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REGIONAL AFRICA HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME

US/RAF/88/100

Terminal Report

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This report has not been edited.

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INTRODUCTION

The Regional Hides and Skins, Leather and Leather Products Scheme (US/RAF/88/100) was conceived on the basis of the recommendation of the UNIDO Third Consultation on Leather and Leather Products Industry, held in Innsbruck, Austria in 1984. Subsequently UNIDO convened a Regional Meeting on the Leather and Leather Products Industry in Africa in Alexandria, Egypt in January 1987 which focussed on the constraints and shortcomings experienced in the African leather industry as a whole. The meeting identified several major constraints affecting the leather industrial sector development in Africa and, therefore, proposed as a follow up a regional scheme which would reduce the enormous wastage of raw hides and skins, increase capacity utilization of industries within the sector, improve productivity and train manpower at all levels of the various subsectors of the African Leather Industry.

In order to assess the prevailing situation of the leather sector in the African countries at that time and also to collect the pertinent data for the whole programme, a preparatory phase entitled "Preparatory Assistance for a Regional Hides and Skins, Leather and Leather Products Improvement Scheme" (UC/RAF/87/069) was launched. The studies were carried out by two senior experts whose findings and recommendations formed the basis of the programme approach adopted during the implementation of US/RAF/88/100.

This scheme was funded generously through the special purpose contributions by the Governments of Austria, France, Finland, Germany, Italy and Switzerland. The regional programme and country project activities of the eight countries covered by the scheme, that is Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe, operated under the overall administration of the Leather Unit at UNIDC Vienna and were coordinated by the Chief Technical Adviser, who was based at the regional headquarters in Nairobi and was assisted by a regional coordinator and national experts operating from their respective countries. From the regional headquarters the CTA supervised the activities of the international experts and the subcontractor's team fielded in the various countries.

The implementation of this umbrella project was based on the integrated programme approach concept and comprised several programme components according to the various subsectors of the industry such as hides and skins improvement, tanning,

footwear and leather goods. Project activities were carried out at both regional and national levels taking into account the broad regional needs as well as the more specific national requirements for the individual countries.

UNIDO acted as the executing agency and subcontracted to the sister agencies, FAO and ITC, the implementation of programme components which fall under their specific areas of competence.

SUMMARY OF ACHIEVEMENTS

The project US/RAF/88/100 had eight outputs, all of which can be considered as successfully implemented. Particular achievements were made in hides and skins improvement with a recorded increased recovery of raw hides and skins as well as improved quality. Inputs from the project included training programmes on correct flaying and curing methods, supply of appropriate slaughter tools and transportation facilities and supply of publicity materials in local languages. However, the quality and recovery of raw hides and skins remain pivoted to the development of the region and improvement in this area should be viewed as a long-term, ongoing activity, preferably promoted by the principal beneficiaries, the tanners and leather goods manufacturers, through their respective trade associations. In this respect a revolving fund for hides and skins improvement was set up in most of the countries where trade associations were either founded or strengthened with the project's assistance. The revolving fund is financed by the companies which received technical assistance from their national project or the regional project for rehabilitation in form of machinery and equipment. The companies pay into the fund for the assistance received in local currency and under concessionary terms. (See Annex 1.) All companies assisted in the participating countries are up-to-date with their pay-back schedule. A good example of the motivation created by the revolving fund is in Kenya. Within a few months of conceiving the establishment of a "Training and Production Centre for the Shoe Industry" (TPCSI), the building construction of the new training centre started, financed to a large extent through the revolving fund. Training activities are expected to start mid-1994.

Technical assistance in the areas of tanning and finishing revolved around the tannery rehabilitation project US/RAF/88/102 at the regional and country levels. Implementation of the technical assistance included organizing five seminars at the

regional level. Industry rehabilitation in this sector could probably be considered as the most successful part of the whole programme.

An extensive volume of reports and working documents were produced during the programme's duration and are listed in Annex 2. The experts and consultants assigned to the programme are shown in Annex 3.

The attention the scheme received in the public media is illustrated by a selection of newspaper excerpts presented in Annex 4.

The impact of the programme is summarized below for each of the countries where technical assistance was provided, either in expertise or capital assistance in the form of machinery and equipment. More details are contained in the terminal report of the respective associated country project.

ETHIOPIA

1. Hides and skins improvement

The main project activities consisted of introducing a grading system for raw hides and skins in the target area, conducting training through workshops for field extension officers, and the construction of model curing and demonstration sheds.

Although during this period it was difficult in Ethiopia to obtain definite trends in collection and quality of hides and skins due to the then prevailing war situation, the project was able to note an improvement in the target area.

In the target area the producers obtained additional earnings of Birr. 600,000 per annum from hides and skins as a result of improved average quality grades. The collection of hides in Ethiopia at the beginning of the project averaged about 37 per cent of the expected hides production of 1.1 million hides. If there is improved collection, as demonstrated in the target area, by at least 20 per cent, this would be equivalent to 220,000 additional pieces of hides per annum. If exported as wet-blue leather, these hides would earn Ethiopia an additional sum of <u>US\$3.3 million</u> per annum, assuming a modest selling price of US \$ 0.60/sq.ft. for wet-blue leather.

It is estimated that in the target area it was possible to collect sheep and goatskins at a rate of about 95 per cent of the expected production. Although collection of skins was generally quite reasonable there is still room for improvement and additional skins collected, as demonstrated in the target area, will generate more foreign exchange earnings.

The benefits arising from improved quality through the introduction of better flaying techniques, preservation methods and provision of incentives for better grades will result in higher prices for raw hides and skins, which, in turn, will benefit the producers.

2. Rehabilitation of factories

The rehabilitation programmes carried out in Ethiopia were implemented satisfactorily and resulted in quantifiable benefits in most of the cases. Awash Tannery was the main object of rehabilitation and the benefits accruing from its rehabilitation are as follows:

- Installation of full hide fleshing and splitting machines increased the yield of wetblue leather and splits, resulting in an additional income of Birr 70,588 per year.
- Installation of four skin staking machines achieved an increase of about 6 per cent, bringing and additional income of Birr 184,642/- per annum.
- Installation of overhead driers for crust skins resulted in increased productivity and efficiency. The tannery is, therefore, able to save Birr 161,000 per annum.
- The installation of retanning drums, soaking drums and a dry shaving machine brought about further savings and additional revenue.

The accrued benefits are estimated to be Birr 562,205 per annum, equivalent to about US\$112.440.

