO BE DETERMINED AND THE VARIOUS TESTWORK WILL HAVE TO BE DISCUSSED AND APPROVED BY THE VARIOUS PARTIES INVOLVED.

IF THE ABOVE BROAD CONCEPT IS ACCEPTED BY UNIDO, A MEETING DEALING WITH THE SPECIFICS CAN BE SET UP DURING THE SECOND WEEK OF JULY 1994.

KIND REGARDS,



NES DU PLESSIS

NDP/boa

CTA's office  
1/1/94

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

National Leather And Footwear Industry Scheme  
US/ETH/92/200/ and /ETH/93/005

PROJECT MEMORANDUM

Subject: ETHIOPIA - COUNTRY REPORT  
(for Hides and Skins Improvement Seminar  
13-17 June 1994 - Morogoro, Tanzania)

1. BACKGROUND

1.1. Area, Population, Location

- Ethiopia, with a total land area of about 1.1 million Km<sup>2</sup> and a human population of about 53 million, is situated in East Africa commonly known as the Horn of Africa, 3° and 15° North, latitude and 33° and 48° East, longitude. It is bounded by Eritrea in the North, Sudan in the West, Djibouti and Somalia in the East and Kenya and Somalia in the South.

1.2. Physical Features

- The country constitutes two irregular blocks of the Central Highlands bisected by the East African Rift Valley, with its chain of lakes, and stretching from Lake Turkana, on the Kenya border, to the south - west to the Red Sea strip of Eritrea in the north - east, and all of these surrounded by arid lowlands.
- The altitude ranges from 4500 meters a.s.l. in the northern Semen Mountains to less than 120 meters b.s.l in the north - eastern Danakil/Afar Depression.

1.3. Climate

- The climate is conditioned by the variable altitude, and three climatic zones are accordingly classified: Cool-over 2500 meters, Temperate-1800-2500 meters and

Hot/Arid-less than 1800 meters. Average annual temperatures range between 35°C in the lowlands and 5°C in the highlands.

- Rainfall is bimodal , with the big rains occurring in June-September and the small rains coming in February/March. Annual precipitation ranges from 2500mm in the western highlands to less than 200mm in the eastern lowlands.

## 2. LIVESTOCK

### 2.1. Population

- The livestock population of Ethiopia, the source of its hides and skins, is estimated as 30 million cattle, 24 million sheep and 18 million goats, ranking them first, second and third, respectively, in Africa. There are also 7 million equine, 1 million camels and 53 million poultry. These make up 17% of the cattle, 12% of the sheep, 11% of the goats and 49% of the equine population of Africa.

### 2.2. Breeds

#### 2.2.1. Cattle

- Ethiopia is considered the home of some of the important cattle breeds in Eastern and Southern Africa. The indigenous breeds are described to have originated from the migration of Hametic Longhorn from Egypt, along the Nile Valley, and the humped Zebu from India, through the Horn of Africa.
- Interbreeding between the Longhorn and the Zebu resulted in a third breed, the Sanga, which spread further south. Among some of the Sanga varieties are the Nilotic (Sudan); Ankole (Uganda), Tanga (Zambia), and Tuli and Mashona (Zimbabwe).
- It is also believed that further Zebu invasion has led to the displacement of and interbreeding with the Sanga, resulting in the intermediate Sanga/Zebu type. (See Fig.1 and table 1)

#### 2.2.2. Sheep

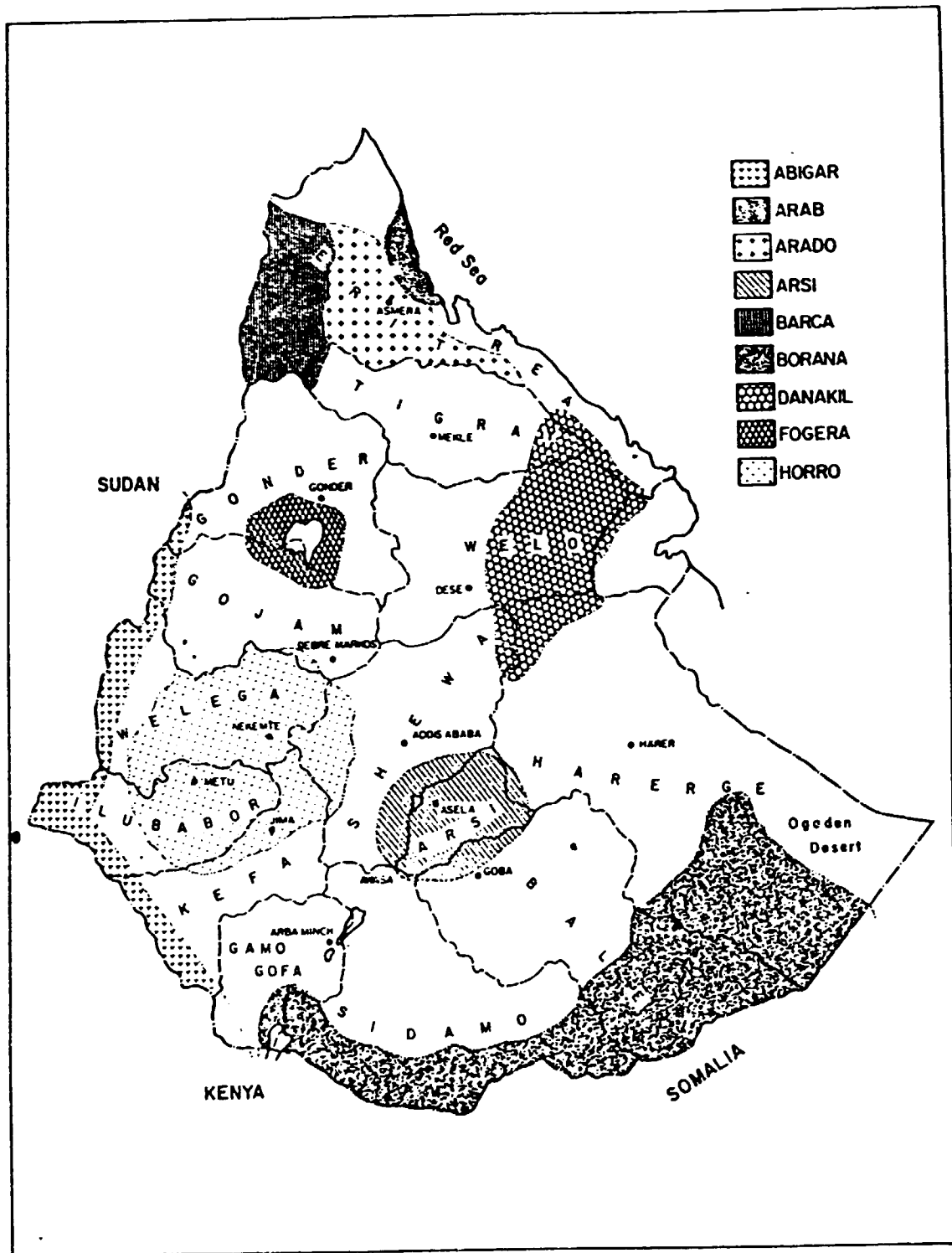
- Indigenous Ethiopian sheep breeds have been identified into four broad categories: the Hairy Thin Tailed, Woolled Thin Tailed, Fat Tailed and Fat Rumped. Attempts have been made to group some of the well-known types into the different categories (Table 2).

#### 2.2.3. Goats

- Very little work (much less than cattle and sheep) has been done to identify and characterise Ethiopian goat breeds. Five major types have been identified and are classified as Nubian, Highland, Adal, Somali, and Long Tailed Gishu. Additional goat classes, like the Digodi, Guji, Tsemay and Konso have also been proposed.



Figure 1. Geographical distribution of cattle breeds in Ethiopia.



Areas with no shading, except for Ogaden Desert, are populated with several varieties of Abyssinian Zebu.

Source: Alberro and Haile-mariam, 1982a.

Class	"Breed" or "Population"
I. Humpless	
Brachyceros	Sheko (Mitzan, Goda)
Hametic	
Longhorn	Kuri (Kouri)
II. Zebu	
	Arsi
	Barka (Begait)
	Borana (Boran)
	Arab (Ajani, Berbera, Bahari)
	Shorthorn Zebu (Harer)
	Highland Zebu (Bale)
	Black Zebu (Jem-Jem)
	Small Zebu (Jijjiga)
III. Sanga	
	Danakil (Adal, Raya, Keriya, Afar)
	Raya Azebo (Galla-Azebo)
	Abigar (Nilotic)
IV. Intermediate Sanga/Zebu	
	Horro
	Fogera (Wagera)
	Arado
	Jiddu
V. Other	
	Fellata (Red Bororo)

Source: Alberro and Haile-mariam (1982a)

**Table 2.** *Classification of the indigenous sheep breeds of Ethiopia.*

Class	"Breed" or "Population"
I. Hairy Thin Tailed	Hamele (Eritrea) Barka (Eritrea) Horro (Western Ethiopia)
II. Woolled Thin Tailed	Arrit (Eritrea)
III. Fat Tailed	Menz (Northern Shoa) Arsi (Arsi and Bale) Akele-Guzai (Eritrea) Rashidi (Eritrea) Tucur (Wello)
IV. Fat Rumped	Black Head Ogaden (Southeast Ethiopia) Adal (Northeastern lowlands)

### 3. HIDES AND SKINS

#### 3.1. Production and Collection

- Statistical estimates, based on national offtake of 7%, 33% and 37% for cattle, sheep and goats, respectively, Ministry of Agriculture inspection figures and tannery purchases over the last several years, put the production of hides and skins at 2.1m. cattle hides, 7.9m. sheep skins and 6.7m. goat skins, while the actual recovery or collection, i.e. the amount reaching the central market and the tanneries is 1.3m. hides, 7.4m. sheep skins and 5.8m. goat skins.

#### 3.2. Quality

- Recent tannery purchases of raw hides and skins indicate that the quality of the product they receive is on the average 50:30:20 for cattle hides, 40:40:20 for sheep skins and 45:35:25 for goat skins.

#### 3.3. Economic Importance

- In contrast to the vast animal resource, the production as well as the quality of hides and skins is low. Even so, hides and skins, after due process into leather and leather products is the second ranking foreign exchange earning commodity of the country.

### 4. PROJECT IMPLEMENTATION

#### 4.1. Pre-UNIDO Projects

- Government efforts to improve hides and skins production, collection and quality was formally organized about 30 years ago through the formation of the former Livestock and Meat Board (LMB). Over the years, both under LMB and then the Ministry of Agriculture, in addition to regular extension activities, several projects were initiated and implemented. The most relevant of these was the Second Livestock Development

Project (SLDP) under which 59 slaughter houses and 61 curing sheds were built in conjunction, (except for 2 curing sheds built separately).

#### 4.2. UNIDO Projects

- Justified by the disparity between production and collection as well as the low quality of hides and skins, and the belief that, properly implemented, it would improve both collection and quality, and subsequently improve the income of the primary producer, increase tannery production sales as well as the export income and foreign exchange earning capacity of the country, the government and UNIDO agreed to implement, in July 1989, the Hides and Skins, Leather and Leather Products Improvement Scheme-US/ETH/88/100.

##### 4.2.1. US/ETH/88/100-Activities and Outcome

###### 4.2.1.1. General

- In addition to the regular project performance reports, project activities and achievements have been well-treated in the Terminal Report. Achievements in providing appropriate demonstration tools, including knives and grading hammers, construction of curing sheds, training of both staff and artisans - in the form of refresher and skill improvement courses, seminars and study tours, production and dissemination of posters and a training manual, and inputs of an international hides and skins improvement expert have been positive, and produced marked improvement in both the collection and quality of hides and skins from the target area as well as the production and quality of leather and leather products from the tanneries. The following specific results have been recorded in collection, quality and

defects assessment. See Table 3 for collection and quality grade analysis, Table 4 for defect assessment of hides and skins in the project area and Table 5 for a comparison of major defects in the project area and country-wide basis.

#### 4.2.1.2. Collection

- The base data for collection before project preparation was 153, 303 hides, 587,435 sheep skins and 257, 676 goat skins. Subsequent project data over the 3 years showed considerable reduction in collection. These were, respectively for the 3 years, 20%, 36% and 24% for hides, 13%, 31% and 42% for sheep skins and 14%, 27% and 35% for goat skins. The reductions may be attributed to illegal/cross-border/unrecorded trade along the Kenyan border, security problem during the country's civil unrest and change of Government after May 1991. Extension activities and the reporting system had been disrupted and have not returned to normal in certain localities since then.

#### 4.2.1.3. Quality

- The project preparation mission's base data for the target area's quality of hides and skins was 50-30-20 for hides, 42-38-20 for sheep skins and 39-37-24 for goat skins; and it was anticipated that no significant quality improvement would be achieved. However, substantial improvement was achieved, especially for sheep and goat skins. Grade I for hides decreased to 49% and 42% during years 1 and 2 but rose to 51% during year 3. But

sheep skins improved to 51% , 60% and 62% and goat skins to 42%, 46% and 48% over the 3 years.

- For comparative purposes, a previous MOA study for the whole country indicated that quality grades were 43-30-17-10 for hides. 41-26-18-15 for sheep skins and 40-24-22-14 for goat skins.

#### 4.2.1.4. Defects Assessment

- There was no base data indicated for the various hides and skins defects. Assessment of data over the project period showed that flay cuts, poor pattern, putrefaction and diseases were the main defects observed in all cases while hides also suffered from branding.
- Country-wide study showed similar results but included improper handling, poor substance, dirt and red heat as more serious defects, especially for air - dried and wet-salted skins.

TABLE 3. COLLECTION AND QUALITY GRADE ANALYSIS OF HIDES AND SKINS

PERIOD	CATEGORY	TOTAL COLLECTION	G R A D E (%)				
			I	II	III	IV	REJECT
Base Data 1987	Hides	153,303	50	30	20		
	Sh. Skins	587,435	42	38	20		
	G. Skins	257,676	39	37	24		
April '90 - March '91	Cattle Hide	123,301	49	27	16	7	1
	Sheep Skin	509,080	51	30	15	3	1
	Goat Skin	220,696	42	31	21	5	1
April '91 - March '92	Cattle Hide	97,763	42	28	17	11	2
	Sheep Skin	403,175	60	24	12	4	0
	Goat Skin	187,235	46	28	18	6	1
April '92 - March '93	Cattle Hide	117,087	51	27	14	8	1
	Sheep Skin	340,181	66	23	8	3	0
	Goat Skin	167,957	48	29	17	5	1

Source: Project data

TABLE 4. DEFECT ASSESSMENT OF HIDES AND SKINS IN THE PROJECT AREA

PERIOD	CATEGORY	D E F E C T ( % )							
		Putre- faction	Bran- ding	Poor- pattern	Flay cuts	Red heat	Socketed	disease	Others
	Cattle Hide	5.1	6.2	5.7	16.4	0.0	0.9	2.5	12.3
April '90- March '91	Sheep Skin	4.6	0.4	7.3	9.8	3.0	1.9	2.2	11.9
	Goat Skin	4.4	0.5	7.5	9.4	1.9	2.2	3.7	14.1
	Cattle Hide	5.0	8.8	5.3	15.7	0.1	0.0	3.7	15.6
April '91- March '92	Sheep Skin	6.0	0.2	7.4	14.6	2.1	0.9	2.3	12.7
	Goat Skin	5.5	0.1	7.0	12.0	1.2	0.6	4.2	15.3
	Cattle Hide	4.7	6.4	5.5	13.3	0.1	0.0	2.1	11.5
April '92- March '93	Sheep Skin	4.4	0.0	6.5	11.5	0.7	0.7	1.7	11.1
	Goat Skin	4.9	0.3	6.2	14.1	0.4	0.5	7.7	13.8

Source: Project data



Table 5. Major Hides and Skins Defects-Comparison of Project Area and Country-wide

No.	Type of Defects	Country - Wide				Project Area			
		Hides	Sheep Skins		Goat Skins		Hides	Sheep Skins	Goat Skins
			Air Dried	Wet Salted	Air Dried	Wet Salted			
1	Branding	6.9	-	-	-	-	7.1	9.2	9.3
2	Scratch	3.1	-	-	-	-	2.8	2.7	3.5
3	Disease	3.2	2.4	-	7.5	-	2.8	2.7	3.5
4	Knife/Blay/ Cut	15.0	13.8	7.5	9.6	5.3	15.1	12.3	11.8
5	Poor Pattern	3.7	3.6	2.5	2.9	3.4	5.5	7.1	6.9
6	Dirt	1.1	2.7	26.8	1.3	10.3	1.5	5.3	4.7
7	Disrefaction	10.6	7.1	6.1	6.6	7.3	-	5.3	-
8	Backed	1.7	7.3	-	7.1	-	-	-	-
9	Pegged	4.0	-	-	-	-	-	-	-
10	Improper Handling	4.2	15.7	-	17.5	-	-	-	-
11	Poor Substance	-	13.1	-	6.2	-	-	-	-
12	Beetle Bites	-	2.5	-	2.2	-	-	-	-
13	Red Heat	-	-	10.7	-	11.7	1.7	2.7	1.5
14	Soaked	-	-	3.0	-	1.7	1.1	1.1	1.1
15	Others	-	-	-	-	-	13.1	11.3	14.7

Source: MDA study and project data

#### 4.2.2. US/ETH/92/200 and ETH/93/005

- Project Phase 2, National Leather and Footwear Industry Scheme, has, with regard to hides and skins improvement, the same core objective as phase 1, i.e. to improve hides and skins collection and quality in selected Target Areas.
- The Target Areas encompass 2 Autonomous Regions, 10 Zones and, provisionally, 104 Weredas (Districts) as indicated below for Oromiya and Southern Ethiopia Peoples (SEP) Regions.
- The project outputs and activities include:
  - Construction of slaughter slabs and curing sheds.
  - Purchase and delivery of field vehicles, motorcycles, spare-parts, and demonstration equipment and tools.
  - Provide training to staff and artisans, and arrange/conduct staff seminars and workshops.
  - Preparation, and translation into local languages, of manuals, posters, guide books, grading norms, licences.etc.
  - Updating of statistical data collection forms, and collection, analysis and dissemination of data to all concerned.