Dire and Modjo Tanneries also benefited from the rehabilitation to a lesser extent but the investments resulted in increased productivity and better quality leather.

Anbessa Shoe Factory was a major rehabilitation object and was provided with two automatic conveyors and shoe making machines. Prior to the rehabilitation this factory used to produce 1,600 pairs of shoes per day in two shifts, but after rehabilitation the production capacity increased to the extent that the factory produces 2,500 pairs of shoes in a single shift of eight hours.

The rehabilitation also resulted in quality improvement, better production flow as well as reduced direct labour costs. Production increased from a total of 254,366 pairs per annum in 1989 to 431,418 pairs per annum in 1991, representing an increase of more than 70 per cent, while the sales turnover during the same period increased from Birr 5.822 million to Birr 12.636 million.

KENYA

1. <u>Hides and skins improvement</u>

In Kenya the project concentrated hides and skins improvement activities in the target areas of Nakuru and Kiambu/Nairobi. Implementation of the project activities in Nakuru faced operational constraints as a national expert was not recruited for Kenya.

However, improvement in quality of raw hides and skins in the Kiambu/Nairobi target area was recorded as follows:

_	<u>Year 1989</u>				
	Grade I	Grade II	Grade III	Grade IV	
Cattle hides Goatskins Sheepskins	45.6% 47.6% 44.3%	28.2% 28.0% 38.5%	18.5% 19.6% 12.3%	7.7% 4.8% 4.9%	
		<u>Year 1992</u>			
	<u>Grade I</u>	Grade II	Grade III	Grade IV	
Cattle hides Goatskins Sheepskins	46% 48% 45%	30% 29% 40%	22% 20% 14%	2% 3% 1%	

From the above data it is possible to assess the likely impact if activities of the project in hides and skins improvement are carried out throughout the country. Improvement of the hides quality alone by 5 per cent in the target area would, if applied nationally, reflect a significant increase of revenue. The current price range based on quality of wet-blue hides is from US\$ 0.59 to US\$ 0.72 per sq.ft. and, therefore, in a situation where the 1 million hides exported in wet blue are upgraded in quality through improved extension services, it would result in about US \$ 1.75 million per annum additional foreign exchange earnings for the country.

2. Rehabilitation of factories and upgrading of effluent treatment plants

Sagana Tannery was selected by the project as the most suitable for the construction of a model effluent treatment plant which was commissioned and used for demonstration during the regional pollution control seminar in June 1992. The design and technology used are being transferred to the other countries in the region. The tannery was also a rehabilitation object and received three liming drums, three tanning drums, a fleshing machine, a sammying machine and spare parts. As a result of this

investment the tannery increased its production three-fold from 200 hides per day to 600 hides per day. This has improved the cash flow of the factory and changed its position from a 100 per cent contract-tanning operation to an exporter of wet-blue hides. The tannery is able to obtain premium prices of up to 20 per cent of the prices fetched by equivalent wet-blue hides processed elsewhere because of the improved quality due to the utilization of appropriate machinery for fleshing and sammying.

Alpharama and Kitale tanneries were assisted to upgrade their effluent treatment plants by providing them with some equipment as well as expertise.

MALAWI

1. Hides and skins improvement

At the start of project activities there was no organized hides and skins improvement extension service in Malawi and the whole sector was monopolized by the Cold Storage Company Ltd. The producer prices were low and purchases were not made on the basis of quality according to grades.

Hides and skins project activities were concentrated in the target area of Central Region where grading was introduced in 1991. In 1992, after the introduction of grading in the target area, data collected show a general improvement in the quality of hides collected of up to about 5 per cent, while showing at the same time improvement of about 3 per cent for skins. The producer prices in Malawi are still low, mainly due to the high cost of transportation, but there is an upwards trend in the prices being paid to them.

The liberalization of the hides and skins trade during this period enabled more people to join this trade, thereby creating new employment opportunities for Malawians. About 75 per cent of the raw hides and skins from Malawi are still exported in raw form while only 25 per cent are processed by Liwonde Tannery.

2. Liwonde Tannery

This tannery is the only tannery in Malawi and was established in 1989 in order to produce finished leather for the local footwear and leather goods manufacturers who relied on imported finished leather from neighbouring countries. Although Liwonde Tannery experienced liquidity and management problems intermittently, its production steadily increased and the turnover rose from Malawi Kwacha 46,467 in the first six

months of 1989 to MK.489,727 in the first nine months of 1992. Assistance from the project to Liwonde Tannery enabled Malawi to save valuable foreign exchange which was previously used in the importation of finished leather.

3. Leather goods production and training unit

The leather goods production and training unit, known as Superior Leather Goods Company Ltd., was established with the technical assistance of the UNIDO project. This unit was set up as a commercially viable, self-sustaining company with a training element mainly for <u>women</u> who are working in this field.

The project will continue using this facility for training women within the region in leather goods manufacture.

SUDAN

1. Hides and skins improvement

The project concentrated hides and skins improvement activities in the selected target areas of Kassala, Gadalfa and New Halfa. The Sudan has the second largest livestock population in Africa after Ethiopia and, therefore, has much potential for the development of the leather sector.

In order to achieve a meaningful improvement in the area of hides and skins, the project provided extension workers with transport facilities and flaying tools. The fielding of the FAO international hides and skins expert assisted in the training of field personnel within the target area as well as the training of flayers and hides and skins merchants. During the period of project implementation all the state-owned tanneries were operating with difficulties and, therefore, the impact of hides and skins improvement activities could not be ascertained. However, two major tanneries, White Nile and Gezira, have now been privatized and a total ban of exports of raw hides and skins has become effective as of May 1993.

The project introduced a new grading system for raw hides and skins which is used by traders to pay purchase prices according to quality. This will serve as an incentive for producers to improve the quality and the quantity of available hides and skins.

2. Rehabilitation of factories

International experts in tanning, leather finishing, effluent treatment and maintenance were fielded at White Nile and Afrotan tanneries. The status of White Nile and Khartoum tanneries, when they were not in a position to provide counterpart inputs, interfered with the possible rehabilitation through the project. However, assistance for upgrading the tannery effluent plants at White Nile and Khartoum tanneries and the training institute is being provided.

Salim tannery received three machines valued at US\$ 147,000 which enabled it to process skins of higher quality for export. The tannery will refund this assistance by paying the equivalent value in Sudanese pounds into the revolving fund.

In the footwear subsector operations at SATA Shoe Co. were improved by providing spare parts worth US \$ 17,000. At the same time a footwear expert was fielded for one month to make a rehabilitation study.

It is expected that with the recent privatization of the tanning sector and the ban on raw hides and skins export, supported by continued project activities, the economy of the Sudan will benefit greatly.

TANZANIA

1. Hides and skins improvement

Shinyanga Region was the selected target area for hides and skins improvement in Tanzania during the implementation of the project. In this region 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 per cent for hides, 12 per cent for goatskins and 11 per cent for sheepskins between 1989-1992.

The most encouraging aspect of the Tanzania programme is that hides and skins improvement activities continued in the Shinyanga region after the UNIDO project expired by utilizing funds from the revolving fund. It is expected that similar achievement will be made in the new target area of Mwanza region.

If collection of raw hides and skins is increased throughout Tanzania in the same proportion as in Shinyanga and the quality of hides and skins improved through grading and better producer prices, then a significant number of hides and skins will be recovered. The project estimates a hide production of 1.7 million pieces per annum in Tanzania while government statistics still show less than 1 million hides per annum.

2. Rehabilitation of factories

At the beginning of the project the tanning capacity of the three main tanneries in Tanzania, namely, Morogoro Tannery Ltd., Tanzania Tanneries (Moshi) and Mwanza Tannery, which were state enterprises, had dropped to less than 30 per cent. The three tanneries could not provide the required counterpart input in order to benefit fully from the rehabilitation programme. However, towards the conclusion of the project the Government adopted some of the project recommendations and privatized two of the tanneries.

A privately-owned tannery Afro Leather Industries in Dar-es-Salaam was rehabilitated by providing fleshing and sammying machines valued at US\$ 205,465 which are already installed. A production capacity of about 400 hides per day could thus be achieved by this tannery.

The only parastatal company able to provide counterpart inputs was Morogoro Leather Goods Factory which was rehabilitated by the regional project. The performance of this factory was improved, with 26 sewing machines working after rehabilitation when only 9 out of 33 machines were working before rehabilitation. The production capacity was greatly enhanced and has increased by about 175 per cent.

ZAMBIA

1. Hides and skins improvement

The hides and skins improvement activities were concentrated in the target area of Eastern and Western provinces where several workshops to train animal health personnel, farmers, butchers and hides merchants were conducted by the national expert and the FAO hides and skins expert. Hides and skins improvement publicity campaigns by the project in Zambia were exceptionally effective in creating awareness of the economic importance of this commodity in order to minimize its wastage.

In general terms a modest increase in the quality of hides of about 2 per cent was recorded in the target areas but more significantly an increased hides collection of about 57 per cent in the target area was recorded. The producer prices rose by an average of about 70 per cent and this is a major incentive to the producers, inspite of the fact that the cost of wet-salting increased tremendously, therefore, the project is introducing air-suspension drying methods.

2. Rehabilitation of factories

Most of the assistance to Zambia for a total of US\$1.3 million went into the rehabilitation of tanneries and leather goods factories. Assistance to Bata Shoe Company increased the supply of finished leather in Zambia and this supported the emerging footwear subsector which lacked raw materials. Technical assistance through expertise and assistance in tannery effluent control were also given to Asaria and Kembe tanneries. Tannery rehabilitation resulted in increased area yield of wet-blue hides, quality and overall productivity in factory operations.

A footwear industry expert was fielded in Zambia and provided technical expertise focusing on quality improvement of footwear at Bata, Kamra, Copperbelt and Universal footwear companies.

Bimzi Leather Goods Factory received spare parts and technical assistance which resulted in upgraded technical skills of the company's operators.

ZIMBABWE

1. Hides and skins improvement

The impact of hides and skins improvement activities in Zimbabwe was lessened by the prolonged drought in the country. The target area of Masvingo initially recorded improvement in the quality of hides coming from the communal sector and increased collection, but the positive gains were reduced when the herds of cattle became depleted due to the drought.

2. Rehabilitation of factories

The rehabilitation programme of factories in Zimbabwe was quite successful and it was complemented by the development of human resources through the services of a machinery maintenance expert, a leather finishing expert and a shoe manufacturing expert. The following tanneries were rehabilitated and a positive impact was made in all of them.

Belmont Leather (Pvt) Ltd. was supplied with a vacuum drier which increased the area yield by 3 per cent, earning the company an extra US\$ 150,000 per annum. Installation of a vibrating staking machine and an overhead drier improved the workflow tremendously. Extra savings of \$ 206,448 per annum were achieved by

installing a new fleshing machine which increased the off-take of subcutaneous tissue by 45 per cent, saving 13.7 per cent chrome tanning salts.

During rehabilitation Imponente Tannery received three soaking drums, two tanning drums, a vacuum drier, a shaving machine and a spraying machine. As a result the production throughput rose by about 40 per cent and the high quality leather processed enabled the factory to develop higher value-added products for export markets. Productivity in this tannery increased by about 32 per cent, while water consumption by the factory was reduced by 25 per cent, decreasing effluent emission by the same percentage.

Likewise, Eagle Tannery received a buffing machine and a de-dusting machine during rehabilitation.

The project supported the footwear subsector by establishing a Footwear CAD Centre at the Leather Institute of Zimbabwe to assist in footwear design. The installation of this system boosted design capabilities of the footwear industry and reduced the extensive number of patterns made out of cardboard.

General

In the whole region all assisted tanneries enhanced their production capabilities, quality standards and range of manufactured products.

During the implementation of the programme government policy has changed in those countries where the industry is in the public sector and the tanneries and footwear factories are in the process of being privatized. In Tanzania privatization has progressed well while in Ethiopia the process is expected to take a little longer.

A major achievement is the creation and establishment of registered national leather industry associations representing the common development interests of the hides and skins producer, the trade, and the tanning and leather products industries. These associations manage revolving funds by accepting and monitoring repayments from assisted private companies for equipment provided through the project.

The setting up of a model effluent treatment plant in Sagana tannery demonstrated the possibility of upgrading the capacity and technical efficiency of tannery effluent treatment plants in the region at affordable cost.

Manpower development through training programmes and study tours was a major feature of the assistance provided under project US/RAF/88/100. Details

concerning the fields of training and persons sponsored are provided in the individual country terminal reports.

Problems encountered

Amongst the problems encountered during the implementation of this project was the discontinuation of project activities in Somalia due to insecurity.