#### 4.2.1.2. Bulawayo Recommendations

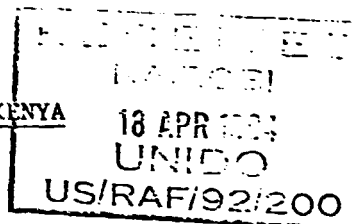
- The ECDC Workshop on Trade in Hides, Skins and their Derived Products held in Bulawayo, Zimbabwe, 29 July-August 1991, Formulated a set of 7-point recommendations which was supported by the 3<sup>rd</sup> session of the Inter-Governmental Sub-Group on hides and skins held in Rome, 21-24 April 1992. The following indicate some of the actions taken with regard to these recommendations:

1. Formulation of an incentive scheme, concerning better prices to be paid by NLSC for hides and skins originating from the Target Area, specifically the project-built facilities, was initiated by MOA and agreed upon by NLSC. The corporation also agreed to send its own trucks to transport its purchases in the project area. Unfortunately the scheme could not materialize because of the dissolution of NLSC. The scheme will be tried again with the Tanners Association.
2. A hides and Skins Improvement Coordinating Committee, consisting of the Animal Resources Marketing Team, 6 Government owned and 2 private tanneries and chaired by MOA, has been set up by the Prime Minister's office to solve problems facing the industry. Also, tanneries are supplying MOA with monthly reports on defects of processed hides and skins for analysis by MOA and eventual feedback to field extension staff to be used for hides and skins improvement at the primary producers level. Again, the formation of the Tanners Association, and eventually other related Associations, is expected to enhance the development of the industry.
3. The project planned for the collection of fees of Birr 0.50/hide and Birr 0.25/skin purchased by NLSC from the curing sheds constructed by the project, and put into a revolving fund for subsequent use of constructing other hides and skins curing sheds. Although 2 sheds have been built, the collection of any fees has been deferred until the system of revolving fund is established and operational.

4. The responsibility for hides and skins improvement in Ethiopia rest with the Animal Resources Marketing Development staff who, in addition to livestock marketing activities, perform all hides and skins extension activities including construction of slaughter houses/slabs and curing sheds, licensing, supervision of preservation, storage, grading and transportation. But where ARMD staff are not posted at Wereda/District level staff at Zonal level orient animal production and veterinary/animal health staff to enable them conduct basic follow-up activities.
5. Reporting formats indicating monthly collection, quality grades and defect analysis, monthly individual assignment results as well as quarterly and annual reports, at Wereda, Zonal and Regional basis have been devised and implemented. Addition of a column for average monthly prices has been recommended and will be implemented in phase 2.
6. With the dissolution of NLSC, the government owned tanneries are now autonomous and expected to run profitably as private enterprises. Together with the private tanneries they are in the process of legalizing their Tanners Association. The Association is one of the co-implementing agents of the NALFIS project with MOI and MOA in association with UNIDO. It will also bear co-responsibility for the management of the revolving fund, and at the same time, act as "promotion/inter-professional/lobbying forum" representing the industry. Other professional societies related with the industry are expected to be formed eventually.

7. Although phase 1 of the project was successful in the construction of only 2 and the operation of 1 curing shed, it is planned that during phase 2, a further 9 slaughter slabs and 7 curing sheds will be built. But efforts have been made by MOA, through the EC, to construct rural slaughter slabs and curing sheds. It has also been providing previous designs of slaughter houses and curing sheds to interested Regional offices, NGO's and municipalities.

*LEWDU KEBEDE*  
*JUNE 1994*

STATISTICAL DATA ON HIDES AND SKINS AND LEATHER FOR KENYA1. SHORT DESCRIPTION OF THE COUNTRY1.1 AREA AND EXTENT

Kenya is located in East Africa roughly between 4 degrees South Latitude and 5 degrees North Latitude, thus straddling the equator. It extends from about 35 degrees to 45 degrees East longitude. It has an area of 225,000 square miles or 581,787 square kilometres.

1.2 POPULATION

The last census on human population was conducted in 1989 when the population was 21 million. Current estimates put population at 23 million with a population-growth rate of 3% per annum.

1.3 PHYSICAL FEATURES AND CLIMATE

The great Rift Valley cuts across the country from north at Lake Turkana through the central highlands to the south and into Tanzania at Lake Natron. To the east and from the Coast are Eastern lowlands rising from 0 M to 500 M above sea level and extending 250 km from the Coast. There are Northern Plains and the Eastern plateau rising from 500 M to 1000 M above sea level. The highlands rise to 5,199 M at Mt. Kenya with the Nyandarua ranges, Mau Escarpment and Cherangani Hills rising to about 3000M above sea level. To the west is the Lake region falling between 1000 M and 1,500 metres above sea level.

The climate differs according to the altitude with average temperatures ranging between 39°C in the Eastern plateau and northern plains to 5°C in the habitable highlands. The average annual temperatures are 35°C maximum and 25°C minimum.

Rainfall is bimodal with the south west monsoon bringing in long rains between March and May and north east monsoon bringing in short rains between September and November. Average rainfall ranges from 200 mm in the northern plain lands, 500 MM in the eastern plateau and 750 mm at the Coast and Central highlands. Arid area averages 250 mm. of rainfall annually.

2. TYPES AND BREEDS OF CATTLE, SHEEP AND GOATS2.1 CATTLE

The majority of cattle in Kenya are the indigenous East African short horned humped Zebu of various sizes with the largest non horned Boran breed occupying northern and north western plainlands and the smaller maasai humped

Zebu occupying most of the eastern and southern plateau. There are many crossbred cattle arising out of a successful artificial insemination service particularly in the highlands, the lake region and eastern plateau so that it is rare to find a 100% humped herd in these areas.

There are also exogenous breeds of cattle from Europe, mainly of dairy and dual purposes e.g. the Friesian (including the Holstein) the Guernsey, the Jersey and Ayrshire, the Simmental and the Indian Sahiwal. Smaller numbers of Hereford, Aberdeen Angus, the Brown Swiss etc are also reared by very few farmers in the highlands. Dairy cattle account for 26% of the National herd.

## 2.2 SHEEP

Most of Kenyan sheep are hairsheep accounting for 91% of the flock grazing in the southern and eastern plateau and northern plainlands. These sheep consist mainly of the fat tailed Dorper, the Red Maasai and the Nyanza Fat tail breeds. There are also few woolsheep and mutton breeds like the Merino, Romney Marsh, Hampshire Downs, Comedale and Suffolk found on the highlands and eastern plateau as well as southern plateau.

## 2.3 GOATS

The Kenyan indigenous meat goats are the East African, the Galla, the Nubian and the Bedouin. The Boer goat is also reared particularly in some highland area. There are also exogenous goat breeds like the Togenburg, the Angora and Anglo-Nubian, some of whom are reared mainly for milk production. Only 0.2% of the national flock is kept for milk production.

## 3. LIVESTOCK POPULATION

Livestock census is under preparation. Estimates currently are 11.7 million cattle 8.3 million sheep and 9.6 million goats. There are also various numbers of equine (horses, donkeys and mules), porcine camels and poultry besides wildlife species of various kinds sometimes grazing with domestic animals and which are sometimes cropped for meat.

## 4. OFF-TAKE RATES

Off-take rates are generally high for sheep and goats at 28.1% and 41% respectively, but low for cattle at 8.2%. Cattle are raised for prestige by pastoral peoples of Boran, Somali, Galla, Maasai and for dairy purposes by the highland peoples and only unproductive, cattle are normally slaughtered except during the periods of drought, when off-takes rates increase.

## 5. NATIONAL KILL

Except in the arid pastoral and rangeland areas (accounting for 80% of total area of Kenya and occupied by 10% of the country's population), most of the cattle are slaughtered in designated slaughterhouses located in urban and peri-urban centres. In fact only 30% of the cattle are slaughtered in backyards or rural areas outside abattoirs. For sheep and goats only 39% and 20% respectively are slaughtered in abattoirs in urban and peri-urban centres. In 1992, some 845,888 cattle, 427,114 sheep and 1,020,324 goats were reported slaughtered throughout the country.

## 6. PRODUCTION OF HIDES AND SKINS AND QUANTITIES RECOVERED

### 6.1 PRODUCTION OF HIDES AND SKINS

The average annual quantities reaching the markets (Exporters godowns, tanneries) are estimated at 0.7 million hides, 1.5 million goatskins and 1.2 million sheepskins. There is estimated non-recovery of 14% hides, 29% sheepskins and 34% goatskins. Sources are 70% urban centres for hides, 61% rural areas for sheepskins and 80% rural areas for goatskins.

### 6.2 AVERAGE WEIGHTS OF RAW HIDES AND SKINS

#### 6.2.1 Cattle hides

Dry hides	5-6 kg/hide
Green hides	20 kg/hide
Wet salted	15 kg/hide

#### 6.2.2 Sheepskins

Dry sheepskins	0.6 kg per skin
Green sheepskin	1.8 kg per skin
Wet salted sheepskin	0.9 kg per skin

#### 6.2.3 Goatskins

Dry goatskins	0.5 kg per skin
Green goatskins	1.5 kg per skin
Wet salted	0.8 kg per skin

Wet salted hides and skins are found in few centres at the Coast and in Nairobi's godowns. Nearly 90% of hides and skins from slaughterhouses around Nairobi are delivered to the tanneries in green condition where salting is often done, awaiting processing.



#### 6.2.4 Grades of Hides and Skins

Grading as reported from slaughterhouses (in green form) and in Nairobi and tanneries godown differ slightly. This is because at the tanneries and godowns, grading is strict while this is not the case in rural stores and at abattoirs.

##### 6.2.4.1 Upcountry grading

	<u>Grade 1</u>	<u>Grade 2</u>	<u>Grade 3</u>	<u>Grade 4</u>
Cattlehides	40%	30%	19%	11%
sheepskins	40%	31%	17%	12%
Goatskins	40%	31%	17%	13%

##### 6.2.4.1 Godowns and Tanneries Grading

	<u>Grade 1</u>	<u>Grade 2</u>	<u>Grade 3</u>	<u>Grade 4</u>
Cattlehides	34%	25%	11%	30%
Goatskins	23%	30%	24%	23%
Sheepskins	19%	40%	31%	10%

**NB** Grade 4 is commonly regarded as REJECT

### 7. TYPES OF DEFECTS ON RAW HIDES AND SKINS

#### 7.1 BEFORE SLAUGHTER

- Brandmarks in more than 50% of cattle originating from pastoral peoples of the northern plainlands and eastern and southern plateau.

- Disease conditions - lumpy skin disease, Streptothricosis, ticks and mange accounting for some 20% of defects at this stage.

- Scratches, horn rakes, barbed wire marks etc and related husbandry problems also are seen on hides and skins in animals from the highlands.

#### 7.2 During Slaughter

These are the most serious damages on Kenya's hides and skins and may account to 50% or more of visible defects. Often knives are used even in goat and sheep flaying. Handling of carcasses on rough floors and poorly constructed lairages result in further defects-

- cuts, bruises, rubbed grain, irregular shape, gauge marks, corduroy, etc

- Fouling with blood, dung and dirt

### 7.3 AT PREPARATION AND PRESERVATION

Workers at drying sheds and godowns where cleaning, trimming, suspension or salting are done, further cause the following defects:-

- poor pattern or irregular shape due to wrong trimming
- irregular shape due to wrong suspension
- further corduroys and gauge marks during fleshing
- putrefaction, autolysis and staleness due to delay in preparation and preservation
- ground drying defects in remote parts of the country or outside curing sheds e.g. rottenness, surface drying with centre still green etc.

Few cases of re-soaking and drying have been reported. Currently, salt curing defects are not pronounced, or seen as there are very few traders involved in this. Tanneries prefer to salt for one or two nights before processing. However salt stains are sometimes seen when the salt used is very poor often containing iron compounds, soil, stones etc.

### 7.4 COMMON METHODS OF PRESERVATION

	<u>Hides %</u>	<u>Sheepskins%</u>	<u>Goatskins%</u>
Wet salted	3	5	5
Air dried	95	85	85
Ground dried	2	8	8
Other (No preservation at all)	-	2	2

Where no preservation is carried out, skins are usually rolled up or placed in a corner of a room and eventually sold to local buyer when "dry" after the smell has ceased. This happens to some of the skins coming from ceremonies e.g. circumcision etc when no trained buyer is alerted, so that he can collect and cure.

### 8. NUMBER OF TANNERIES

Some 16 commercial tanneries have at one time or another been operating in the last three or four years and some have been under construction during the period. Currently, only 13 are in operation. In 1992 those in operation processed some 920,000 cattlehides and 6,500,000 skins. All the tanneries are privately owned. Very few of them are operating at 60% capacity mainly due to lack of raw materials of the right quality and secondly due to economic slump in the world resulting in lack of orders.

### 9. AVERAGE WEIGHT - YIELD AND PERCENTAGE TANNED TO WET BLUE. CRUST

#### TO FINISHED LEATHER

### 9.1 AVERAGE WEIGHT -YIELD PER SQ FEET

Average weight for dry hides and skins are 5.5 kg and 0.5 kg respectively. The weight ranges for hides follows the Kenya Meat Commission weight classification, namely :

	<u>Weight range (lbs)</u>	<u>Average in pounds</u>
extra-lights	0 - 4	2
lights	4 - 8	6
medium	8 - 12	10
heavy	12 - 16	14
extra -heavy	16 up	19

There have been very few hides reaching 22 - 23 lb dry weight and 0 - 4 lb. hides are really calfskins so that majority of hides fall between 4 - 12 lbs i.e. mediums or an average of 8lb. These are the hides from animals in northern plainlands and eastern and southern plateau. Thus

	<u>Wt range</u>	<u>Average lbs</u>	<u>Average kg</u>
Calfskins	0 - 4	2	0.9
Light hides	4 - 8	6	2.7
Medium hides	8 - 12	10	4.5
Heavy hides	12 - 16	14	6.4

	<u>Area Range</u>	<u>Average Area</u>	<u>Yield/kg</u>
Calfskins	10-15 ft <sup>2</sup>	12.5ft <sup>2</sup>	13.8ft <sup>2</sup>
Light hides	15-20ft <sup>2</sup>	17.5ft <sup>2</sup>	7ft <sup>2</sup>
Medium hides	20-25ft <sup>2</sup>	22.5ft <sup>2</sup>	5ft <sup>2</sup>
Heavy hides	25-40ft <sup>2</sup>	32.5ft <sup>2</sup>	5ft <sup>2</sup>

NB Yield/kg = Average Area (sq.ft) divided by Average weight(kg)

### 9.2 PERCENTAGE TANNED TO WET BLUE, CRUST TO FINISHED LEATHER

Comparing exports and tannery inputs in 1991 and 1992, it would appear that 100% of skins (goat and sheep skins) produced and imported go up to wet blue stage. Indeed tannery input figures reported indicated 6.5 million skins tanned to wet blue in 1992 against recorded production of 4.1 million skins. For cattlehides 88% were tanned to wet blue stage in 1992. Except for wastage, nearly all wet blue stock is tanned to crust stage. In 1992 recorded bovine crust tanned leather finished was 95%. Most of the skins were tanned to crust leather and exported in 1992 - about 97% leaving a small quantity for use locally and for export i.e. 3% was tanned to finished leather.

10. CATEGORIES OF RAW OR SEMI-PROCESSED OR FINISHED LEATHER MARKET

10.1 IN THE COUNTRY

10.1.1 Cattle hides

Raw Hides have 100% local market but only 84% and 97% were marketed locally in 1992 and 1993 respectively.

Wet blue - No market locally

Crust - about 10% to local cobblers - usually poor grades and rejects

Finished - about 20% to local footwear manufacturers

10.1.2 Goat and Sheepskins

- Raw skins have 100% local market but only 98% were marketed locally in 1992

- Wet blue - No market locally

- Crust - about 10% to local cobbler - usually poor grades and rejects

- Finished - about 5% to local cobblers and local footwear manufacturers

10.2 OUTSIDE THE COUNTRY

10.2.1 Cattlehides

Raw - 16% and 3% exported in 1992 and 1993 respectively. This is not encouraged by the Government.

Wet Blue - 14% exported in 1991, none in 1992 and 1993. The rest made to crust and finished leathers.

Crust leather - 90% exported in 1992 and 95% exported in 1993

Finished - 80% exported in 1992 and 1993

10.2.3 Goat and Sheepskins

Raw - 2% exported in 1992, none in 1993

Pickle - 0.2% exported in 1992, none in 1993

Crust - 90% exported in 1992

Finished - 95% exported in 1992

NB Not much of goatskin/sheepskin leather is finished unless it is for export.

10.3 QUANTITIES MARKETED

10.3.1 <u>Exports</u>	<u>1991</u>	<u>1992</u>	<u>1993/1994</u>
Hides (raw)	-	301,934kg	67,000kg
Wet blue	7,445,611kg	-	-
Crust	203,548kg	12,177,980kg	6,847,073kg

Finished	4,078,819kg	226,817kg	249,890kg
<b>10.3.1.2 <u>Goatskins</u></b>			
	<u>1991</u>	<u>1992</u>	<u>1993</u>
Raw	-	49,000kg	-
Wet blue	3,220,460kg	-	-
Crust	4,130kg	2,996,597kg	2,986,322kg
Finished	41,596kg	7,535kg	18,097kg

**10.3.1.3 Sheepskins**

<u>Type</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Raw	-	36,000kg	-
Pickled	-	7,050kg	-
Wet blue	11,940,327kg	-	-
Crust	-	1,619,518kg	-
Finished	15,797kg	22,673kg	-

**10.3.2 LOCAL MARKETS**

It is virtually impossible to obtain data on quantities of finished leather (or even semi-finished leathers). Visits to leather goods and leather footwear do not yield much and in some cases there is no co-operation. However local consumption of hides and skins in the raw is as follows:-

<u>Purchases ( 1992)</u>	<u>Hides (pieces)</u>	<u>Skins (Pieces)</u>
Tanners	920,887	6,457,834
Hides and skins 'exporters'	640,294	2,502,321
	<u>1,561,181</u>	<u>8,960,155</u>

**11. IMPORTING COUNTRIES**

Data from the Customs and Excise Department indicate the following:

**11.1 Cattle hides**

<u>Type</u>	<u>(1992) Importing Countries and Percentages</u>
Raw	Portugal 80%, Singapore 20%
Crust Leather	Italy 60%, Pakistan 25%, Spain 10% Singapore 2%, Hongkong 2%, Others 1%
Finished Leather	U.K 60%, France 30%, Belgium 10%

**11.2 GOATSKINS**

<u>Type</u>	<u>(1992) Importing Countries and Percentages</u>
Raw	Italy 90%, Hongkong 10%

Crust Leather	Italy 60Z, U.K. 20Z, U.S.A 8Z, Greece 5Z, India 5Z, Spain 1Z, Mexico 1Z
Finished Leather	Brazil 100Z

### 11.3 SHEEPSKINS

<u>Type</u>	<u>(1992) Importing Countries and Percentages</u>
Raw	India 100Z
Pickled	Japan 60Z, U.S.A 40Z
Crust Leather	Italy 70Z, India 20Z, U.K 8Z, Others 2Z
Finished Leather	U.S.A 100Z

### 11.4 CROCODILE SKINS

<u>Type</u>	<u>(1992) Importing Countries and Percentages</u>
Raw	Italy 70Z, Hongkong 30Z

## 12. LEATHER FOOTWEAR AND LEATHER GOODS SUB-SECTORS

### 12.1 Introduction

Reports indicate that except for Bata Shoe Company, other footwear manufacturers have ceased operations because (they claim) of competition (severe) from informal sectors operating in Kiosks, streets and open air areas of all urban centres. The shoes from these "roadside" operations are of poor quality but affordable by majority of the population during these hard economic times. It is therefore very difficult to obtain reasonable data on footwear and leathergoods subsectors to work on. In addition, regular reporting on leather utilization by Hides and Skins and Leather Improvement Service of the Veterinary Department seems to have been abandoned and only scanty details in 1991 and 1992 annual reports are found.

In Nairobi, Tiger Shoe Company and Joy Shoes Ltd had closed and are no longer in production. So are Kenya Shoe Company and United Footwear in Kiambu area. ElSCO in Eldoret and other units in Nakuru were not included in reports from the Hides and Skins and Leather Improvement Service. At the Coast, McQuin Shoes and Slappers operations continued on a small scale in 1992.

### 12.2 FOOTWEAR

Data from Bata Shoe Company, Limuru is hard to come by. However, four Provinces reported (1992) footwear production from Units operating there as follows:

<u>Province</u>	<u>Men's (Pairs)</u>	<u>Ladies (pairs)</u>	<u>Kids (pairs)</u>
Nyanza	2,528	1,291	891
Coast	125,869	53,555	84,951
North Eastern	1,673	1,169	789
Rift Valley	1,120	475	645

### 12.3 LEATHER GOODS

The same four Provinces reported leathergoods production of many types and uses such as brief cases, ladies handbags, travelling bags, belts, sheaths, prayer mats, book cases and covers etc, some of which are indicated herebelow:-

<u>Province</u>	<u>Brief Cases</u>	<u>Handbags</u>	<u>Travelling Bags</u>	<u>Belts</u>
Nyanza	327	464	272	832
Coast	-	641	61	1,118
NEP	110	-	-	175
Rift Valley	56	544	32	618

### 12.4 EXPORTS

Similarly an indication of leather utilization of high quality may be gauged from quantities of footwear and leathergoods exported in 1992 - namely:-

#### 12.4.1 Footwear

<u>Types</u>	<u>Quantities</u>	<u>Countries and Percentages</u>
Shoes	30 pairs	Tanzania 100%
Football boots	115 pairs	Uganda 100%
Other Sports	100 pairs	Sudan 100%
Other Leather footwear	22,697 pairs	Rwanda 60%, Uganda 20%, Somalia 20%

#### 12.4.2 Leathergoods

<u>Types</u>	<u>Quantities</u>	<u>Importing Countries and Percentages</u>
Gloves	424 No	U.S.A 100%
Belts	54 No	U.S.A 80%, Reunion 20%
Other goods	20 No	Reunion 100%

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
(US/MLW/88/100 AND US/RAF/92/200)

COUNTRY PAPER

ON

HIDES AND SKINS IMPROVEMENT SCHEME IN MALAWI

PREPARED

FOR

THE SEMINAR ON HIDES AND SKINS IMPROVEMENT  
ORGANIZED BY UNIDO AND HELD IN MOROGORO,  
TANZANIA

FROM 13 - 17 JUNE 1994

PREPARED AND PRESENTED

BY

A.N. JUMBE  
NATIONAL EXPERT



TABLE OF CONTENTS

(ii)

	Page
INTRODUCTION	1
ACKNOWLEDGEMENTS .....	(i)
PROJECT OBJECTIVES .....	2
OBJECTIVES ACHIEVED DURING PHASE ONE .....	3
TRAINING ASPECT .....	3
PRODUCTION OF HIDES AND SKINS IN THE TARGET AREA QUANTITIES	4
QUALITY OF HIDES AND SKINS IN TARGET AREA .....	4
REHABILITATION AND UPGRADING THE PRODUCTIVITY OF LIWONDE TANNERY .....	5
LEATHER PRODUCTS SECTOR .....	6
SUPERIOR LEATHER COMPANY LTD. ....	7
CREATION OF NEW EMPLOYMENT OPPORTUNITIES .....	8
WOMEN STATUS IN THE LEATHER INDUSTRY .....	9
LEATHER ASSOCIATION AND REVOLVING FUND .....	10
FOLLOW UP ACTIVITIES OF BULAWAYO SEMINAR RECOMMENDATIONS	11
RECOMMENDATIONS ACHIEVED .....	11
1. Establishment of Leather Association and Revolving Fund .....	11
2. Construction of Slaughter Slabs by Government ..	11
3. Extension Schemes .....	12
4. Hides and Skins Improvement Country Projects participation attitude .....	12
PARTLY ACHIEVED RECOMMENDATIONS .....	13
1. Incentive Schemes .....	13
2. Government Encouragement to leather industry sector .....	13
3. Hides and Skins Levy for improvement activities .....	14
GENERAL RECOMMENDATIONS .....	14
CONCLUSION .....	15

## ACKNOWLEDGEMENT

The writer would like to acknowledge the extensive cooperation, assistance and advice provided throughout the project period of Phase One by Mr. G. Felsner, the Chief Technical Adviser, Mr. J. Berg, the Backstopping Officer and Ms. A. Calabro, the Associate Industrial Development Officer by way of numerous discussions, comments, planning and conducting training courses, seminars, workshops and leather fairs.

The assistance, cooperation and advice provided by all International Experts and consultants that were fielded to Malawi like Mr. I.B. Leach, Mr. S. Kiruthu, Mr. D. Tracy, Mr. D. Manly, Mr. A. Zink, Mr. A. Lessuise, Mr. D. Arenari, Mr. S. Haegbloom, Mr. Touguihna, Mr. R. Glenk, Mr. T. Germano, Mr. J. Nishida, Dr. Taylor, Ms. H. Chigudu and many others during the project life is gratefully acknowledged.

The assistance, cooperation and advice provided by staff of Ministry of Commerce, Industry and Tourism, Ministry of Agriculture, United Nations Development Programme and Allied Institutions during the course of meetings and field trips throughout the project period is also gratefully acknowledged.

## SEMINAR ON HIDES AND SKINS IMPROVEMENT

### 1. INTRODUCTION

This paper is prepared for the seminar on Hides and Skins Improvement to be held in Morogoro, Tanzania from 13 - 17 June, 1991. The paper is intended to cover, among other things, the areas which are of particular significance for Malawi situation as to what actually happened during Phase One implementation period 1990 - 1993 and a follow - up action on the recommendations that came out of Bulawayo joint UNIDO/FAO/ITC seminar held in July 1991.

The paper is also intended to focus on successes achieved and failures due to given constraints and some recommendations for future planning of similar and related leather projects.

The National Hides and Skins, Leather and Leather Products Improvement Scheme in Malawi started in 1990 a year later than other associated countries. Generally Malawi is a small land-locked country south of Equator covering an area of 118428 square kilometers with 9 million people.

Malawi has a small national herd with one million heads of cattle, 900,000 goats and 100,000 sheep. The country has two main abattoirs of Blantyre and Lilongwe plus 47 slaughter houses and slabs distributed throughout the country. It is pity to see that livestock statistics from Department of Animal Health and Industry are different from those of National Statistics Office.

The leather industry sector is still in its infancy in the sense that Malawi has Liwonde Tannery as the only tannery in the country which produces finished leather for consumption by local footwear and leather goods manufacturers. The Tannery has a capacity to produce wet blue and other semi-processed leathers for export market. There are five footwear manufacturers and three leather goods manufacturers in the country which until mid-1991 had been utilizing imported leathers.

## 2. PROJECT OBJECTIVES

Malawi is one of the seven countries in the Eastern and Southern Africa namely, Ethiopia, Kenya, Malawi, Sudan, Tanzania, Zambia and Zimbabwe which have greatly benefited by participating in the Regional Hides and Skins, Leather and Leather Products Improvement Scheme executed by UNIDO from 1989 to 1993. The principal objectives of both the Regional and National Schemes can be summarised as follows:

- (i) Establishment of a national pilot scheme for demonstration in practical terms the process of hides and skins improvement from butchering and flaying to conservation, grading and collection.
- (ii) Rehabilitation and upgrading the productivity of selected tanneries.
- (iii) Increased collection and quality improvement of raw hides and skins.

- (iv) Development of the leather products sectors to serve home markets and reduce imports.
- (v) Creation of new employment opportunities and to increase the income of primary producers.
- (vi) Enhancement of women status in the leather industry.
- (vii) Establishment of national leather industries associations and their revolving fund operations.

#### 2.1.0 OBJECTIVES ACHIEVED DURING PHASE ONE

In Malawi Central Region was identified as the first Target Area for the execution of pilot scheme activities of the subject project. The national project was introduced to Government Policy makers, chemical suppliers, hide merchants, tanners, footwear and leather goods manufacturers by conducting two formal hides and skins improvement seminars held in Lilongwe. Three formal training courses on hides and skins improvement were conducted in Kasungu, Ntcheu and Salima Districts for livestock farmers, extension officers, hide merchants, butchers, flayers and skimmers.

#### 2.1.1 TRAINING ASPECT

During Phase One the project staff managed to train the following:-

34 Animal Husbandry Officers, Veterinary and Field Assistants as Extension Officers.

- 315 Livestock farmers, butchers and hide merchants.
- 32 Flayers and skinners.
- 11 Leather goods manufacturing personnel -  
(5 Trained locally while 3 women from SLC were trained at LIZ in Zimbabwe 3 men from SLC were trained in Germany, Kenya/Zimbabwe and Tanzania).
- 6 Tannery personnel were trained abroad by UNIDO.

2.1.2 PRODUCTION OF HIDES AND SKINS IN THE TARGET AREA: QUANTITIES

Dependent on recorded slaughterings, production of hides and skins in the target area had been increasing steadily year by year as appended below:-

<u>YEAR</u>	<u>HIDES</u>	<u>GOAT SKINS</u>	<u>SHEEP SKINS</u>
1990	25933	20780	2142
1991	25110	23405	2509
1992	27743	23949	2665
1993	29454	24160	2710

SOURCE : UNIDO AND CSC.

2.1.3 QUALITY OF HIDES AND SKINS IN TARGET AREA

There was no grading of hides and skins at the time of launching the project in Malawi. However, the project staff managed to introduce grading system in June 1991. Therefore, the results of buying raw hides and skins on the basis of quality had been as follows:-

<u>YEAR</u>	<u>GRADE</u>	<u>NO. OF HIDES</u>	<u>%AGE</u>	<u>NO. OF SKINS</u>	<u>%AGE</u>
1991	I	6278	25	11661	45
	II	7031	28	8292	32
	III	7282	29	4665	18
	IV	3515	14	-	-
	Reject	1004	4	1296	5
1992	I	9710	35	12775	48
	II	8323	30	9315	35
	III	4994	18	3992	15
	IV	3329	12	-	-
	Reject	1387	5	532	2
1993	I	10604	36	11597	48
	II	8542	29	7731	32
	III	5596	19	3866	16
	IV	3534	12	-	-
	Reject	1178	4	966	4

The districts which performed remarkably well in producing good quality hides and skins in their order of priority were as follows:- Salima, Ntcheu, Lilongwe, Dowa, Mchinji, Ntchisi, Dedza, Kasungu and lastly Nkhotakota.

#### 2.1.4 REHABILITATION AND UPGRADING THE PRODUCTIVITY OF LIWONDE TANNERY

Liwonde Tannery, the only one in Malawi, was initially set up as a cottage industry and later developed into a full - fledged tannery through UNDP technical assistance when production capacity increased from cottage industry level to 50 hides per day.

In 1991 UNIDO provided Liwonde Tannery with additional tanning drums and equipment and that increased production capacity to 100 hides per day although utilization capacity is still below 60% due to some serious constraints experienced by the tannery in obtaining chemicals, frequent break-downs of old machines, quality hides and economic prices and marketing intelligence for its finished leather. However, the new management is doing its best in redressing these problems.

Liwonde Tannery is currently processing finished leathers which are utilized by local footwear and leather goods manufacturers. However, the tannery has the potential of processing wet blue and other semi-processed leathers for export market. Leather production for the past four years had been as follows:-

<u>YEAR</u>	<u>QUANTITY OF LEATHER IN SQUARE FEET</u>
1990	32846
1991	166416
1992	291530
1993	450000

#### 2.1.5 LEATHER PRODUCTS SECTOR

Malawi has five footwear manufacturers namely,

- Bata Shoe Company
- Steplite Shoe Manufacturers
- Duke Footwear Manufacturers
- Classic Shoe Manufacturers
- Phazi Industries



Leather requirements by these footwear manufacturers ranges from 100,000 to 500,000 square feet per plant per annum and production levels of leather shoes ranges from 100 to 750 pairs per day per plant with Bata Shoe Company being the largest leather shoes manufacturing factory.

Malawi also has three leather goods manufacturing plants namely:-

- Leather and Luggage Manufacturers
- Bag and Baggage Industries
- Superior Leather Company

The daily production ranges from 50 to 300 items with Leather and Luggage Manufacturers being the largest leather goods manufacturing factory.

#### 2.1.6 SUPERIOR LEATHER COMPANY LTD.

It should be noted that Superior Leather Company (SLC) was established with technical assistance from UNIDO in 1992 and the plant is currently manufacturing pure leather products like belts, wallets, key and passport holders, computer cases, ladies handbags, men's briefcases, industrial gloves and aprons.

The Superior Leather Company have had the services of the Leather Goods Expert, Mr. David Tracy on two split missions June/July 1992 and November/December 1992 during which he trained the work force on the job. Currently the company has expertise of UNV Leather Goods Expert, Mr. Daniel Alano who arrived in Malawi on 12 May 1993 for one year contract. It is fortunate for SLC in that Mr. Alano's contract

has been extended for another 12 months period from 12 May 1994 - 11 May 1995.

With the coming in of Mr. Alano at SLC the product lines and quality of products have remarkably improved. The present production is ranging from 50 - 100 items per day. Indeed, Mr. Alano's excellent performance at Superior Leather Company and training skills which he demonstrated at the Leather Institute of Zimbabwe in Bulawayo in 1993 has clearly proved that Mr. Alano is an asset not only to SLC and Malawi Government, but also to other leather products manufacturing plants in the neighbouring countries within our region.

It may be worth mentioning here that Mr. Alano conducted a special training of trainers course at Superior Leather Company for two women from Zimbabwe namely, Mrs. K. Essof and Ms. M. Mathe as from 13 April - 6 May 1994. Plans are also underway to send Mr. Alano to Zambia on a five - day mission being organized by UNIDO Headquarters. He also trained 12 people as trainers on leather and leathersgoods production at MEDI for 5 weeks as organized by DEMATT and SLC.

#### 2.1.7 CREATION OF NEW EMPLOYMENT OPPORTUNITIES

The establishment of Liwonde Tannery and Superior Leather Company had facilitated creation of new employment opportunities for some Malawians e.g. Liwonde Tannery has a work force of 49 men and 4 women while Superior Leather Company has 9 men and 6 women.

Liberalization of leather industry in Malawi in 1987 had influenced some Malawians to become Hide Merchants who had in turn employed their fellow Malawians as hides and skins buyers and/or collectors and that had eventually assisted to increase the income of primary producers.

### 2.1.3 WOMEN STATUS IN THE LEATHER INDUSTRY

In Malawi the number of women employed in the leather industry as specialized workers or entrepreneurs is indeed very low due to lack of technical skills and discriminatory attitudes.