The inter-agency arrangements with FAO for the implementation of hides and skins activities presented difficulties in coordination, as FAO lacked substantive technical support in the hides and skins improvement area.

The cost of implementing projects in land-locked countries like Malawi escalated due to unforeseen increases in transportation costs.

Government policies on issues such as free export of raw hides and skins interfered with the expected performance of rehabilitated industries.

The project found it difficult to collect reliable statistical data since national governments were mostly responsible for gathering the information.

Nevertheless, the above-mentioned problems did not affect significantly the positive impact of the project's implementation.

SUBSTANTIVE OVERVIEW OF US/RAF/88/100 PROJECT ACTIVITIES

At the commencement of the Regional Hides and Skins, Leather and Leather Products Improvement Scheme US/RAF/88/100 during 1989/90 all the participating countries had in principle confirmed their willingness to provide the government counterpart inputs required for the successful implementation of the project. All projects' objectives and planned activities were designed in line with the various governments' strategies for leather sector development and as specified in the individual country documents.

On the whole the project followed the specified guidelines in the project documents but from time to time responded to individual country needs by adopting maximum flexibility in order to provide the appropriate inputs. In spite of the fact that the sectoral development in the eight countries differed widely from the beginning of the project, the development objectives of this project were such that several national projects required common international inputs for them to be successful. Therefore,

during implementation, the project made every effort to obtain maximum benefits of the international inputs by utilizing them in the most economical way possible. An example of this is the core cadre of experts who were fielded from country to country according to specific needs, for instance in effluent treatment and hosting of several regional seminars.

Activities of this scheme cover a wide spectrum according to the various subsectoral needs and requirements and, therefore, are best illustrated by looking at each specific area as follows:

1. HIDES AND SKINS IMPROVEMENT

The immediate objectives and outputs of project US/RAF/88/100 reflected the general situation of the hides and skins improvement within the African countries covered by the project at the beginning of the project. Although the level of development of hides and skins extension services and improvement differed from country to country with Ethiopia, Kenya and Zimbabwe being more developed than others, coherent and integrated programmes for raw hides and skins improvement, increased collection, standards for grading and classification of hides and skins were not fully in place or effectively implemented in all the countries.

The project sought to improve activities of the subsector through demonstration of the best methods of slaughtering, flaying, preparation of hides and skins for curing and adopting the best curing methods. In order to achieve this UNIDO subcontracted FAO to provide two international hides and skins experts to work with the respective national counterparts in the selected target areas. One of the FAO international experts covered Somalia, Sudan and Kenya while the other covered Tanzania, Malawi, and Zambia. The other countries such as Ethiopia were covered by short-term consultancies.

During the implementation of the hides and skins improvement activities the project provided assistance to the country projects by delivering project vehicles and motorcycles which gave extension workers the necessary mobility within the designated target areas. Other assistance included provision of slaughtering and flaying knives to butchers and flayers.

Hides and skins improvement outputs/activities which took place during the implementation of the project are considered below:

Output 1

This output concerns improved policy guidelines and industrial strategy for the development of the region's hides and skins, leather and leather products industry which was produced in the form of a regional document specifying both regional and individual country aspects.

The document addressed itself to the pertinent government policy issues which hinder development of the sector. These issues included absence of legislation stipulating hides and skins trade licensing practices of selling and buying according to grades, lack of incentives for the primary producers, sometimes due to excessive tax levy as well as lack of clear marketing policies. It is considered that the document provides valuable information on policy guidelines and development strategy for the hides and skins derived industries sector which are applicable also to some other African countries other than those participating in the UNIDO project US/RAF/88/100 (see Annex 5).

During the FAO-organized ECDC Workshop on Trade in Hides and Skins and their Derived Products in Bulawayo, Zimbabwe, July 1991, it was recommended that a summary of the output would be presented as a background information paper at the Third FAO Intergovernmental Sub-Group Meeting on Hides and Skins in April 1992. The document was subsequently presented during this meeting.

Output 2

This output concerned the establishment and/or rehabilitation of well-operating hides and skins, leather and leather products improvement schemes with trained butchers, flayers, and extension officers. Better slaughtering tools were to be provided together with preservation chemicals.

In order to achieve and obtain satisfactory implementation of this output the approach adopted involved selection of suitable target areas where concentrated hides and skins improvement activities would be focused. Counterpart personnel from the respective countries were fielded in those target areas where the pilot hides and skins improvement schemes were based. All the areas selected for hides and skins improvement pilot schemes were characterized by the presence of a large livestock population, high slaughter rate as well as high production of raw hides and skins. The raw materials produced in these areas come predominantly from indigenous breeds

which are reared using traditional methods and therefore suffer from inadequate veterinary resources which contribute to a high level of pre-slaughter defects.

With the exception of Somalia where the project activities were terminated early due to security and administrative reasons, the project embarked on a hides and skins improvement publicity campaign in the other seven countries through posters and video shows in order to sensitize primary producers on aspects and benefits which could be accrued by producing raw hides and skins of better quality. The posters were in local languages and were introduced as part of the strengthened extension services. The national experts also utilized the posters as part of the teaching aid when conducting local seminars on hides and skins improvement. While implementing aspects of this output the project considered the four main methods of hides and skins preservation practiced in the region which are air-suspension shade drying, sun-drying, dry-salting and wet-salting and recommended improved and the most suitable method for each country or region.

As part of the regional effort aimed at improving hides and skins, a seminar was organized in Bulawayo, Zimbabwe in November 1990 within the framework of project US/RAF/88/100 and associated country projects, in cooperation with the subcontractor Ewbank Preece Ltd. This seminar was very successful and had as its main objectives the provision of up-to-date methods on hides and skins care from animal husbandry, slaughter practices, hides and skins defects both pre- and post-slaughter, preservation, and grading to marketing, training and promotion of hides and skins improvement schemes.

During this seminar the delegates drawn from all the eight participating countries approved the following recommendations:

- (a) With UNIDO assistance, responsible government/ministry departments should formulate incentive schemes to counter the lack of motivation and neglect in hides and skins improvement.
- (b) Governments should encourage the state-owned and private leather industrial sector to be involved in hides and skins improvement through closer collaboration with the hides and skins subsector and by facilitating the creation of independent, self-financing entities for the benefit of leather industry development, and where possible, in conjunction with existing trading, tanning, leather associations and institutes.