However, UNIDO had set the ball rolling in 1992 when it assisted in the establishment of Superior Leather Company by putting a condition of integrating women in the leather goods manufacturing plant in Lilongwe which eventually resulted into having 6 women employed at SLC representing 40% of total work force. Current situation is as follows:-

	<u>NAME OF COMPANY</u>	<u>NO. OF EMPLOYEES</u>	<u>GENDER DISTRIBUTION</u>
1.	Superior Leather Co. Ltd.	15	9 men 6 women
2.	Liwonde Tannery Ltd.	53	49 men 4 women
3.	Bata Shoe Company	320	312 men 8 women
4.	Leather and Luggage	75	75 men 1 woman
5.	Bag and Baggage	80	80 men NIL
6.	Phazi Industries	85	85 men NIL
7.	Classic Shoe Manufacturers	62	62 men NIL
8.	Steplite Shoe Manufacturers	32	32 men NIL
9.	Duke Footwear Manufacturers	70	70 men NIL

Following the seminar on gender development in the leather and leather products industry which was held in Malawi from 7 - 10 March 1994 there is every hope that soon or later the situation is going to change for the better if appropriate strategies are undertaken by respective governments and leather associations in the region.

2.1.9. LEATHER ASSOCIATION AND REVOLVING FUND

Following one of the recommendations that came out of Bulawayo joint FAO/ITC/UNIDO seminar held in July 1991 Malawi formed its own association in the same year and was officially incorporated with the Registrar of Companies and Associations on 14 April 1993 under the name of "The Leather Association of Malawi" (LAM) and its Revolving Fund was established in May 1993.

The Association has 15 members at the present time of which two are women. The membership fee is K200.00 per year. The main source of funds for the Association is Superior Leather Co. Ltd. at the moment, because Liwonde Tannery was given 12 months grace period which expires on 8th December, 1994 and until then the financial status of the Association still remains meagre.

A small project proposal made by LAM was floated to Germany Embassy in Lilongwe which positively responded by allocating LAM with the sum of K58,638.00 to implement its project activities namely, construction of a standard slaughter slab, high-shed and a small leather handcraft centre at Msundwe Rural Trading Centre which is 40 kilometers away from Lilongwe on Lilongwe/Mchinji road.

Following the seminar on gender development in the leather and leather products industry which was held in Malawi from 7 - 10 March 1994 there is every hope that soon or later the situation is going to change for the better if appropriate strategies are undertaken by respective governments and leather associations in the region.

2.1.9. LEATHER ASSOCIATION AND REVOLVING FUND

Following one of the recommendations that came out of Bulawayo joint FAO/ITC/UNIDO seminar held in July 1991 Malawi formed its own association in the same year and was officially incorporated with the Registrar of Companies and Associations on 14 April 1993 under the name of "The Leather Association of Malawi" (LAM) and its Revolving Fund was established in May 1993.

The Association has 15 members at the present time of which two are women. The membership fee is K200.00 per year. The main source of funds for the Association is Superior Leather Co. Ltd. at the moment, because Liwonde Tannery was given 12 months grace period which expires on 8th December, 1994 and until then the financial status of the Association still remains meagre.

A small project proposal made by LAM was floated to Germany Embassy in Lilongwe which positively responded by allocating LAM with the sum of K58,638.00 to implement its project activities namely, construction of a standard slaughter slab, high-shed and a small leather handcraft centre at Msundwe Rural Trading Centre which is 40 kilometers away from Lilongwe on Lilongwe/Mchinji road.

Work of procuring materials is underway while waiting for the owner of the land to harvest his maize.

### 3.0 FOLLOW UP ACTIVITIES OF BULAWAYO SEMINAR RECOMMENDATIONS

Some of the recommendations that came out of Bulawayo seminar were followed up with some successes while others were met with some failures.

#### 3.1.0 RECOMMENDATIONS ACHIEVED

The collaboration between the project staff and Government/Institutions had made underlisted recommendations to be achieved during the period from December 1991 to date.

##### 3.1.1 ESTABLISHMENT OF LEATHER ASSOCIATION AND REVOLVING FUND

The Leather Association of Malawi was formed in 1991 and was officially registered on 14 April, 1993. Currently the Association has 15 members of whom two are women. A Revolving Fund was opened in May 1993 with the National Bank of Malawi in Blantyre. Mr. D.P.H. Chisala is the Chairman, Mr. K.I. Hassen is the Treasurer while A.N. Jumbe is the Secretary.

##### 3.1.2 CONSTRUCTION OF SLAUGHTER SLABS BY GOVERNMENT

In collaboration with the project staff the Government of Malawi has constructed seven new slaughter slabs within the Target Area during the period from July 1991 to April 1994 namely:-

1. Ntcheu Slaughter Slab
2. Mitundu Slaughter Slab
3. Nkhamenya Slaughter Slab
4. Santhe Slaughter Slab
5. Kamwendo Slaughter Slab
6. Mlangeni Slaughter Slab
7. Lumbadzi Slaughter Slab

### 3.1.3 EXTENSION SCHEMES

Extension packages on hides and skins improvement had been formulated by project staff with assistance of the Department of Animal Health and Industry and a standard monthly reporting system on collection, grading and price structure has been established and is being used by Extension Officers within the Ministry of Agriculture. The only problem that the National Expert is experiencing is delayed submission of field reports by some of the Extension Officers despite several reminders.

### 3.1.4 HIDES AND SKINS IMPROVEMENT COUNTRY PROJECTS PARTICIPATION ATTITUDE

The hides and skins improvement project activities in Central Region being Target Area were cordially accepted by field staff as demonstrated by their active participation and involvement in the training sessions and field visits as organized by the National Expert. The same good relationship had applied between National Expert and personnel from Cold Storage Company and Department of Animal Health and Industry throughout the project period.

### 3.2.0 PARTLY ACHIEVED RECOMMENDATIONS

The project staff made very little or no achievements in the recommendations appended below:-

#### 3.2.1 INCENTIVE SCHEMES

Apart from introducing grading system for raw hides and skins in the country very little had been done in finding suitable incentives e.g. increase in prices for raw material base.

However, due to recent 55% devaluation of Malawi Kwacha, Cold Storage Company has recently also increased buying prices for the raw hides and skins as follows:-

(a) <u>OLD PRICE FOR A HIDE</u>	<u>NEW PRICE FOR A HIDE</u>
Grade I - K9.50 (US\$1.36)	Grade I - K15.00(US\$2.15)
II - K7.20 (US\$1.03)	II - K12.00(US\$1.72)
III - K4.60 (US\$0.66)	III - K 9.00(US\$1.29)

(b) <u>OLD PRICE FOR A SKIN</u>	<u>NEW PRICE FOR A SKIN</u>
Grade I - K1.20 (US\$0.17)	Grade I - K1.50 (US\$0.22)
II - K0.90 (US\$0.13)	II - K1.20 (US\$0.17)
III - K0.60 (US\$0.09)	III - K0.90 (US\$0.13)

NB Exchange rate is US\$1 = MK7.00 as at 1st May 1994.

#### 3.2.2 GOVERNMENT ENCOURAGEMENT TO LEATHER INDUSTRY SECTOR

Malawi has just gone through transition period from single to multiparty system of Government which is in place now and in view of this situation nothing significant has been done in this respect. However, there is every hope that the new Government will some day do something



beneficial to the leather industry sector once it gets settled.

### 3.2.3 HIDES AND SKINS LEVY FOR IMPROVEMENT ACTIVITIES

This matter was discussed between the project staff and the Department of Animal Health and Industry a year ago. In principle the Chief Veterinary Officer for the Department of Animal Health and Industry agreed that the proposition was indeed good and promised to take up the matter with Treasury. A reminder to this effect had been issued to the Chief Veterinary Officer two months ago. Unfortunately, there has been no feedback from him up until this time.

### 4.0 GENERAL RECOMMENDATIONS

The National Expert feels that underlisted recommendations may assist UNIDO in planning for its future leather industry projects.

- i. UNIDO should think of finding an independent office for the National Expert and be prepared to pay for office rental fees and wages for his support staff like drivers, copy typists and office messengers, funds permitting, to avoid some of the inconveniences that the National expert had experienced during Phase I.
- ii. UNIDO should strengthen the coordination and communication link with Line Ministries with particular reference to Ministry of Commerce, Industry and Tourism in cooperation with the Ministry of Agriculture e.g. Policy issues should not be directed to the National Expert, but to

the Line Ministries.

iii. Training is a continuous process. Therefore UNIDO should continue to provide training courses in various fields to people working in the leather and leather products industry sector with gender development in mind. The same thing should apply to organization of study tours, seminars and workshops.

iv. Registration of project motor vehicles and/or motor cycles should either be private or CD numbers to avoid wrong assumptions by Ministries or Departments that motor vehicles/cycles belong to them when they are given Malawi Government (MG) Registration numbers:

## 5.0 CONCLUSION

In conclusion the writer wishes to thank the Government of Germany for funding Phase One of the National Project and to ask the same Government or any other donor countries to come forward and assist Malawi Government by funding her phase two of the subject project now that general elections are over and multiparty government is in place.

NB DEFECTS : Live animals -- There is no branding in Malawi  
- scratches, whip lashes pork marks  
: AT Slaughter - Flay cuts, gouges, scores, drag marks, veininess  
: AT Preservation - Hair slip and putrefaction  
- misshapen.

SUDAN PRESENTATION TO HIDES AND SKINS  
(MOROGORO) SEMINAR MOROGORO - TANZANIA  
13 - 17 JUNE 1994

1. Profile =

1.1. Area = 2-5 million Km<sup>2</sup>, the largest in Africa and neighbouring 9 African Countries.

1.2 Ecological zones =

Desert	31%
Semidesert	19%
Low Savannah Rainfal, Sand Soil	12%
Low Savannah, Central Plains	18%
High rainfall Savanah with forsets, flood regions and mountain	20%

1.3 Water Sources = Suan has substantial water resources from the Nile and its tributaries, Seasonal water courses. There is extensive Run of Areas. Arable land is about 12% as well as natural pastures.

1.4 Climate: Normally Hot and Dry from September to May and Rainy April/May to September/October. Lower Southern Sudan has a tropical climate.

1.5 Population = 1993 census is 25 million of which:-

69.1 %	Rural
20.2 %	Urban
and 10.7 %	Nomadic

2. Livestock =

Ranks second to Ethiopia in African countries and first in ARAB League countries.

2.1 Estimates = Adopted by National strategy in (Million heads) is

Cattle	22.2
Sheep	22.0
Goats	16.4
Camels	2.8

2.2. Breeds

2.2.1 Cattle = Predominantly short-horn ZEBU classified mainly to:  
 Baggara, Kennana, Butana, Sanga ..... etc.

2.2.2. Sheep = Widly spread is the Desert sheep (hair types) with many classification according to breeding area or tribe. In Southern area there are Nilotic types.

2.2.3. Goats = Nubian, Desert and Nilotic types.

2.2.4 Camels = Two types: Riding and packing camels  
Further classified according to tribal ownership.

2.3 Offtake Rates =

Cattle	8.0%
Sheep	24.9%
Goats	26.9%
Camels	7.2%

2.4 Average careass weight (kg)

Cattle	170
Sheep	18
Goats	12
Camels	250

2.5 National Kill (Million heads)

Cattle	1.72
Sheep	5.5
Goats	4.4
Camels	0.1

2.6 Hides - Skins recovered (million pieces)

Cattle	1.70
Sheep	4.30
Goats	3.90
Camels	0.05

2.7 Average Green Weights :

Cattle hides	16 - 20 kg/piece
Sheep skins	26 - 32 lb/d,
Goat skins	14 - 20 lb/d,
Camel hides	20 + kg/piece

2.8 Average Grading (%)

Grade =	(1)	(2)	(3)	(4)
Cattle	10	30	40	20
Sheep	40	20	20	20
Goats	30	20	20	30
Camels	-	10	30	60

### 3. Hides/ Skins Defects

#### 3.1. Antimortem Defects :

##### 3.1.1 Diseases and parasites

	Cattle	Sheep	Goats	Camels
Mange	Common	Common	Common	Common
Ticks	Common	Very little	Very little	Common
Streptothricosis	Common	-	-	-
Pox	Common	Common	Common	-

##### 3.1.2. Mechanical

	Cattle	Sheep	Goats	Camels
Brands	Common	-	-	Common
Thorns	Little	Common	Common	little

#### 3.2. Post-mortem Defects:

	Cattle	Sheep	Goats	Camels
Bad paltarn:	Common	very little	very little	common
Slaugh: defects	"	"	"	Very common
patrifeiction	"	Common	Common	Common
Insect damage	"	Common	Common	Common

### 4. TANNERIES

#### Large: (1) Khartoum Tannary (Khartoum)

Governmental but soon will be privitized

(2) White Nile Tannary (Khartoum) privitized

(3) Gezira Tannary (Medawi) Joint venture 60% Dawoo(Korea), 40% Sudan Government

(4) Afrotan (40 km South Khartoum) Private.

#### Medium Scale

(5) Omdurman Tannary and Footwear Factory (oldest Tannary in Omdurman)

(6) Salem Tanuary (Omdurman)

(7) AbuElizz Tanary (Khartoum North)

(8) Omdurman Modern Tannary ( Closed)

(9) Red Sea Tannary (Port Sudan) 50/50 government and private sector, on way to privitylization

(10) Nyala Pilot Tannary (Nyala)

Informal tradition Artisans (29 groups) handling  $\frac{1}{2}$  of hide and  $\frac{1}{3}$  of skins production. In 1990 the performance of Sudanese tanneries was classified as below 30% capacity utilization, Now 1994 and after ban of export of raw hides the utilization of capacity reaches 75% and over.

5. Hides/ Skins Improvement Services:

Started 1947 with other East African Countries. UNDP/FAO programme (1963 - 1967) where by mostly 150 slaughter slabs of different capacities graded ( 1 - 5), 3 Abattoirs of which 2 in Khartoum (one for Export), Third in Medani Extension/inspection staff employed, trained and distributed at provincial capitals, districts and large towns. Now the man power distributed in states but with concentration in Khartoum, Gezeria and Eastern Region. Deterioration due to lack of good slaughtering facilities and existing ones needs rehabilitation. There is a move towards erection of private slaughter houses. Also lack of motivation of inspection and extension staff.

6. Unido Project

Started late in Sudan (January, 1990). Work in target areas which was started in 3 areas of Eastern Sudan, Gedarif - Kassala and Halfa eL Gadida - We have  $3\frac{1}{2}$  man/month field work of International Hide/Skin expert worked with nationals and good results were achieved. The project addressed problems by supplying transport (Vehicles, motor-bikes and bicycles) and also equipment for hoisting and flaying, more than 115 flayers were trained in target areas, knives distributed to flayers even outside the target areas freely at first and on payment later to revolving fund. Leather trading and Manufacturing Companies, Animal Resources, Government National Development Plan has allocated much funding and counterpart Staff salaries and generally payment was more than stimes. For collection increase generally in Sudan the loss of hides and skins is 5 - 10 % and this goes for home use or during rainy season.

Training Seminars for 85 persons in target areas which were attended by variety of people, Administrators, Veterinarians, Hide and skins staff, Merchants etc. As for quality improvement was noticed especially in Gedarif Target area, in which the green grading became as follows:

<u>Grade</u>	(1)	(2)	(3)	(4)
1992	51	31	9	9 %
1993	55	28	10	7 %
1994	60	28	7	7 %

*Tanners, Merchants and Exporters comment that the improvement is 15 - 20% in quality in general for hides and Skins.*

**7. Incentives:**

*Tanners are now more willing to contribute to this specially after Ban of Raw Exporting in May 1993. One agent of Afrotan, Trader in Gedarif area is paying incentive to flayers.*

*Government has formed Leather Chamber of the Ministry of Industry and Commerce, Membership includes all concerned from Government departments as well as from private sector (Tanneries manufacturers etc...) the duties and functions are for better performance for the subsector. Now having the issue of Legislation on top of agenda Unido Grading Scheme will be used, A workshop is to be held at the end of June 1994 for setting suitable programmes for subsector. Hides and Skins improvement being top sector.*

**8. Revolving Fund**

*Started with pay back with Sata Shoe Factory, 17,000 \$ utilized for DSA/overtime for drivers and participating in training seminars for footwear.*

*However, the large amount is to start and cheque deposited to the Association at date 1.6. 1994 have been handed to Sudanese Chamber of Industries Association. It will be utilized mainly for hides, skins improvement field work: DSA, offering credit with guarantees, to merchants to erect drying warehouses or sheds.*

**9. Acknowledgement**

*Despite, the Sudan National Project for Extention did not attract Donors till now, we are grateful to Unido for giving Sudan a fair chance in phase II of Umbrella Project, and hope to open work in proposed New Target areas in Southern Darfur and Blue Nile regions.*

## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

US/URT/88/100



Hides and Skins, Leather and Leather Products  
Improvement Scheme in Cooperation with  
the Regional Project US/RAF/88/100



Your Ref.

Dar es Salaam

7/6/1994

Tanzania has an area of 881,000 Sq km which includes the mainland Tanganyika and the Islands of Zanzibar and Pemba. The country's total population stands at 26,000,000 people.

Main physical features include Coastal belt along Indian Ocean to the East running down from North to South a chain of mountain, on the North which includes mounts Kilimanjaro and Meru a highland plateau to the South and South West and Vast Savannah lands in the middle and West of the country.

There are three major lakes namely Victoria on the North West, Tanganyika on West and Nyasa on South West.

There are two rainy seasons along Coast and one season in the rest of the country.

The basic objectives of the UNIDO project, as far as raw materials are concerned, are to improve the quantity and quality of hides and skins available to the tanning industry.