- (c) As recommended jointly by the UNIDO and national experts of the regional scheme and the veterinary departments, animal health, veterinary hygiene and hides and skins extension officers of the target areas should be involved in hides and skins improvement country projects.
- (d) Extension schemes should be organized in each country (and in each target area) in order to establish a standard reporting system on collection, grading and pricing structures.
- (e) The necessity to create associations where they do not exist to act as promotion/inter-professional/lobbying forum to negotiate on behalf of the industry with governments.
- (f) UNIDO/FAO should encourage/persuade governments to set up slaughter slabs in small towns and villages as an essential step towards hides and skins improvement.

A notable development during the implementation of this project is the creation of private trade associations through UNIDO assistance where they did not exist and strengthening of the associations where they existed. The associations' membership consists mainly of tanners and footwear manufacturers and they played a significant role in supplementing government efforts in the development and promotion of hides and skins activities utilizing funds from the revolving funds. The revolving fund was created from the funds paid in local currency by tanners, footwear and leather goods manufacturers in repayment of the equipment received from the projects US/RAF/88/100 and US/RAF/88/102 or the national project as part of the technical assistance to the industry.

Output 3

Improved statistical intelligence throughout the region. A uniform statistical country report will be produced periodically to the regional office for transmission to UNIDO/FAO/ITC for further monitoring and dissemination.

During the implementation data collection was mostly confined to the target areas. As expected from the beginning, Lata collection has been neglected or data have been haphazardly collected at the national level by most of the countries in the scheme. Therefore, this meant that most of the national livestock populations were based on

estimates, the statistics available on national kill and hides and skins production were almost always inadequate.

The national experts were charged, together with the FAO experts, with the responsibility of collecting data in their respective areas of operations. FAO has been involved in these activities in the past but data available from the organization and governments did not always agree and, therefore, could not be used as a basis for any future development activities. Collecting data on hides and skins at the national level and correlating it with the national kill as well as the traded figures in this region, where informal trading in hides and skins across common borders is quite rampant, is rather difficult without developing a suitable method adoptable for the region.

Annex 6 refers to the statistical data compiled by FAO on the hides an hides and skins, leather and leather footwear in Africa.

Output 4

Improved quality of raw hides and skins through incentives to primary producers, and a realistic quality grading system, based on well operating hides and skins improvement schemes.

The quality of hides and skins has an important bearing on the price they fetch either in the raw form, as semi-processed leather or even in the finished state. Hides and skins produced in this region usually suffer from various types of defects which reduce their quality and, therefore, the primary producers subsequently receive low value for their produce. This is a major disincentive to the producer and one of the reasons why they neglect hides and skins. To reverse this situation the project drew up a comprehensive grading system whose draft was initially presented and reviewed at the hides and skins improvement seminar in Bulawayo, from 19-23 November 1990 (see Annex 7).

The project's field activities were aimed at both pre-slaughter and post-slaughter defects. Most of the pre-slaughter defects require a long-term strategy directed at improving animal husbandry practices, introduction of modern range management techniques and better veterinary services which are beyond the scope of this scheme, but the important element of training received a lot of attention.

Training of extension officers, flayers and butchers was conducted regularly throughout the region through local seminars. Visual aids and posters were used

extensively as promotional materials in order to create awareness of the importance of hides and skins not only as a source of wealth for the producers but also for the country.

Post-slaughter defects such as flay marks and putrefaction were greatly reduced in most of the countries as a result of the training of flayers, butchers and extension personnel in better skinning and preservation methods. However, a lot of constraints in this area still persist, especially in those countries where government legislation on proper methods of flaying, curing and trade in hides and skins based on quality does not exist.

It is expected that changes based on the full acceptance of the new and more standardized grading system for both hides and skins will not be achieved overnight but the trend is set with various incentives being provided such as better prices for quality raw materials free of defects. There is more transparency in pricing and the trade is almost fully liberalized in most of the countries.

The revolving fund created during this phase is expected to provide a basic incentive to those extension officers who perform well and the trade associations are prepared to give cash rewards.

Output 5

Increased collections of raw hides and skins. The increased quantity is expected to be achieved through minimizing waste and through providing suitable incentives to the primary producers.

This output is closely related to Outputs 2, 3 and 4 and is of major importance because a large portion of hides and skins produced in the African countries covered by the scheme does not reach the market and is therefore wasted. This wastage of a valuable renewable resource like hides and skins constitutes a great loss in foreign exchange to the individual countries as well as to the individual primary producers. Several factors contribute to this situation and one of the factors was the low purchase price paid for hides and skins by traders while the bulk of the profit is taken by middle men. Lack of awareness on the part of producers, who in some cases prior to the onset of the project did not know the importance of hides and skins, caused them not to take care when slaughtering and to throw these away into pits, as was the case in Zambia. Posters and seminars sensitized the producers in the various countries as elaborated in the country reports.

2. TANNING SUBSECTOR REHABILITATION/IMPROVEMENT

Rehabilitation of the factories in the tanning subsector through the scheme constituted a major step in sectoral technical assistance to the countries in the region with the aim of exploiting to the maximum value-added of hides and skins by transforming this resource from the raw form into either semi-processed leather or good quality finished leather.

The Regional Tannery Rehabilitation Scheme US/RAF/88/102 was financed entirely through an Italian special purpose contribution to the IDF and provided assistance to various selected tanneries both state and privately owned in the countries covered by the scheme. It was recognized from the initiation of the project that there already existed in this region sufficient tanning capacity and in some cases over-capacity but most of the factories worked below capacity due to various reasons such as breakdown of machinery, lack of spare parts as well as lack of management skills.

Technical assistance to selected existing factories aimed at increasing the industries' efficiency, capacity utilization, upgrading of technical skills at all levels and improving marketing performance. The private companies which received assistance in the form of new equipment are obliged to repay this equipment in local currency over a period of time. The payments are made into a revolving fund which is expected to continue funding hides and skins improvement activities when UNIDO's assistance is terminated.

In all cases the assistance was given only after careful study of the rehabilitation objects either by the subcontractor Ewbank Preece Ltd. or by the international experts when carrying out field missions. Implementation was carried out in line with Output 6 as described below.

Output 6

Rehabilitation plan for selected tanneries and shoe factories for improved productivity and trained personnel. The factories to be selected for the rehabilitation programme are described in more detail in the individual country documents. To facilitate monitoring, the base line situation of each selected factory will be established prior to starting the rehabilitation programme.

The rehabilitation programme was implemented in the selected recipient tanneries with great success (see Annex 8).