Data on the quality and quantity of hides and skins produced, collected delivered to Tanneries and exported are available as follows:-

①	<u>Animal population,</u>	<u>Off take rate</u>	<u>Estimated availability of Hides and Skins</u>
Cattle	12,776,643 - 15-16	8%	1,022,131
Goats	7,747,668 - 10-11	25%	1,936,917
Sheep	3,551,999 4-5	15%	526,799

...../2

## Mail Address:

UNIDO - UNDP  
P.O. Box 9182  
Dar es Salaam, Tanzania

Telephone: 27411, 64261  
Telex: 41284 UNDEVP TZ  
Telefax: 36136



Collection of Hides and Skins

<u>YEAR</u>	<u>HIDES</u>	<u>GOAT SKINS</u>	<u>SHEEP SKINS</u>
1985	352,450	201,600	73,232
1986	405,755	218,591	85,467
1987	575,179	326,031	116,690
1988	725,115	408,000	203,175
1989	759,113	525,132	289,165
1990	775,105	506,175	327,840
1991	705,276	525,180	301,870
1992	917,941	719,872	418,714
1993	1,400,000 1.6	1,000,000 1.1M	450,000

Export of Hides/Skins

<u>YEAR</u>	<u>HIDES</u>	<u>GOAT SKINS</u>	<u>SHEEP SKINS</u>
1990	848,347	753,799	264,323
1991	771,468	564,007	169,696
1992	879,817	415,341	217,467
1993	1,614,216 1.4M	1,109,699 1.1M	395,150

Importing countries for the raw hides/skins from Tanzania are:  
India, Pakistani, U.K., Italy Gulf Countries, Hong Kong.

Distribution of grades among of cattle hides/skins produced in the country:

<u>HIDES</u>		<u>SKINS</u>	
Grade: I	10 - 20%	Grade: I	45%
II	25 - 40%	II	40%
III	25 - 30%	III	14%
IV	10 - 40%	IV	1%

② Types of defects on raw materials:

(a) Before Slaughter:

- Pox .....7.4% ✓
- Branding ..... 14.5% ✓
- Scratches ..... 10.1% ✓

(b) During Slaughter:

Gouge marks .....	20.7%	/
Cuts .....	14.6%	/
Contamination .....	2.5%	/
Drugged grain .....	2.5%	/
Bad pattern .....	2.0%	/

(c) During preservation:

Hair Slip .....	3.9%	<i>Commonly goat/sheep skin</i>
Putrefaction .....	1.3%	
Distortion .....	1.5%	
Vermin .....	0.7%	

(d) During Storage and Tryportation

Insects .....	2.8%
Wetting .....	0.2%
Rubbing .....	1.0%
Smoked hides .....	1.9%

Reference: Survey conducted by the World Bank.

Livestock Distribution and Population in the country

<u>REGION</u>	<u>CATTLE (000)</u>	<u>GOAT</u>	<u>SHEEP</u>
Arusha	1,921.56	2,121.0	1,154.2
Coast	91.01	19.5	4.9
D'Salaam	6.38	19.5	1.4
Dodoma	1,035.68	592.8	169.9
Iringa	497.46	214.2	91.6
Kagera	377.31	451.8	53.6
Kigoma	64.51	245.7	36.4
Kilimanjaro	424.60	453.7	221.1
Lindi	6.44	16.8	10.2
Mara	1,004.19	437.7	215.6

Mbeya	932.77	209.0	142.1
Morogoro	344.47	176.2	53.3
Mtwara	15.58	93.3	29.3
Mwanza	1,405.72	684.2	250.0
Rukwa	406.16	105.3	21.1
Ruvuma	40.40	212.0	29.6
Shinyanga	1,957.28	1,084.7	487.1
Singida	973.18	543.8	280.3
Tabora	961.76	331.0	174.5
Tanga	468.98	258.3	116.2
<b>Total</b>	<b>12,935.43</b>	<b>8,261.2</b>	<b>3,540.8</b>

AVAILABLE SLAUGHTER FACILITIES

(increasing)

REGION	<u>ABATTOIRS</u>		<u>SLAUGHTER SLABS</u>	
	<u>1989</u>	<u>1993</u>	<u>1989</u>	<u>1993</u>
Arusha	9	10	80	144
Coast	8	8	11	11
D'Salaam	2	2	22	22
Dodoma	4	4	29	39
Iringa	5	3	13	20
Kagera	5	5	67	67
Kigoma	4	6	15	21
Kilimanjaro	5	7	57	339
Lindi	3	3	3	3
Mara	4	4	38	74
Mbeya	10	18	33	33
Morogoro	7	7	8	8
Mtwara	3	3	3	3
Mwanza	17	17	47	49
Rukwa	3	3	10	16
Ruvuma	2	8	9	11
Shinyanga	11	14	9	35
Singida	6	3	13	26
Tabora	7	8	33	33
Tanga	7	7	18	19

For the last 4 years due to effort of UNIDO Project, government and Leather Association of Tanzania, we have seen an increase in the number of slaughter slabs as indicated above. On similar lines, butchers and traders have contributed funds for construction of New drying shed at Sirari - Kenya - Tanzania border, New drying shed at Shinyanga, and erected drying frames at regional abattoir in Mwanza.

This encouraging trend is being taken as an essential step for hides/skins improvement in rural areas.

Slaughtering

- (a) Slaughter in organized slaughter houses in only 30%
- (b) Slaughter in rural <sup>area</sup> ~~un-organized~~ places is more than 70%. (we concentrate)

Types of preservation in percentage:

Wet salting	-	10%
Frame drying	-	22%
Peg drying	-	64%

Average weight:

Wet salted	-	14Kg
Dry salted	-	10.6 Kg
Suspension dried	-	5.6 Kg

PHYSICAL CHARACTERISTICS

- Average area of green hide is sq ft 21
- Average green weight for a hide is 12 - 14 Kg
- Type of grain expected is mainly rough which is always corrected during processes.
- Substance mainly is between 2.2 - 2.5mm.

Role of National Agriculture Livestock, Extension Rehabilitation programme in improvement of Hides/Skins in Tanzania.

Tanzania is among the most important hides and skins producing countries in Africa with an estimated annual production of about 1.1 million cattle hides, 2 million sheep and goat skins. However, the quality of hides and skins in this country is comparatively poor.

Hides and Skins contribute immensely into the Gross National product and therefore in order to capitalize on this product, there is a growing need to direct the national effort towards improvement of hides and skins both quality and quantity.

Improvement measures

There are four most important measures which if taken, might improve the hides and skins product immediately.

- (1) Strengthening of livestock Extension services towards hides improvement. ✓
- (2) Setting up modern abattoirs with adequate scientific flaying and curing facilities. ✓
- (3) Setting up marketing systems based on price incentives to primary producers, dealers and Tanneries. ✓
- (4) Reviewing the regulatory Legislations and Laws for the development of hides and skins sector. ✓

The structure of Extension Service Department of Ministry of Agriculture.

The structure of the Division of Extension Service is in such a way as to allow or facilitate an easy flow of Technical messages to the farmers or target groups.

The extension system practiced in this aspect is referred to as training and visit (T & V) system. Under T & V system, the village Extension Agents are trained on particular subjects regularly and they are given specific Technical messages to send to the target groups.

National Agriculture and Livestock Extension Rehabilitation  
Project (NALERP)

In 1988, the government of Tanzania obtained a loan from the World Bank US \$ 30.4 million to enable it to implement the system of extension services.

Training of Village Extension workers

Under T & V systems, every village extension worker undergoes a two day training a chosen subjects of economic importance. The resource person in such trainings are subject matter specialists.

Hides and Skins improvement is one of the subjects taught in these monthly sessions.

Provision of Transport to village Extension workers (VEW)

In order for the VEW to be able to have technical package reach the farmers/Livestock keepers, mobility is absolutely necessary.

The extension service has provided a motorcycle to each divisional extension worker and a bicycle to each village extension worker.

The extension staff are therefore able to visit the rural livestock keepers and farmers to advise them on various packages including those on hides and Skins improvement such as hide preparations, curing, grading and storage.

Hides and skins subject matter specialist is supposed to emphasize on the use of posters and distribution of pamphlets showing Hides/skins improvement methods.

The potential of foreign reserve which can be realised from hides and skins in Tanzania is great. In order to exploit this fully, extension services has a substantial role to play, Under the present T & V system of extension tremendous improvement in hides/skins could be accomplished.

Training of Hides/Skins improvement officers.

NALERP has set aside funds for the purpose of training hides/skins personnel Tshs 30M.... In this financial year. One training course was conducted in Mwanza and another one is planned to take place in Dodoma 20th - 26 this month.

All regional Hides and Skins improvement officers from twenty regions have been <sup>invited</sup> limited to attend the training course. .... /8

The Leather Association of Tanzania, by the N E

Leather Association of Tanzania (LAT) was established at the end of the year 1991 in DSM and its first meeting to elect leaders was held on 28 March 1992.

(1) Aims and Objects of the Association:

The objects for which the Association is formed are:-

- (i) To provide a forum for interchange of Information and experience among leather and leather goods industries on one hand and Government institutions on the other so as to achieve optimum results in cooperation and corporate endeavors.
- (ii) To represent the interests of the leather and leather goods Industries and the administering and supervising institutions and Ministry concerned with such industries, at a combined forum to evolve and recommend steps for the development of such industry in the country.
- (iii) To develop hides and skins improvement in conjunction with government and non-government organizations. The Association will endeavor to develop hides and skins preparation and recovery of all hides and skins in the country.
- (iv) To develop leather and leather goods sector in Tanzania.
- (v) To establish a forum for discussion, coordination and planning in the leather and leather goods sector.
- (vi) To exchange information, ideas and views on problems and prospects of leather and allied industries with an aim of solving problems and improving the leather industry as a whole.
- (vii) To endeavor and promote the use of local materials where possible with an aim of reducing dependency of imported supplies.
- (viii) To stimulate internal and external markets for leather and allied leather goods products.
- (ix) To endeavor the use and development of local skilled manpower and technology and develop local expertise and know how either on our own or through foreign aid assistance.
- (x) To undertake organized training locally and outside the country.

- (xi) To ensure that through coordinated efforts, maximum use is made of leather wastes of both leather and leather goods industries.
- (xii) To develop better coordination and joint efforts in research, product design and marketing.
- (xiii) To organize, coordinate and consolidate the purchase and import of essential inputs and bulky supplied of leather and leather goods industries.
- (xiv) To make coordinated efforts in the field of sales, and export promotion of leather, and Leather products by participating in international leather and leather goods trade fairs and symposiums.
- (xv) To establish a Leather Institute and Training Centre in the country for the needs of the Hides, Leather and Leather goods Sector.
- (xvi) To identify constantly the current problems affecting the operations and growth of the existing industry and evolve and recommend curable measures pay all costs and expenses of and incidental to the formation and registration of the Association.
- (xvii) To do all such things as are incidental or conducive the attainment of the above objects.

## 2. Functions of the Association:

The functions of the association shall be:

- (a) To conduct research and studies in the various operational and development areas of the leather and leather goods sector.
- (b) To maintain close contact with other institutions in similar or allied industries.
- (c) To prepare and recommend sectoral improvement data to the government.
- (d) To render active operational assistance and advice to the existing industries.
- (e) To promote export sales and generally assist member companies in their marketing efforts.



- (f) To host seminars for flayers and hides and skins improvement officers on proper methods of hides/skins flaying and preservation.
- (g) To establish documentation and information system relevant to leather development sector.
- (h) To publish newsletters etc. relevant and pertinent to the leather sector.
- (i) To advice training institutions on relevant on relevant courses and wherever necessary initiate them.
- (j) To assist member companies to maximize training opportunities.

### 3. Membership

All public and parastatal organizations, Govt. institutions, companies, cooperatives, firms or individual or persons dealing or engaged in business of hides and skins including game skins and game products, leather, leather goods or any allied trades or related fields thereof in Tanzania shall be eligible for membership.

So far the association has been very active on the improvement of hides and skins. It is supporting hides/skins improvement in Shinyanga region, rehabilitation of Mwanza abattoir, office accomodation for N.Es, and purchase of equipments for de-fleshing of Hides and Skins to be installed at two abattoirs in D'Salaam.

Once our Tanneries are in full production, leather association will be able to work closely with the Tanneries for the development of leather sector in Tanzania particularly on hides/skins improvement.

Africa Trade Development, the owner of New "orogoro Tanneries and Africa Tannery in Mwanza are Co-operating very effectively with Leather Association of Tanzania is supporting hides/skins improvement in the two target area Shinyanga and Mwanza.

ACTIVITIES IN THE TARGET AREAS

SHINYANGA REGION

Hides and skins improvement activities in Shinyanga region are being funded by the Leather Association of Tanzania through the revolving Fund established by UNIDO. Also the Ministry of Agriculture on quarterly basis supports the activities through its recurrent budget.

Tremendous improvement in the quality of hides and skins was recorded while at the same time recovery through increased collections showed an increase of 15% for hides, 12% for goat skins and 11% for sheep skins during the implementation period.

All the equipments including vehicles, motorcycles, bicycles provided by the project are still in use of course, with regular services and maintenance.

During the forth coming seminar on hides and skins improvement in Dodoma, a comprehensive programme for hides and skins improvement for Shinyanga region will be prepared and submitted to the Leather Association of Tanzania for funding. Such a programme will among other things include:-

- (a) Training activities
- (b) Rehabilitation and Construction of New Slaughter Slabs and drying sheds in rural areas.
- (b) To print more campaign materials for hides and skins improvement.
- (d) Purchase of more flaying and Ripping knives.
- (e) Requirements for vehicle services and fuel.

We continue to receive from the field two types of reports on monthly basis.

- (a) Regional production Data on hides/skins.
- (b) Hides/skins improvement activities (Extension Services).

MWANZA REGION

Mwanza Region is situated directly between Shinyanga to the South and Lake Victoria to the North. (See the map).

The region occupies an area of 19,592 km<sup>2</sup> of land together with 15,656 km<sup>2</sup> of the lake.

The most recent determination of Livestock numbers in the region are as follows:-

Cattle .....	1.4 million
Goats .....	600,000
Sheep .....	277,353

Type of raw material collected

	<u>1989</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Cattle Hides	138,442	145,000	152,415	166,914
Sheep skins	27,296	29,000	35,000	37,000
Goat skins	27,063	40,000	75,112	130,000

Quality improvement (Hides)

	<u>G R A D E</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>REJECT</u>
1989	10%	32%	39%	15%	4%
1991	14%	32%	44%	9%	1%
1992	21%	42%	22%	5%	10%
1993	31%	42%	22%	5%	-

• From the controlled abattoirs only.

Quality improvement (Skins)

	<u>G R A D E</u>				
	<u>I</u>	<u>II</u>	<u>III</u>	<u>IV</u>	<u>REJECT</u>
1989	10%	30%	35%	10%	15%
1991	14%	36%	32%	13%	5%
1992	25%	40%	21%	9%	5%
1993	30%	41%	15%	14%	-

• From the Controlled abattoirs only.

Activities in the region started Feb. 1992 as an Extension of the National Hides/Skins Leather and Leather Products Improvement Scheme Associated with US/RAF/88/100 and US/URT/88/100.

Present status of the activities are as follows:-

- (a) Transport facilities like vehicles, motor bikes and bicycles have been received and delivered to the target area with essential spares.
- (b) Two Training Courses for hides/skins improvement have been conducted so far. One in Arusha and another one in Sengerema Mwanza. Regional and District hides and skins improvement officers from Mwanza and Shinyanga attended the training courses.
- (c) There has been an improvement in quality of raw hides/skins due to reduction of flay cuts to almost all the controlled slaughter houses.
- (d) Hides/skins Co-ordinator, S.M. Kiruthu has been fielded twice to the target area. During his visits, he was able to travel to the districts and slaughter sites to assess the impact of the programme.
- (e) Campaign materials for hides/skins improvement were distributed to Extension officers during the seminars and during field visits.
- (f) Ripping and Flaying Knives have been distributed and are being used effectively.

Hides/Skins production Sites.

Most of the sites for hides and skins production are in bad condition. To raise the quality of the raw materials for the industry, effort has to be made towards construction of new and rehabilitate the existing slaughter houses, slaughter slabs and drying sheds.

UNIDO Project has provided funds Tshs. 4.8 million for construction of de-fleshing tables for all district slaughter houses, construction of slabs and to complete Sengerema abattoir.

Regional Hides/Skins Co-ordinator has reported that work at the regional abattoir has been completed and the contractor has moved to Sengerema district.

Leather Association <sup>through</sup> revolving fund has set aside Tshs. 4,875,125/= for provision of water, Electricity and Fencing at the regional abattoir for the improvement of hides/skins. The contractor has started construction of water Tank and we expect the work to be completed before end of August this year.

Ministry of Agriculture has provided funds for repair of Ukerewe abattoir, expansion of Magu abattoir and purchase of wheelbarrow for transportation of hides from the slaughter house to the drying shed in Magu.

Our effort now is directed towards putting open frames to areas where slaughtering is taking place and there is no drying shed. Open frames requires only poles, nails and ropes. When this is done, there will be a significant reduction of ground dried hides and skins.

Current price of raw materials in Tanzania

Africa Trade Development

Tshs. 1,000/=            1,200/=    per Kg.

Goat and Sheep skins = Tshs. 700 - 750 per piece.

Afro Leather Industries

Hides            Tshs. 1,000/= - 1,100/= per Kg.

They do not buy skins.

Fair Deals Co. Ltd.

Tshs. 1,000/= per Kg Hides

Skins Tshs. 600/= per piece.

Lake Trading Co. Ltd.

Tshs. 1,000/= - 1,100/= per Kg. Hides

Tshs. 600 - 650/= per piece.

Appendix.

REGIONAL COLLECTION DATA, HIDES & SKINS

Type	Preservation	G R A D E				TOTAL
		I	II	III	IV	
CATTLE HIDES	Ground dried					
	Suspension dried					
	Wet dried					
GOAT SKINS	Ground dried					
	Suspension dried					
	Wet salted					
SHEEP SKINS	Ground dried					
	Suspension dried					
	Wet salted					

Name of Hide/skin merchant .....

Address of Merchant .....

Area Covered by merchant .....

Period Covered by this Report .....

## Appendix

### Job Description for Hides and Skins Extension officers

1. To facilitate maximal production of the best quality hides and skins.
2. To provide assistance and advice to: Farmers, butchers and hide merchants.
3. To collect and compile hides and skins statistics in their area of work.
4. To visit slaughter slabs, hide sheds and rural areas in general, at regular intervals to ensure that every hide and skin is recorded and collected.
5. To conduct Training courses for farmers, butchers and hide merchants.
6. To participate in hides and skins seminars, workshops and other Training courses.
7. To assist in compiling livestock population and slaughter statistics in their area of work.
8. To assist in finding suitable incentives for farmers, butchers and hide merchants.
9. To identify constraints on improving the quality and quantity of hides and skins collected.
10. To report activities regularly and promptly on a month basis.
11. To participate actively in other related activities.

Appendix:

Hides and Skins Improvement Extension Officers monthly Report

US/URT/91/110

Officers Name:-

Designation:

Period Covered:

Area Covered:

Original work Plan:

Actual work Completed:

Problems or Items of special Importance:

Work planned for Nex Month:

Signed:

Note: Return to E.J. Muryinga, UNIDO, BOX 9182 DAR ES SALAAM.



Appendix:

US/URT/91/110

DISTRICT ..... MONTH ..... YEAR .....

Production	Quantity (PCS)	G R A D E S					R E M A R K S
		I	II	III	IV	REJ	
Hides							
Goat Skins							
Sheep Skins							

Return to E.J. MUYINGA

UNIDO, BOX 9182 DAR ES SALAAM.

Appendix:

US/URT/91/110

COMPANY NAME: ..... MONTH ..... YEAR .....

COLLECTION(VOLUME)	QUANTITY	G R A D E S				
		I	II	III	IV	REJ.
Hides						
Goat skins						
Sheep Skins						

Return it to E.J. MUYINGA  
 UNIDO, BOX 9182,  
 DAR ES SALAAM.

US/URT/91/110

Company NAME ..... MONTH ..... YEAR .....

TRADE INFORMATION

PRICE PER KG/PIECE

	I	II	III	IV
Hides	TSHS.....	TSHS.....	TSHS.....	TSHS.....
Goat Skins	TSHS.....	TSHS.....	TSHS.....	TSHS.....
Sheep Skins	TSHS.....	TSHS.....	TSHS.....	TSHS.....

Return it to E.J. MUYINGA  
 UNIDO, BOX 9182,  
DAR ES SALAAM.

## ANNEX VIII

### THE INDIGENOUS DOMESTIC ANIMAL GENETIC RESOURCES OF UGANDA

F. M. B. MBUZA<sup>1</sup>

DEPARTMENT OF ANIMAL PRODUCTION

MINISTRY OF AGRICULTURE ANIMAL INDUSTRY AND FISHERIES

#### 1.0. INTRODUCTION

Uganda is well endowed with Animal Genetic Resources (AGR), the domesticated ones include cattle, goats, sheep, pigs, dogs, donkeys, chicken, rabbits, etc. The number of species may appear small but they form an important genetic resource that has for long been neglected. The nature and extent of variation existing within our domestic species is not yet well studied and documented. Most important is the fact that our domestic AGR are under threat. According to Mason's (1988) world dictionary of livestock breeds, in the last century Uganda has lost 12 breeds of cattle, three breeds of goats and one breed of sheep.

This paper highlights the main AGR of Uganda, describes their evolutionary trends, their production systems and discusses the main factors affecting their population.

#### 2.0. IMPORTANCE OF AGR IN UGANDA

In Uganda, livestock production contributes about 30 percent of the Agricultural Domestic Product and if the value of manure is considered, their contribution rises to about 40 percent.

Uganda is basically an Agricultural Country with over 90 percent of its population actively involved in agriculture. Crop-livestock integration is a main system of agricultural production practised by about 20 percent of Uganda's households (UASS, 1986/87). As compared to 1963/64 when only 12.2% of the holdings kept cattle. It is estimated that about three percent of Uganda's households are solely dependent on livestock for a livelihood.

On average there were ten heads of cattle per holding although this average varied from 3 to 58 head of cattle. The majority (97 percent) of all the cattle on the holdings in the twenty six districts were indigenous.

1 Dr. F. M. B. Mbuza is the interim National Animal Genetic Resources Program in Uganda

Crop-livestock integration is a main system of agricultural production practised by about 20 percent of Uganda's households (UASS, 1986/87). As compared to 1963/64 when only 12.2% of the holdings kept cattle. It is estimated that about three percent of Uganda's households are solely dependent on livestock for a livelihood. On average there were ten heads of cattle per holding although this average varied from 3 to 58 head of cattle. The majority (97 percent) of all the cattle on the holdings in the twenty six districts were indigenous.

### 1 Interim National Animal Genetic Resources Program in Uganda

Table 1. Uganda: Economic activities of households by geographical zones

Zone	Percent of households depending on:				
	Livestock	Crops	Mixed	Fishing	Others
Arua	.6	65.1	25.2	3.2	5.9
Jinja	2.1	40.8	15.7	1.3	40.1
Kabalore	2.0	73.2	7.9	2.0	14.9
Kampala	3.6	38.1	13.9	2.4	42.0
Mbarara	2.6	84.2	7.3	.6	5.3
Masaka	4.1	57.2	23.9	1.7	13.1
Mbale	1.9	42.3	40.7	.4	14.7
Mityana	3.5	57.4	20.4	1.1	17.6
26 Distr.	2.8	56.0	18.2	1.5	21.5

Source: UASS (1986/87)

Given that the majority of Uganda's households are peasant smallholder families, the well adapted indigenous AGR are likely to remain a major source of livelihood since such households have limited resources with which to improve the environment adequately to accommodate the high yielding exotic genotypes. Indigenous livestock are a significant source of food



percent of the total cattle population in Eastern Uganda and Eastern province had about 42 percent of the total cattle population in Uganda (1.25 million out of 3 million). The recently concluded National Census of Agriculture and Livestock, NCAL (1991) did not specifically categorise the cattle numbers into their respective breeds. An attempt was however made to establish the age-sex (herd) structures.

Based on the available information and well aware of the geographical distribution of cattle, it is now obvious that the Ankole cattle are the most numerous (49.5 %) followed by the Zebu short-horn (32.3 %) and Nganda (18.2 %) in that order as summarised in Table 2.

Table 2. Uganda: Population of indigenous cattle breeds

<u>INDIGENOUS BREED</u>	<u>ZSH</u>	<u>ALH</u>	<u>NGANDA</u>	<u>TOTAL</u>
APPROXIMATE POPN.	1,392,676	2,137,180	787,291	4,317,147
PROPORTION OF BREEDING MALES	7.8	4.8	4.9	5.8
APPROX. POPN. OF BREEDING MALES	109,497	102,742	38,944	251,183
PROPORTION OF BREEDING FEMALES	38.3	42.1	39.7	40.4
APPROX. POPN. OF <u>BREEDING FEMALES</u>	<u>532,946</u>	<u>900,140</u>	<u>312,881</u>	<u>1,745,967</u>

Source: NCAL, 1991

The long-run trend in total cattle numbers over the period 1933 to 1969 was generally upwards at about 2 percent per year (Ferguson, 1971), although there were some annual fluctuations due to floods, droughts, migrations, political unrest, epidemics and price fluctuations. Since 1969, there was a sharp increase in cattle numbers mainly due to successful vaccination campaigns against epidemics such as Rinderpest and the extensive tick control efforts as shown in Table 3:





... ..

Table 7. Culling rates: herd disposal rates (%) of the different breed categories of sectors

	TRADITIONAL SECTOR		IMPROVED SECTOR	
	Locals	Locals	Crosses	Exotics
Heifers	5.4 ± .14	23.4 ± .21	5.0 ± .06	5.0 ± .32
Cows	5.1 ± .17	27.7 ± .19	5.0 ± .12	5.0 ± .11
Bulls	35.5 ± .49	77.7 ± .31	21.0 ± .60	47.0 ± .36

Source: Mbuza (1991)

The main reasons for disposal were commercial offtake, poor growth, production, age and infertility. On improved farms, the exotics were least culled for low production and the indigenous were the most culled.

Table 8. Uganda: Culling for low production as a percentage of Total wastage on improved farms.

BREED	NO. CULLED	TOTAL WASTAGE*	PERCENTAGE
Exotics	16	450	3.6
Crosses	71	748	9.5
Locals	191	1026	18.6

\* Excluding Commercial Offtake.

Source: Mbuza (1991)

### 3.4.2. INTERBREEDING

Because of the nature of the management systems of our traditional breeds, the unrestricted movement, trade and lack of a breeding policy, there has been extensive interbreeding



1994/95

Table 3.1: Summary of the main products of the cattle sector - 1994/95

	1994/95		
	Uganda	Tanzania	Kenya
1. Food - milk	50	50	70
- meat	40	40	20
- blood	5	5	0
- urine	0	5	0
- Ghee	50	10	0
2. Commercial sales	40	50	90
3. Draught power	0	50	0
4. Hides - sale	50	50	80
- cloth, bedding, carpet	20	5	7
- food	5	10	0
- musical gadgets	20	20	20
5. Cow dung			
- manure	30	30	80
- building material	30	20	10
6. Social service			
- dowry	20	20	2
- exchanges	30	5	2
- sacrifices	10	2	0
- hobby farming	10	-	5
7. Security	40	40	60

Source: Mbuza, 1994, Personal communication

### 3.6. PRODUCTION CHARACTERISTICS OF INDIGENOUS CATTLE

A detailed account of the productivity of indigenous breeds of Uganda is given by Mahadevan (1966), and Sacker & Trail (1966). Their milk yield is generally poor and they are late maturing.

The Mubende goat is a medium-sized goat with a white and black coloration. The head is erect and the ears are large. The horns are small and curved. The coat is short and dense. The average live weight of adult males is 45 kg and 25 kg for females. The average live weight of adult males and females were 45 kg and 25 kg respectively (Sacker & Trail 1955).

Females attain kidding percentage of about 150 with a kidding interval of about 300 days (Sacker & Trail, 1955). They are also mainly kept for meat. The skins from Mubende goat are renowned for their high quality which puts them in great demand on the world market (Gall 1981, Gelave et al. 1982).





RECEIVED  
NAIROBI  
22 JUN 1994  
UNIDO  
US/RAF/92/200



UNITED  
NATIONS  
INDUSTRIAL  
DEVELOPMENT  
ORGANIZATION



REGIONAL AFRICA

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS  
IMPROVEMENT SCHEME

US/ZAM/88/100/17-01/07-20B0

Seminar on Hides and Skins Improvement

Morogoro, Tanzania, 13th to 17th June, 1994

COUNTRY REPORT

Based on the work of

Charles Siulapwa, National Expert

Backstopping officer: Aurelia Calabro  
Agro-Based Industries Branch

This report has been reproduced without formal editing

0.01

## INTRODUCTION

Zambia has a land mass of 750,000 square kilometres and has a cattle population of approximately 3 million.

Goats	565,000
Sheep	35,000

In comparison with the estimated human population of 8 million, this works out to 4 people sharing 1 animal.

## 0.02 TYPES OF BREEDS

Many breeds and types of cattle have been introduced in Zambia, each being specifically suited either for meat, milk or work (drought breeds) or a combination of these three.

## 0.03 MODE OF PRODUCTION

70% of the herd is in the traditional sector  
30% in the commercial sector

In the traditional sector the main breeds are ZESU and SANGA.

And in the Commercial, SUSSEX, BORAN, AFRICANDA, HEREFORD, FRESIAN, JERSEY and BRAHMAN breeds exist.

## 1.00 HIDE PRODUCTION

Hide production, based on 8% offtake, is estimated at 250,000 pieces/annum. Statistics generated by the Leather Industry Association (LIAZ) and the Project indicate the volume of Hides and Skins collected as follows:

1991	= 163,000 pieces
1992	= 185,000 pieces
1993	= 123,000 pieces

The drop in the 1993 figures can be attributed to:

- a) The drought
- b) Unrecorded cross-border trade

## 1.01 SKINS

1991	= 65,000 recovered
1992	= 60,000
1993	= 56,000

## 2.00 - Slaughter Facilities

Phase I of the Regional Project started operations in 1989.

At the commencement of the project we evaluated the existing infrastructure at the time in order to ascertain what we needed and to guide us in our extension efforts.



2.01 SLAUGHTER SLABS

These had been run down in the period prior to the project. There was no equipment, no permanent staff, meat inspection was fragmented between the Health and the Veterinary Department with no proper cohesion between the two.

- With the coming of the Project, centralised slaughters are being encouraged. In certain areas these are working out very well whilst in other areas not so well. This can be attributed to the high slaughter fees charged by some Councils resulting in people slaughtering in illegal premises.

- Available Slaughter Houses:

ZCSC - Four abattoirs at:

- Lusaka	-	300 head/day
- Mongu	-	100 -do-
- Livingstone	-	120 -do-
- Chipata	-	30 -do-

Private

1 Galaunia Farms	100/day
1 Lendor Burton	40/day
1 Chibote	80/day
1 Kambe	30/day

72 Slaughter Houses are owned by the District Councils.

- 3.02 We have recommended that meat inspection should be done by the Veterinary Department as these people have a better pathological picture of the animal.

3.00 HIDES AND SKINS

- 3.01 Grading : People graded according to their wims and wits. (Explain).

Each one had in his mind what constituted a grade I, II or III. However, grading existed at the tanneries.

3.02 Distribution of Grades Before Project Implementation

Grade I	II	III	IV
28%	40%	21%	11%

3.03 Distribution of Grades After Project Implementation

Grade I	30%
II	35%
III	25%
IV	10%

The above improvements in quality are as a result of a number of factors,

but above all a combination of commercial and technical measures undertaken by the project, farmers and tanners.

4.00 FINANCIAL BENEFITS TO FARMERS AND BUTCHERS THROUGH SALE OF HIDES

1989 - Price was K60/hide  
1992-93 - " " K3,000-K7,000/hide

5.00 DEFECTS

In 1991 the Project carried out an objective exercise to determine the type and extent of defects inherent in the raw hides, the exercise revealed the following:

a) Tick marks	100%
b) Scratches	100%
c) Growth marks	37%
d) Brands	16%
e) Mange	10%
f) Senkobi (cutaneous streptococcosis)	70%
Pre-Slaughter	70%
Post-Slaughter	14%

5.01 The exercise proved very valuable and is used as a guide in our extension efforts.

The exercise will be repeated this year.

6.00 STATISTICAL INTELLIGENCE

The project appreciates the difficulties in collecting reliable data. However, great strides have been made. A simple reporting format has been made available and its application is being tested in the field.

6.01 So far data generated over the years in the target areas indicate that collection of hides has increased by threefold over the pre-project years.

6.02 PRESERVATION METHODS

	Commercial	Traditional
- Wet Salting	95%	5%
- Dry Salting	2%	NIL
- Other	NIL	NIL

7.00 REVOLVING FUND

The Revolving Fund was started in 1991. It is under a tri-partite oversight of UNIDO, Government and LIAZ.

It is in the opinion of local project management and indeed

LIAZ this innovative idea is operating very well. So far there have been no unusual hitches. Repayments are on schedule.

LIAZ, inspired by UNIDO efforts to improve the leather industry in Zambia, have decided to reduce the repayment period from the originally agreed period of ten years to a maximum of two years, depending on the amount borrowed. So far the fund is being used as a bridging gap/stop gap financing for Phase 1 into 2.

#### 8.00 POLICY

One of the biggest achievements of the project is that Government has taken due notice of its work - thanks to the Leather Industry Association of Zambia which was formed at the same time as the project started.

The project has, in conjunction with LIAZ, participated in the National Symposium called to define and put in place a National Policy on Commerce, Trade and Industry. This has been a result of the Liberalisation policy which seems to be the "in-thing" of most countries. Liberalisation has over-simplified the strategic path to industrialisation while concealing the dangers of a loss to the infant industries.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION  
US/ZIM/92/200

## PROJECT MEMORANDUM

### National Leather and Footwear Industry Scheme

SUBJECT:            STATISTICAL DATA ON HIDES AND SKINS  
                  PRODUCTION AND PRODUCTION OF THE HIDES  
                  AND SKINS COMPENDIUM

#### 1    SHORT DESCRIPTION OF THE COUNTRY

##### 1.1    AREA

Zimbabwe lies between the Zambezi and Limpopo rivers which constitute its northern and southern borders respectively. To the east lies the mountainous border with Mozambique and on the west flat country bordering Zambia and Botswana. The area of Zimbabwe is 38 888 000 hectares.

##### 1.2    POPULATION

The last census conducted in 1992 reflected a population in excess of 10,0 million. but this is generally believed to be less than actual. The present population is probably nearer 11,0 - 12,0 million.

##### 1.3    PHYSICAL FEATURES

The areas in the vicinity of the Zambezi and Limpopo rivers are low lying with altitudes from 300 metres to 1000 metres, and are known as lowveld. The central part of the country is plateau with altitudes ranging from 1000 metres to 1500 metres, and is known as highveld. Most agriculture and ranching takes place on the highveld central plateau which flattens towards Botswana and Zambia in the west. The eastern border is extremely mountainous and supports thriving timber, coffee, tea and fruit growing industries.

Ambient summer day temperatures are 30°C on the highveld and 35-40°C, and higher, in the lowveld.

Rainfall averages 80 cm annually for the country as a whole. But can be much lower in the west, which is categorised a drought prone area, and much higher along the eastern border. The wet season runs from early November to April.

#### 2    TYPES, BREEDS, AND ANY PHYSICAL FEATURES OF CATTLE, SHEEP AND GOATS

The national herds and flocks in Zimbabwe are sub-divided into two categories - commercial and communal, the latter peasant/subsistence farmer owned. There are distinct differences between livestock from

the two sectors. This is important when discussing hides and skins in the Zimbabwean context.