In Ethiopia the rehabilitation supported by project US/RAF/88/102 was carried out very successfully in three tanneries, namely, Awash Tannery, Dire and Modjo tanneries.

Awash Tannery received full hide fleshing and splitting machines, six retanning drums, two soak/liming drums, dry shaving machine, four skin staking machines, and two overhead driers. This assistance resulted in increased productivity, more leather area yield and improved quality of the leather produced.

Dire Tannery received a tanning drum and a fleshing machine while Modjo Tannery received one fleshing machine.

In Kenya most of the assistance was given to Sagana Tannery Ltd. which was the selected rehabilitation object and where the model effluent treatment plant for the region is located. The tannery received three tanning drums, three liming drums, and a fleshing machine as well as spare parts.

In Zimbabwe two tanneries, Imponente Tannery and Belmont Leather Tannery, received assistance. Imponente received fleshing and spraying machines which resulted in increased productivity and a significant reduction in chemical inputs, saving the tannery a substantial amount of money. In Belmont there was a 21 per cent increase in output and in area yield 12 per cent, while the quality of high grade leather increased by 10 per cent.

In Zambia Bata Tannery was selected for assistance as it had numerous operational problems due to machinery breakdown and old equipment. Since this tannery was the only supplier in Zambia of finished leather, footwear manufacturers and leather goods manufacturers could not obtain the required leather. The machinery and expert assistance provided resulted in increased capacity utilization and an increase in area yield of about 10 per cent.

3. FOOTWEAR SUBSECTOR REHABILITATION

Rehabilitation assistance provided to this subsector was in accordance with the requirement specified under <u>Output 6</u> which calls for rehabilitation of "shoe factories for improved productivity and trained personnel".

Anbessa Shoe Factory in Ethiopia received technical assistance in terms of machinery and equipment as well as expertise. As a result of the rehabilitation programme Anbessa Shoe Factory achieved increased productivity, higher capacity

utilization and is now producing 2,200 pairs of footwear per eight-hour shift compared to previous production of 1,400 pairs per shift (see Annex 9).

Pachar Shoe Company in Kenya was assisted with some footwear closing and making machinery which allowed the factory to increase production to 500 pairs weekly.

4. EFFLUENT TREATMENT

The leather sector is associated with the three forms of pollution, i.e. effluent discharge, offensive gaseous emission, and solid waste. Problems related to tannery effluent treatment and its disposal received special attention during the implementation of the scheme.

The programme was concerned that pollution problems of the industrialized countries' tanning sector are not transferred to African countries and that experiences gained in the industrialized countries in tannery waste management are transferred to the region through the project.

Output 7

This output addresses the issue of effluent treatment and sought to establish "a well-functioning model effluent treatment plant located in a suitable tannery for demonstration and training purposes on a regional level".

Sagana Tannery in Kenya was chosen as the most suitable tannery in the region where a model effluent treatment plant could be established. At the beginning of the project this tannery was found to experience serious environmental constraints as a treatment plant did not exist and the tannery relied instead on a number of open lagoons before discharging effluent into the river. Other factors which favoured the selection of Sagana Tannery included its close proximity to the regional headquarters, local ownership and the ability to raise the required local counterpart inputs.

A model plant was completed in Sagana Tannery for effluent treatment up to the primary treatment stage. This new and modern effluent treatment plant was demonstrated during the regional seminar on pollution control held in Nairobi in June 1992 (see Annex 10).

Further assistance under this output was provided to the following tanneries:

Afro Leather Industries

Tanzania

Alpharama Tannery

Kenya

Bawazir Tannery Kenya
Afrotan Tannery Sudan
White Nile Tannery Sudan
Khartoum Tannery Sudan
Asaria Tannery Zambia
Kitale Tannery Kenya

Activities under this output are considered to have been successfully implemented.

5. TRAINING SEMINARS, WORKSHOPS AND STUDY TOURS

In order to sustain achievements under the various outputs during the implementation of project US/RAF/88/100 and to instill certain skills, several seminars, workshops and on-the-job training programmes were carried out.

The project organized five regional seminars during the implementation period (see Annex 11).

- (a) Tannery machinery maintenance seminar from 8-12 October 1990 at Awash Tannery, Ethiopia. Over twenty tanneries in the region sent their chief engineers to this seminar. The main conclusions reached are listed below:
 - Scheduled maintenance is a must for successful tannery operations.
 - Governments and the managements of tanneries should allow sufficient funds and foreign exchange to operate a preventive maintenance system with a sufficient spare parts stock.
 - UNIDO should continue to assist the various tanneries, case by case, to install preventive maintenance systems as demonstrated during the seminar and as operated by Awash Tannery.
- (b) Hides and skins improvement seminar at the Leather Institute of Zimbabwe from 19-23 November 1990. Recommendations given during this seminar are presented on page 18.
- (c) Tanning and leather finishing seminar at the Kenya Industrial Research and Development Institute, Nairobi, from 8-19 April 1991. Basically two seminars were held, with the seminar on tanning first, followed by the leather finishing seminar. They were organized jointly by the project and the Leather Development Centre, utilizing the LDC pilot tannery and laboratories.

The seminar drew participants from the region who took part in the practical demonstrations conducted in tanning and leather finishing technologies.

The seminar recommendations approved by the participants are as follows:

- (i) To the governments of the participating African countries:
- The governments of the various African countries should involve the leather manufacturers' associations and start jointly incentive schemes based on quality grading for the hides and skins improvement. A suitable draft outline for these schemes will be prepared by the UNIDO programme US/RAF/88/100 and the associated national projects, to be presented for consideration to the governments concerned. It may be considered to further discuss these draft schemes during the FAO-organized hides and skins improvement and trade workshop in Bulawayo July/August 1991.
- The governments of the participating African countries should instruct their relevant statistical organizations to cooperate with and assist the UNIDO project personnel national and international in improving the statistical data of the hides and skins, leather and leather products industries and trade. Simple nomenclature for hides and skins statistics and conversion factors should be prepared. This work should be carried out jointly with UNIDO and FAO and take into consideration the work already carried out by FAO in this sector.
- As effluent treatment is such an important issue for the environmental protection of the African countries, the governments should allow duty free import of effluent treatment equipment and provide incentives and encouragement for tannery effluent treatment measure.