2.1 CATTLE - Commercially owned cattle are generally of European breeds, particularly so with regard to dairy stock. Crossing is practised with indigenous breeds for ranches beef cattle to increase resistance to disease.

2.1.1 Communal sector cattle are normally indigenous Zebu or Sanga types which include Inkoni, Tuli, Mashona, with some cross breeding with European breeds to improve size and milk yield.

2.1.2 As with Sanga type cattle elsewhere in Africa, horns are typically long and a smallish hump is usual. There are several hybrid breeds, their vernacular names having origins in clan and tribal names.

2.1.3 The Zebu type in Zimbabwe have shorter horns than the Sanga and a more pronounced hump. Much cross breeding has occurred and it is sometimes difficult to differentiate between Sanga and Zebu strains where the characteristics of both types are equally dominant in progeny.

2.2 SHEEP - Zimbabwe is not good sheep country and the population is small. 98% of Zimbabwean sheep are "hair" type, and possibly have their origins in Northern types brought down during past Bantu migrations.

2.3 GOAT - Goats are raised mainly in hot lowveld areas by communal owners. Stock is a hybrid of the Transvaal boer goat, and Indian and Abyssinian strains derived from Somali, Nubian and other sources. Zimbabwean goats tend to be small in size (5-8 sq ft), with short smooth hair.

### 3 LIVESTOCK POPULATION

It is many years since a livestock census was conducted. Figures for goat and sheep are therefore not reliable. But estimates for cattle populations are reliable, because dipping is routine, legislated for by Government, and accurate records are maintained. The cattle population is about 6,0 million. Goat are estimated at 2,3 million and sheep at 0,65 million, about 3,0 million combined.

4 OFF-TAKE RATES are 15-20% for commercially owned cattle and 1,0-3,0%<sup>2</sup> for subsistence farmer owned cattle. The commercial sector is estimated to own 2 million of the national herd and the communal 4 million.

Off-take for sheep and goat combined is estimated at 1,5 million (50% of population), but these are inspired estimates only and based on the opinions of those closely associated with livestock. Recovery of goat skins is poor.

5 NATIONAL KILL

Hide collections and the national kill are roughly the same for cattle. The collection system in Zimbabwe is efficient - collections are 95% and 90% of possible for the commercial and communal sectors respectively. Nationally equivalent figures for sheep and goat are not known precisely though, in a target area well served by a hide merchant, collection of available skins was estimated at 96,2%. This area is believed to supply about 50% of the skins collected nationally. Collection of goat skins elsewhere in Zimbabwe is probably well under half the number of goat and sheep slaughtered.

6 PRODUCTION OF HIDES AND SKINS AND QUANTITIES RECOVERED - AVERAGE WEIGHTS AND GRADES OF RAW HIDES AND SKINS

6.1 PRODUCTION OF HIDES AND SKINS

Based on the above off-take rates, annual production of raw hides is 700 thousand hides plus or minus, though drought induced slaughters - after poor wet seasons - can raise production. On the other hand subsequent attempts to build up herds in good seasons reduce production. Hide production in 1993 - following the drought of 1992 - was a mere 610,000 against 842,000 (largely drought reduced) the previous year. Production of goat and sheep skins combined is estimated at 1,5 million.

6.2 RECOVERED QUANTITIES OF HIDES AND SKINS

The average annual numbers reaching tanners is estimated at 725,000 hides, and perhaps 0,3 million skins of which 0,2 million come from Masvingo province.

6.3 AVERAGE WEIGHTS OF RAW HIDES AND SKINS

6.3.1 Cattle hides

Average green weight for commercial stock is 25kg plus and for communal stock 20kg minus.

Wet salted hides - commercial stock average 20kg and communal stock 16kg. \* Few, if any hides are sun or shade dried. 95% of commercially processed Zimbabwean hides are wet salted and 5% dry salted.

6.3.2 Sheepskins

Average Green Weight	-
Average Wet Salted Weight	-
Average Shade Dried Weight	-

6.3.3 Goatskins

Average Green Weight	3-4 kg
Average Dry Salted Weight	2 kg
Average Sun/Shade Dried Weight	1,5 kg

## 6.4 GRADES OF RAW HIDES AND SKINS

In the absence of a uniform grading system for raw hides and skins throughout Africa, it is difficult to compare grading results from one country with those from another. Under Zimbabwean grading conditions data is approximately as follows:-

## a) CATTLE

	GRADE	COMMUNAL ORIGIN PERCENTAGE	COMMERCIAL ORIGIN *PERCENTAGE
<u>Wet salted hides</u>	I & II's	70,0%	
	III & IV's	26,0%	
	Rejects	1,5%	
	Calves	2,5%	

\* Standard of grading is tighter/more strict for commercial stock processed at the parastatal abattoirs.

<u>Dry salted hides</u>	I & II's	50%	Commercial origin hides are seldom dry salted or dried and no data is available
	III & IV's	43%	
	Rejects	3%	
	Calves	4%	

## b) GOAT

<u>Dry salted</u>	I & II's	85%
	III & IV's	11%
	Kids	4%

<u>Shade/sun dried</u>	I & II's	74%
	Damaged	22%
	Kids	4%

66% of goat are dry salted and 34% shade or sun dried.

## c) SHEEP.

<u>Dry Salted</u>	I & II's	76%
	III & IV's	22%
	Lambs	3%

<u>Shade/sun dried</u>	I & II's	65%
	III & IV's	32%
	Lamb	3%

61% of sheep skins are dry salted and 39% shade or sun dried.

7 TYPES OF DEFECTS ON RAW MATERIALS

(See Appendix 1 for detailed breakdown)

7.1 BEFORE SLAUGHTER - The main defects are brand marks and grain scratches. There are few disease and parasitic defects other than those stemming from eczema, dermatitis and biting insects. Generally veterinary control in Zimbabwe is good and tick damage is not a problem.

- 7.2 DURING SLAUGHTER - The most serious damage is found on communal origin hides, flay cuts etc. For communal original animals slaughtered under rural conditions the incidence of such defects runs between 15% and 20% of hides offering. For commercial and communal origin animals slaughtered at parastatal abattoirs the equivalent figures are less than 1%.
- 7.3 DURING PRESERVATION - Defects resulting from poor preservation are, again, confined mainly to communal origin animals and include autolysis, hair slip, red heat, moles, insect infestation. The incidence however on hides offering seldom exceeds 4% for communal animals and is below 1% for those from the commercial sector.
- 7.4 COMMON METHODS OF PRESERVATION

	HIDES %		SHEEP %	GOAT %
	Commercial	Communal		
Wet Salted	95%	25%	-	-
Dry Salted	5%	75%	60%	65%
Shade drying	Nil	Nil	40%	35%

## 8 NUMBER OF TANNERIES

There are six medium scale commercial tanneries, all members of the Leather Institute of Zimbabwe, and two or three smaller plants which are not members of the Institute. The latter have a small irregular production which can be ignored. All major Zimbabwean tanneries are privately owned and listed in the International Leather guide. Their names are:-

The Bata Tannery, Gweru; Belmont Tannery, Bulawayo; Deraswiss Tannery, Kadoma; Imponente Tannery, Harare; Eagle Tannery, Marondera (temporarily closed due to shortage of hides); South East Tanning, Chiredzi.

South East Tanning Ltd, Chiredzi, specialise in game skins, ostrich and crocodile included, to wet blue and crust for export. Finished game skins, hair on, are processed for taxidermists and as trophies for private customers. But some formal type finished leather is produced. All other tanneries process mainly cattle hides and goat skins for domestic and export purposes, mainly for manufacture of footwear and leather goods.

## 9 AVERAGE WEIGHT & YIELD OF FINISHED LEATHER

- 9.1 AVERAGE WEIGHT-YIELD PER KG. IN SQ. FT.  
Zimbabwean cattle hides are generally classified as lights, mediums and heavies. Weight, in kg and yield square feet is as below:-



TYPE	AVERAGE WEIGHT (KG)	YIELD SQ FT
<u>COMMERCIAL ORIGIN CATTLE</u>		
Light Wet Salted	16	30
Medium Wet Salted	20	35
Heavy Wet Salted	25 plus	40 plus
<u>COMMUNAL ORIGIN CATTLE</u>		
Light and medium dry salted	12-15	30 or less

9.2 PERCENTAGE OF PIECES TANNED TO WET BLUE - CRUST - FINISHED LEATHER

9.2.1 TANNED TO WET BLUE

CATTLE HIDES	95%
SHEEP SKINS	100%
GOAT SKINS	100%

9.2.2 TANNED TO CRUST

CATTLE HIDES	5%
SHEEP SKINS	-
GOAT SKINS	-

9.2.3 TANNED TO FINISHED LEATHER

CATTLE HIDES	75%
SHEEP SKINS	100%
GOAT SKINS	100%

10 INDICATE CATEGORIES OF EITHER RAW - SEMI-PROCESSED OR FINISHED LEATHER MARKETS AND QUANTITIES

10.1 WITHIN THE COUNTRY (Domestic)

		Categories	Quantity
10.1.1	<u>Cattle Hides</u>	Raw	100%
		Wet blue	75%
		Crust	-
		Finished	75%
10.1.2	<u>Sheep Skins</u>	Raw	100%
		Pickled	-
		Wet blue	50%
		Crust	-
		Finished	50%
10.1.3	<u>Goat Skins</u>	Raw	60%
		Wet blue	60%
		Crust	-
		Finished	60%

## 10.2 OUTSIDE THE COUNTRY (EXPORT)

		Categories	Quantity
10.2.1	Cattle Hides	Raw	-
		Wet blue	20%
		Crust	5%
		Finished	10%
		(in form of either finished leather and/or finished goods).	
10.2.2	Sheep Skins	Raw	50%
		Pickled	-
		Wet blue	-
		Crust	-
		Finished	-
10.2.3	<u>Goat Skins</u>	Raw	40%
		Wet blue	-
		Crust	-
		Finished	-

11 IMPORTING COUNTRIES UP TO 1993

Wet blue and crust exports go mainly to Italy and a few to Greece and elsewhere: Italy 95% of semi-processed exports, others 5%.

12 GIVE SHORT DESCRIPTION OF THE LEATHER FOOTWEAR AND LEATHER GOODS SUB-SECTORS

All sectors are increasingly suffering from a shortage of hides, particularly those footwear and leather goods plants which do not have an associated tannery. In consequence such organisations are moving increasingly to synthetic production. A similar development is taking place, but to a lesser extent, amongst manufacturers who have tanneries because of reduced supply of raw hides and skins. Goat skin and exotic raw material usage is likely to increase in the future if the hide shortage continues. However, because of reasonably good rains over much of the country during 1993/1994, the national herd will hopefully build up and hide supply will improve. At present farmers are loathe to send cattle for slaughter if this can be avoided because they are concentrating on building up herds after tremendous losses during the 1992 drought. This encourages production of synthetic and textile uppered footwear. The need to produce cheaper lines of footwear which are affordable by the masses and can compete in domestic and export markets also favours use of synthetics.

Total production of footwear in Zimbabwe is estimated at 23 million pairs annually, leather and textile combined. Leather uppered footwear makes up perhaps 40% of shoe production and about 10% of finished footwear is exported.

At the present time little footwear is imported into Zimbabwe. Local manufacturers keep the domestic market fully provided. This could change now the country has embarked on open market policies.

Zimbabwean footwear manufacturers export stitched uppers and finished footwear mainly to South Africa, which takes perhaps 80% of exports. The balance goes to Europe, mainly the UK and Germany. Exports to Australia have risen recently, especially for upholstery leathers.

The bulk of leather goods manufacture is exported either directly or as a result of local purchase by tourists. Leather goods manufacture (excluding industrial gloves) absorb about 9,000 sq ft annually. Zimbabwean leather goods are able to compete successfully in South African markets and, increasingly, in European markets also. There is, however, still much room for improvement. Finished leather (table run) sells at approximately Z\$15.00 per sq ft on the domestic market, but prices trends are upwards.

ATTACHED      APPENDIX 1 INCIDENCE OF DISEASE  
APPENDIX 2 LEATHER STATISTICS *To Follow.*

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: ALEX NELSON JUMBE

Country: MALAWI

Age: 51 YEARS

No. of years in Hides and Skins Trade: 25 YEARS  
Experience in other areas of leather industry: Years: 5 YEARS  
Area: LEATHER INDUSTRY

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	
Content and Substance		✓	
Theoretical part		✓	
Practical part			✓

Suggestions and additional comments: ① Seminar to be held in an area where practical work could easily be conducted eg. within a given target area.  
② More time should be given to countries presenting country papers - 20 minutes is not good enough.  
③ DISA should be paid in (US \$) dollars in full to participants who should look after their own.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

(1) To continue providing assistance training in various fields within leather industry  
(2) To continue conducting seminars, workshops, study tours and exchange training programmes  
(3) To continue providing technical assistance to newly established leather industries of tanneries, leathergoods and footwear manufacturing factories  
(4) To continue providing national leather projects with transport, tools and equipment and to offer to be operated and maintained by recipient institutions as their local contribution.

# QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: MICHAEL GITHINJI IFANJOM

Country: KENYA

Age: 45 YEARS

No. of years in Hides and Skins Trade: 5 YEARS

Experience in other areas of leather industry: Years: NONE YEAR

Area MANUFACTURING AND TRADE.

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization			✓
Content and Substance		✓	
Theoretical part	-	-	-
Practical part	-	-	-

Suggestions and additional comments:

the seminars and meeting should be held in places which motivate the participants. the present venue was not fully satisfactory.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

Every tannery unit should be included in the seminars, training symposia, workshops at the level of factory graders or buyers and purchasers. It is important the selling and buying functions are interfaced. otherwise they will conflict; this should be done by bringing together the government extension staff, buyers in industry and sellers in the merchandising sector. After all the commodity being dealt in by all three is the same: hides & skins.



## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: Samuel Mwaere

Country: Tanzania

Age: 45 yrs

No. of years in Hides and Skins Trade: 22 yrs

Experience in other areas of leather industry: Years: 15 yrs

Area: LEATHER PROCESSING (TANNING), FINISHING

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	
Content and Substance		✓	✓
Theoretical part		✓	✓
Practical part			✓

Suggestions and additional comments: 1. To have more participation in defects that downgrade the H/S quality.  
2. Leather samples of good and bad leather to be provided.  
3. Practical's in tanning by each participants should be done.  
4. ~~Practical~~ papers should be incited to participants.  
5. Invite women to attend H/S seminars to share their experiences - Many are meat inspectors and veterinary officers. Live stock officers etc.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

1. Provide more transport to extension officers other than those in the target areas eg those near the target areas and HORS H/S staff. Many bicycles are needed as extension assistance for the unified extension exercises. They can be brought by the staff of subsidized prices and put the fund to the revolving fund.
2. Provide assistance to the directly attached counterpart extension officers of the project in the target areas and HORS H/S staff.
3. ~~Set~~ as many slaughter slabs as possible and drying shed as possible and should be considered as a priority in the target areas. Technology and
4. Boost Tanzania's in Management so as to produce efficiently and effectively in order to pay good prices for improved Hides and skins.

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: DR. FRANCIS MBUZA

Country: UGANDA

Age: 34

No. of years in Hides and Skins Trade:         

Experience in other areas of leather industry: Years:         

Area         

Please provide your comments on the Seminar:

Excellent                  Good                  Not satisfactory

Organization ✓

Content and Substance ✓

Theoretical part ✓

Practical part ✓

Suggestions and additional comments: The venue did not have adequate facilities for conducting a successful participatory seminar; the residential conditions were not very comfortable.

OTHERWISE, THE SEMINAR WAS VERY USEFUL TO ME AND I LEARNED A LOT OF MANY NEW THINGS, SHARED EXPERIENCES, AND GOT MANY NEW CONTACTS. I HOPE I WILL BE INVITED TO OTHER SIMILAR SEMINARS IN FUTURE. THANK YOU.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

- ① Provision of Transport to enable supervision of field staff in the target areas by Headquarters staff.
- ② Assistance in setting up demonstration units in the field to be used for training extension staff, farmers, butchers, tanners et.
- ③ Provision of visual aids (such as posters) to be used in training and extension.
- ④ Sponsor educational programs in Mass media, Print media, Documentaries, for all interest groups.
- ⑤ Arrange training sessions for all people working in the livestock sector to sensitize them on Hides and skins improvement.
- ⑥ Sponsor some of the incentive schemes for grading.
- ⑦ Assist individual Governments and national societies or organizations in identifying donors to support capacity building for hides & skins improvement.



## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: AHMED HAG ELSTEIKH ABRO

Country: SUDAN

Age: 54

No. of years in Hides and Skins Trade: 27 years  
Experience in other areas of leather industry: 27 years  
Area Business Improvement, Leather Institute, UNIDO program

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization	---	✓	---
Content and Substance	---	✓	---
Theoretical part	---	✓	---
Practical part	---	---	✓

Suggestions and additional comments:

It would have been better, to organize  
such a seminar in an important area  
where is good activity with to see - for  
hides skins improvement and tanning working,

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

Technical assistance to provide  
training material films/vedeos etc;  
Equipment for SH to go to revolving fund,  
Study-tours for HS staff. Names of Bacteriocidal  
antiseptics companies and link with them -  
Lobby for finance of phase II National  
Project of Sudan us/SUD/92/200. This will help  
Association to go forward with improvement  
in long term with cooperation with Government.  
Thank you

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: ISMAIL AHMED RAHMA

Country: SUDAN

Age: 47 years

No. of years in Hides and Skins Trade: 18 years

Experience in other areas of leather industry: Years: \_\_\_\_\_

Area \_\_\_\_\_

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization	-	✓	
Content and Substance	✓	✓	
Theoretical part			
Practical part		✓	

Suggestions and additional comments: \_\_\_\_\_

more time required to inform the members in their country should be before good time so they can get ready

to present things with T.V. video or projectors seen to be better than speaking.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

1. to support training for all staff Hide and skin officers and other groups involved in the improved like players, or butchers etc.