(ii) To the international organizations:

- UNIDO should prepare a phase II for the whole programme as recommended by the various national tripartite review meetings and present the document to potential donor countries for consideration. The self-financing of the scheme through revolving funds and introduction of export levies an similar actions should be a part of the new programme phase.

- UNIDO should present the results achieved so far by the programme and carry out an independent evaluation of the achievements, problems and prospects of the present programme in order to record the lessons learned during the first phase. The new programme phase should be ready for presentation to the donor countries early 1992 and should also look into marketing and technology transfer aspects as well as the reinforcement of national institutions and bodies such as the tannery manufacturers' associations.
- A follow-up seminar should be organized about one year from now to check the results achieved through the recommendations and actions of the present workshop. It is also recommended that workshops and seminars on marketing and management subjects will be organized.
- The samples and material prepared for the present seminar should be utilized for organizing national and international exhibitions where these materials should be displayed.

(iii) To the industry:

- The industry is recommended to establish functioning leather manufacturers' associations which should seek membership in the International Council of Tanners (ICT).
- It is recommended that the industry and trade should use the International Council of Hides, Skins and Leather Traders Association (ICHSALTA)/ICT) contracts in their international transactions in order to have legal protection through these international contracts.
- The industry should seek closer cooperation with the national, regional and international branch institutes and use the services of these institutes for quality control, product development and training.

(iv) To the institutes:

The national and regional institutes should seek closer cooperation with the local industry and reshape their work programmes more in accordance with the needs of the industry. Management of these institutes should be re-examined in order to provide a natural linkage with the industry, and the leather manufacturers' association should be invited to take an active part in the management of the institutes. It is deemed to be

of utmost importance that the industry, either through the membership basis or their branch organization, will share the responsibility of managing the institutes' work.

- The national institutes should seek cooperation within the region with other national institutes as well as with institutes in the industrialized countries. Heads of the national (regional) institutes should convene a meeting to discuss and determine capabilities and to develop a framework of cooperation, undertake projects of mutual interest in order to avoid duplication of efforts. The institutes should be developed to be fully effective and operational to be able to:
 - provide local industry with technical services and training
 - undertake projects of regional interest and publish the results
 of such projects for the benefit of the industry
- It is recommended that the institutes such as KIRDI and LIZ will make their facilities available to international chemical companies upon payment of an agreed facility fee for demonstrating from time to time to the local industry the results of their product development.

(v) To the donor countries and funding organizations:

It is considered that the continuation and the expansion of the present Regional Hides and Skins, Leather and Leather Products Improvement Scheme is of importance to the African leather industry as well as to the international leather and leather products trade. It is, therefore, recommended that the proposed phase II of the present programme should be supported financially by the donor countries and suitable funding agents.

(d) Effluent treatment seminar, held in Nairobi from 8 to 11 June 1992. This seminar was attended by technical officers and policy makers from various institutions in the region which are charged with the responsibility of controlling pollution emanating from tannery wastes. Other participants included technicians from tanneries within the region who are involved in pollution control on a day-to-day basis.

Amongst the important aspects of the seminar was the practical demonstration of a model effluent treatment plant in Sagana Tannery and the

discussions on the most relevant design criteria of effluent treatment plants for this region.

Several workshops and study tours were organized at the national level and this benefited government officers, flayers, butchers, and the technical people from the industry.

6. MARKETING

Marketing activities were the responsibility of ITC through the inter-agency agreement pertaining to the marketing aspects of the sector within the region. A marketing expert was fielded in the region for a period of eight months. During this time he participated in drawing up a paper on "Improved Policy Guidelines and Industrial Strategy for the Development of the Leather Sector" (see Annex 5).

The activities were later reviewed in relation to the prevailing situation in the sector and it was felt that, as most of the industrial activities are oriented towards semi-processed leather, marketing inputs were not required at the beginning of project implementation. Thus the scope of this activity was adjusted to focus on strategies and policy issues which could bring about rapid development of the sector.

7. **JOINT VENTURES**

According to Output 8 it was expected that the project would draw "a list of suitable technical, marketing and or joint-venture partners for the various African tanners and leather products manufacturers, through meetings, contacts between individual potential partners to discuss concrete collaboration opportunities."

Through the joint efforts of project US/RAF/88/100 and the UNIDO Investment Promotion Service in Cologne, selected African companies were presented at the Pirmasens Leather Fair held in Spring 1992 to various European enterprises interested in possible joint ventures (see Annex 12).

8. WOMEN PARTICIPATION IN THE LEATHER SECTOR

Initially the project US/RAF/88/100 did not make provision for resources which could be utilized in addressing women in development issues. Subsequently, the need to give special attention to the integration of women in the industrial development of

the leather sector was recognized. Financial resources were sought and obtained from the Government of Germany for the appointment of a "women-in-development expert".

The reports of the expert identify appropriate measures and activities which will enable women to participate in the sectoral activities and also benefit from the regional programme (see Annex 13).

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Annex 1

Revolving Fund Operations (RFO)

A significant factor of the overall programme, US/RAF/88/100 and associated country projects, was the introduction of the so-called "RFO" in the participating countries which is expected to contribute to sustaining the hides and skins improvement and related activities upon completion of the programme.

This mechanism was developed to channel assistance to the private industry. Under the Regional Tannery Rehabilitation project, US/RAF/88/102, assistance was also given to selected private companies. It was agreed between the government authorities concerned, UNDP and the project management that such assistance can be provided if these companies pay the value of the machinery supplied by the project in local currency to a fund under the control of a suitable non-profit organization, such as a leather institute or tanners association, which will use these funds for further work in hides and skins improvement and/or similar activities in the interest of the country's leather and allied industries sector.

Such activities may include organization of hides and skins improvement seminars, starting up new collection points, purchase of improved flaying tools and equipment, as well as remuneration of international and local experts on special short-term improvement assignments.

The "revolving fund" is already operational in Kenya, Malawi, the Sudan, Tanzania, Zambia and Zimbabwe and is expected to be started also in the other participating countries.

This <u>modus operandi</u> will ensure that funds will be continually available for the improvement of quality of the raw material, thus automatically improving the leather at the tannery stage. At the same time the linkage between tanners, footwear and leather goods manufacturers, and leather institutions/associations in each country will be strengthened and they will serve as an instrument to influence policy makers to formulate appropriate strategies for the development of the sector.

The RFO operations have proved to be an excellent tool to assist private industry development and the assistance through branch associations has been very useful.

All companies assisted in each of the participating countries are up-to-date with their pay-back schedule.