2. To help in hide and skins improved programmes by supplies in instruments like Audiovisual equipment.

*Ismail R*

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: E. KALUMBA-KATONGOLE

Country: UGANDA (JINJA TARGET AREA)

Age: 47 years

No. of years in Hides and Skins Trade: 23 years  
Experience in other areas of leather industry: Years: 3 years  
Area UGANDA LEATHER AND TANNING INDUSTRIES

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization	x		
Content and Substance	x		
Theoretical part		x	.
Practical part			x

Suggestions and additional comments:

Practicals should be done physically for demonstrations  
e.g. slaughtering and flaying demonstrations

Copy of minutes of the Seminar to every attendant  
of the Seminar

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

Bicycles to some field Extension workers inspecting hides  
and skins at every Slaughter Slab or house.

Allowances to ~~the~~ Extension staff directly attached to the  
Project

Provide working materials for demonstrations and Shows  
like posters video decks and films.

Provide magazines and training manuals about  
hides & skins, leather & leather products affairs.

Make Annual Seminars for review of Improvement

UNIDO to Sent Insecticides to Target Areas on cost  
but without Sales Tax by Government.

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: NAN-IOLO MILLT

Country: UGANDA JINJA PROJECT AREA

Age: 28 YEARS

No. of years in Hides and Skins Trade: —

Experience in other areas of leather industry: Years: 5

Area KAMUKI DISTRICT JINJA REGION

Please provide your comments on the Seminar:

Excellent                  Good                  Not satisfactory

Organization	GOOD
Content and Substance	EXCELLENT
Theoretical part	GOOD
Practical part	Not satisfactory

- Suggestions and additional comments: I would suggest that
- Animal Husbandry officers in target areas should be provided with HHS skills as for our case in Uganda. There are very few Hide improvement officers. As there are some regions without and even hide improvement assistants we have an average of two per District.
  - There should be a lawyers association and there are the people who should be employed even by individuals a homesteaders to improve on the hides.  
Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:
  - As the slaughter slabs are going to be constructed I feel that there is need for the drying shades to be constructed at every site so that the hide is covered for as soon as it leaves the animal to avoid putrefaction.
  - Provide films or video tapes to the field staff so that it can assist them in spreading the gospel on hides and skins improvement to the rural people as most people have no radios, TV and some cannot read and yet they are the farmers. At least for every target area if they can get a video pack.
  - To give us the new owners in the project more chances to attend seminars as we have now understood the whole set up and what is required so that we can gain full participation in the seminar as this was my first time to attend though I am very much interested in hides and skins since I have dealt with the animal since childhood but now it seemed as though I am shy to talk but it is because I have not had

QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: R. L. O'SHAUGHNESSY

Country: ZIMBABWE

Age: 57

No. of years in Hides and Skins Trade: 40 plus leather sector  
Experience in other areas of leather industry: 40 plus *of various sectors*  
Area BRITAIN & ZIMBABWE

Please provide your comments on the Seminar:

Excellent                  Good                  Not satisfactory

Organization  
Content and Substance  
Theoretical part  
Practical part

✓  
✓  
✓

Suggestions and additional comments: There was far too much theoretical discussion which went on & on, with sometimes the speakers not quite clear as to what they wanted to say or the other hand, some speakers' floor comments were very good, excellent in fact.  
There were no practical demonstrations even though one was indicated in the programme. I believe seminar would have been better held at a venue where field & abattoir hides production could have been witnessed.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

There is a real need for UNIDO to encourage industrial countries to assist in making their hides improvement services self-sustaining within an agreed period - clearly recognizing countries to shoulder the responsibilities which are rightly theirs.

QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: JULIUS MKANDAWIRE

Country: ZAMBIA

Age: 36

No. of years in Hides and Skins Trade: 4 yrs

Experience in other areas of leather industry: Years: Nil

Area: N/A

Please provide your comments on the Seminar:

Excellent                      Good                      Not satisfactory

Organization  
Content and Substance  
Theoretical part  
Practical part

✓  
✓  
✓

X

Suggestions and additional comments: On the programme, it was indicated that a practical demonstration was to take place. So the intentions were there but somehow this did not work out. I suggest that in future practical demonstrations/practicals be done at places where such work takes place during the time when such work is being carried out.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

The recommendation on staff exchange should be taken seriously. Hides & skins improvement officers ought to be sent to other countries in the region where say Hides extension is very successful for at least 1 month and work with the extension staff there to 'see' how they have employed extension methods. That way one becomes better trained by doing work practically.

I'm in agreement with all the other resolutions made at this seminar

J.M. [Signature]

## QUESTIONNAIRE

US/RAP/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: Ahmed Mahmud

Country: Ethiopia

Age: 38

No. of years in Hides and Skins Trade: \_\_\_\_\_

Experience in other areas of leather industry: Years: \_\_\_\_\_

Area Hides and skins improvement: extension 14 years

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		x	
Content and Substance		v	
Theoretical part		x	
Practical part			

Suggestions and additional comments: Keep on organizing such  
Seminars and study tours, workshop in different countries in the region  
To make the seminars lively, papers to be presented on the  
Seminars should be sent to the CTA office before the beginning  
of the seminar so that they can be evaluated and weighed  
and edited and make them ready for all participants  
Any report or paper should be circulated to the participants  
make sure that paper presenters will be attending the  
Seminars (be present) before arranging the programme

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

- Through the provision of the following:
- 1 - provide financial and technical assistance
  - arrange / organize regional workshop, study tours
  - prepare a 15-30 minute video show of  
preservation of Hides and skins of each  
country so that people officers in  
charge of HS improvement exchange knowledge  
and apply the best / appropriate method  
in their country.
  - Disseminate market information to the countries  
involved in the project implementation.

# QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: ZENBU KEBEDE

Country: ETHIOPIA

Age: 49

No. of years in Hides and Skins <sup>Improvement</sup> Trade: 5  
Experience in other areas of leather industry: Years: 13  
Area: Management, Training

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	
Content and Substance		✓	
Theoretical part		✓	
Practical part			✓

Suggestions and additional comments: Hold such seminars in target areas to allow participants practically compare activities and achievements (or otherwise) to that of their own country. At the same time, local staff can meet with colleagues (experts) from other participating countries, discuss and share experiences.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

- Provide study tours for larger groups of H&S officers to maximize training benefits!
- Data collection, collation, analysis and dissemination is a constant and time consuming activity. Therefore UNIDO should provide National expert offices with computers which will also save the Department/section even after phasing out of UNIDO Project.
- Provide <sup>more</sup> extension tools and equipment as well as motorcycles to improve staff mobility to enhance H&S improvement activities, again even after Project termination



## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: NAWAI GUREIR NAWAI

Country: SUDAN

Age: 45 yrs

No. of years in Hides and Skins Trade: 3 yrs only  
Experience in other areas of leather industry: Years: /  
Area: /

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization	—	✓	—
Content and Substance	—	✓	—
Theoretical part	✓	—	—
Practical part	—	—	✓

Suggestions and additional comments:

- ① It will be better if papers ~~or~~ their summaries were distributed to all attendants prior to presentation so that full idea can be obtained which will help in discussion.
  - ② Presentation by video or projectors is preferable than talking alone.
  - ③ To inform participants about the Seminar or any other meeting should be ample time so that people make themselves.
- Please provide comments on how, in your opinion, UNIDO can provide ready additional assistance to the hide and skins improvement sector:

Problems of H&S improvement differ from country to another although in general they are similar so, to my opinion the following assistance are needed:

- ① Support of training the staff (Hide/Skin Officers) ~~and other~~ so that they can be capable to train the other target groups involved in H&S improvement such as tanner, traders, curers and the others.
- ② Strengthening the revolving funds through delivery of equipments not only to tanneries but to smaller activities like Artisan, Slaughter houses etc.

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: JOHN EDIAU-EPEDUNO

Country: UGANDA

Age: 47 YRS

No. of years in Hides and Skins Trade: 23 YRS

Experience in other areas of leather industry: Years: 12 YRS  
Area TRAINING AT TANNERY SCHOOL-ENTESSE

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	
Content and Substance		✓	
Theoretical part		✓	
Practical part			✓

Suggestions and additional comments:

- EMPHASIS TO BE PUT PRACTICALS & TECHNIQUES  
- VISITS TO PLACES OF VITAL INTEREST SHOULD BE  
PRIOR ARRANGED TO AVOID EMBARRASMENTS.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

- 1) - PROVISION OF TRANSPORT FACILITIES TO HEAD-QUARTER STAFF TO FACILITATE DATA MONITORING.
- 2) - INCENTIVES TO THE ABOVE STAFF (ALLOWANCES).
- 3) - PROVISION OF VISUAL AND AUDIO AIDS.
- 4) - FACILITATE DEPARTMENTS IN PRINTING OF PUBLICATIONS OR LITERATURE.
- 5) - PROVISIONS OF INFORMATION ON THE TRADE.
- 6) - GIVE GUIDELINES OR FORMATS TO BEGINNING AREAS ON THING LIKE STANDARDISES, GRADING.
- 7) - PROVISION OF TRAINING PROGRAMMES FOR COORDINATE STAFF ON HIDES IMPROVEMENT.

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: MR. JOSEPH B. BARANTANDA

Country: TANZANIA

Age: 48 YEARS

No. of years in Hides and Skins Trade: 7 YRS

Experience in other areas of leather industry: Years: 7 YRS

Area: TANNING, SHOE MAKING AND LEATHER PRODUCTS

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization	—	GOOD	—
Content and Substance	—	GOOD	—
Theoretical part	—	—	NOT SATISFACTORY
Practical part	—	—	NOT SATISFACTORY

Suggestions and additional comments: (a) REPORT PAPERS AND RESOURCE PERSON TRANSCRIPTS MUST BE DISTRIBUTED TO PARTICIPANTS AT THE BEGINNING OF SEMINAR/WORKSHOP.

(b) FOR REPORTS AND SUBJECT PAPER REQUIRING GOVERNMENT SUPPORT/INPUTS IT IS ADVISABLE TO CLEAR THEM BY SENDING COPIES TO RELEVANT MINISTRY TWO WEEKS BEFORE THE EVENT.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

(a) THE IDEA OF REVOLVING FUND TO BE MANAGED BY INDUSTRY/TRADE ASSOCIATION IS NICE BUT WILL INDUCE GOVT'S RELIANCE THE ABILITY WHICH HAS NOT BEEN UTILISED I.E. INDUSTRY/TRADE SHOULD BE MOTIVATED AND STABILISED AND LEFT ALONE TO MANAGE ITS AFFAIRS. WE NEED UNIDO EFFORT TO CHANGE GOV. ATTITUDE.

(b) HIDE TANNING IMPROVEMENT OF A COUNTRY REQUIRES CONSTANT TRAINING OF TARGET GROUPS AND CREATING SUITABLE ENVIRONMENT WHICH WOULD AT ALL LEVELS OF TRADE GIVE INCENTIVES. WE NEED UNIDO EFFORT TO ASSIST REGIONAL EXCHANGE OF EXPERIENCES.

# QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: Amos Masekwa

Country: Tanzania

Age: 38 yrs

No. of years in Hides and Skins Trade: 20 yrs

Experience in other areas of leather industry: Years: -  
Area Shinyanga

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	
Content and Substance		✓	
Theoretical part		✓	
Practical part			✓

Suggestions and additional comments: There should have some  
practical at some of the subjects eg. tanning technique of  
small scale practiced in Britain and Europe. Because  
these methods are not appropriate in some countries

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

If possible UNIDO can provide additional assistance  
As DSA for Hides & skins staff because the one which  
is being provided by the government is not enough to  
cover to all Extension Staff Dealing with Hides & skins  
improvement.

- Training for butchers and buyers so that they  
can improve the quality of Hides and skins  
thus to maintain grading of Hides & skins.

## QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: Asrat Parku

Country: ETHIOPIA

Age: 35

No. of years in Hides and Skins Trade: —

Experience in other areas of leather industry: Years: 12

Area ETHIOPIA

Please provide your comments on the Seminar:

Excellent                  Good                  Not satisfactory

Organization

✓

Content and Substance

✓

Theoretical part

✓

Practical part

✓

Suggestions and additional comments: UNIDO Should arrange  
such seminar in a place where one can practically

see what is going on in the time of seminar should

3 or 4 per year

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

It should contact donor countries  
to get assistance in money to improve  
AFRICAN leather so that donor countries  
also benefit by importing quality hide and  
SKIN.

# QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: MR R DARCK

Country: ZIMBABWE

Age: 25

No. of years in Hides and Skins Trade: 7 YEARS

Experience in other areas of leather industry: Years: 7 YEARS

Area LEATHER PROCESSING

Please provide your comments on the Seminar:

Excellent      Good      Not satisfactory

Organization

Content and Substance

Theoretical part

Practical part

✓  
✓  
✓  
✓

Suggestions and additional comments:

COUNTRY REPORTS + TALKS: THE USE OF VISUAL AIDS SHOULD BE ENCOURAGED. TARGET AREAS IN RELATION TO THE COUNTRY AS A WHOLE, TRENDS IN LIVESTOCK POPULATION, NO. OF HIDES + SKINS, OFFTAKE RATES COULD HAVE BEEN BETTER ILLUSTRATED USING DIAGRAMS OR GRAPHS.

UNFORTUNATELY THE TALK BY KWANG + CO DID NOT TAKE PLACE. IT WOULD HAVE PROVIDED THE OPPORTUNITY TO DISCUSS GRADING + INCENTIVES WITH A HIDE MERCHANT.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

IN THE CASE OF ZIMBABWE, ~~PROVIDING~~ EXTENSION WORKERS COULD BE PROVIDED WITH MOTORCYCLES. THIS WILL ASSIST IN THE COLLECTION OF DATA + THE ~~FROM~~ DISSEMINATION OF INFORMATION.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: MARSHALL B. B. KASOWANSETE

Country: MALAWI

Age: 47

No. of years in Hides and Skins Trade: 4 year

Experience in other areas of leather industry: Years: None  
Area \_\_\_\_\_

Please provide your comments on the Seminar:

	Excellent	Good	Not satisfactory
Organization		✓	✓
Content and Substance		✓	
Theoretical part		✓	
Practical part			✓

Suggestions and additional comments: \_\_\_\_\_

Next time close a venue that has a variety of accommodation and give chance to participants to find their own accommodation which will be paid from the allowance given

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

training assistance  
material support

### QUESTIONNAIRE

US/RAF/92/200 - Hides and Skins Improvement Seminar  
Morogoro, Tanzania, 13-17 June 1994

Name: SIULAPWA CHARLES

Country: ZAMBIA

Age: 38

RE  
22 JUN 1994  
US

No. of years in Hides and Skins Trade: 13 1/2 YEARS

Experience in other areas of leather industry: Years: 6 MONTHS  
Area POST QUALIFICATION EXPERIENCES IN TANNING AND FINISHING.

Please provide your comments on the Seminar:

Excellent                  Good                  Not satisfactory

Organization		✓
Content and Substance	✓	
Theoretical part	✓	
Practical part		✓

Suggestions and additional comments: IT APPEARED THERE WAS NO LIASON OR A MATTER OF COMMUNICATION BREAK DOWN ?! BETWEEN DAD AND SOME OF THE RESOURCE PERSON. AS A RESULT SOME VERY GOOD LECTURES THAT COULD HAVE BEEN USEFUL AND INTERESTING WERE NOT DELIVERED. (E.G) S.M. LURIE EMAG OF SWITZERLAND ETC. IT IS RECOMMENDED THAT IN FUTURE ORGANISERS RECONFIRM WITH RESOURCE PERSONNEL WELL IN ADVANCE. IT COULD HAVE BEEN EVEN BETTER IF PRACTICAL FIELD DEMONSTRATIONS SUPPLIMENTED FIELD VISITS AND THEORY.

Please provide comments on how, in your opinion, UNIDO can provide additional assistance to the hide and skins improvement sector:

WHILE ITS APPRECIATED THAT UNIDO'S AIM IS NOT TO SUPPORT HIDES TRADERS THE ZAMBIAN SCENARIO PRESENTS A UNIQUE SITUATION IN THAT THERE ARE NO HIDE TRADERS PERSE. TANNERIES COLLECT HIDES THEMSELVES. THIS HAS LED TO TANNERS RESTRICTING COLLECTIONS TO TRADITIONAL SUPPLY ROUTES SUCH AS COLD STORAGE CORPORATION OR URBAN PRIVATE ABATTOIRS. UNIDO IN CONJUNCTION WITH LIAZ SHOULD ENCOURAGE INVOLVEMENT OF MIDDLEMEN OR ALTERNATIVELY SET UP ITS OWN HIDE AUCTION FLOORS. THE STRATEGY BEHIND IS TO DO THE MIDDLE MAN'S JOB BETTER AND MORE EFFECTIVELY AND AT THE SAME TIME LOOK AFTER QUALITY. A MIDDLE MAN WILL GO DEEPER IN REMOTE AREAS TO COLLECT HIDES THAN IF DONE BY THE TANNER IT IS IN THIS AREA THAT UNIDO SHOULD PROVIDE ADDITIONAL ASSISTANCE TRAINING COMPONENT AT ALL LEVELS OF HIDES AND LEATHER PRODUCTION SHOULD NOT BE IGNORED. THE ABOVE OBSERVATION ARE A CASE FOR ZAMBIA ONLY. SITUATIONS MAY DIFFER IN OTHER COUNTRIES.