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Annex 2

24 February 1994

List of documentary outputs

- 1.* <u>US/RAF/88/100 Mission report on Briefing seminar in Nairobi, Kenya, by Mr. J. BERG, UNIDO Backstopping Officer, April 1989.</u>
- 2.* <u>US/RAF/88/100 US/RAF/88/102 Backstopping mission to Ethiopia, Kenya, Malawi, Somalia, Sudan, Zambia and Zimbabwe, by Mr. J. BERG, UNIDO Backstopping Officer, December 1989.</u>
- 3.* <u>US/RAF/88/100 Preferential Trade Area Leather Fair in Addis Ababa, Ethiopia. by Mr. J. BERG, UNIDO BSO and Ms. A. CALABRO, Associate Expert, January 1990.</u>
- 4. US/RAF/88/100 US/MLW/88/100 Mission report by CTA, Mr. G. FELSNER, March 1990.
- 5. US/RAF/88/100 US/URT/88/100 Mission report by CTA. Mr. G. FELSNER, May 1990.
- 6. US/RAF/88/100 US/SOM/88/100 Hides and Skins Improvement Scheme in Somalia, Hides and Skins Consultant (FAO), Mr. E. MACHANGA, March 1990.
- 7. US/RAF/88/100 US/KEN/88/100 Hides and Skins Improvement Scheme in Kenya, by E. MACHANGA, Hides and Skins Consultant (FAO), May 1990.
- 8. US/RAF/88/100 US/SUD/88/100 Hides and Skins Improvement Scheme in Sudan, by E. MAGANGA, Hides and Skins Consultant (FAO), August 1990.
- 9.* US/RAF/88/100 US/ETH/88/100 Mission report by H. A. ECKERT, Leather Finishing Expert, April 1990.
- 10. US/RAF/88/100 US/KEN/88/100 US/ZAM/88/100 Mission report by H. A. ECKERT, Leather Finishing Expert, June 1990.
- 11. US/RAF/88/100 US/KEN/88/100 Survey on tannery machinery maintenance in Kenya, by Mr. A. ROMGVED, Tannery Machinery Maintenance Expert, August 1989.
- 12.* US/RAF/88/100 US/ETH/88/100 Mission report by A. RONGVED, Machinery Maintenance Expert, September 1989.
- 13. US/RAF/88/100 US/SOM/88/100 Mission report by A. RONGVED, Machinery Maintenance Expert, December 1989.
- 14. US/RAF/88/100 US/ZAM/88/100 Mission report by A. RONGVED, Machinery Maintenance Expert, March 1990.
- 15. US/RAF/88/100 US/ZIM/88/100 Mission report by A. RONGVED, Machinery Maintenance Expert, April 1990.
- 16. US/RAF/88/100 US/SUD/88/100 Mission report by A. RONGVED, Machinery Maintenance Expert, June 1990.

- 17.* US/RAF/88/100 US/ETH/88/100 Technical report by A. RCMGVED, Machinery Maintenance Expert, July 1990.
- 18.* US/RAF/88/100 and associated country projects Terminal report by A. RONGVED, Machinery Maintenance Expert, July 1990.
- 18'* US/RAF/88/100 Re-blading course, A. RONGVED, November 1990.
- 19.* US/RAF/88/100 US/KEN/88/100 Mission report by D. TRACY, Leather Goods Expert, January 1990.
- 20.* US/RAF/88/100 US/MLW/88/100 Mission report by D. TRACY, Leather Goods Expert, July 1990.
- 21. US/RAF/88/100 US/ZAM/88/100 Mission report by D. TRACY, Leather Goods Expert, July 1990.
- 22. US/RAF/88/100 US/KEN/88/100 Mission report by Mr. J.L. BARADAT, Footwear Expert, October 1989.
- 23. US/RAF/88/100 US/ETH/88/100 Mission report by J.L. BARADAT, Footwear Expert, January 1990.
- 24. US/RAF/88/100 US/KEN/88/100 Mission report by J.L. BARADAT, Footwear Expert, March 1990.
- 25. US/RAF/88/100 US/ZAM/88/100 Mission report by J.L. BARADAT, Footwear Expert July 1990.
- 26. US/RAF/88/100 US/SUD/88/100 Mission report by J.L. BARADAT, Footwear Expert, August 1990.
- 27. US/RAF/88/100 US/ETH/KEN/SUD/ZAM/88/100 Terminal report by J.L. BARADAT, Foowear Expert, September 1990.
- 28.* US/RAF/88/100 US/ETH/KEN/SOM/SUD/URT/ZAM/ZIM/88/100 Mission report by D. MANLY, Marketing Consultant, May 1990. PART UNE.
- 29.* US/RAF/88/100 US/KEN/SOM/SUD/URT/88/100 Effluent treatment and solid waste discharge by Mr. A. LESUISSE, Effluent Treatment Expert, November 1989.
- 30. US/RAF/88/100 US/ETH/88/100 Mission report by A. LESUISSE, Regional Coordinator, July 1990.
- 31. US/RAF/88/100 US/MLW/88/100 Mission report by A. LESUISSE, Regional Coordinator, August 1990.
- 32. US/RAF/88/100 US/ZAM/88/100 Mission report by A. LESUISSE, Regional Coordinator, August 1990.
- 33. US/RAF/88/100 US/KEN/88/100 Technical report by B. BAROTHY, Computer Consultant, March 1990.
- 34.* US/RAF/88/100 Technical report by S. KIRUTHU, Leather Industry Consultant, August 1990.

- 35. US/RAF/88/100 US/ETH/88/100 Hides and Skins Improvement Scheme in Ethiopia, by T. DEVASSY, Hides and Skins Consultant (FAO), April 1990.
- US/RAF/88/100 Establishment of the PTA Leather Technology Centre in Addis Ababa, Project Document by Messrs. M. NESTVOLD, F. SCHMEL and S. KIRUTHU, January 1990.
- 37.* US/RAF/88/100 US/ETH/88/100 Mission report by F. SCHWEL, Industrial Development Officer, May 1990.
- 38. US/RAF/88/100 US/ETH/88/100 Report on the field by T. DEVASSY, May 1990.
- 39. US/RAF/88/100 Interim reports on Alpharama tannery/Sagana tannery/Afro-Leather tannery by G. CLOWFERO, July 1990
- 40. US/RAF/88/100 US/URT/88/100 Preliminary report on Hides and Skins project in the Shinyanga Region (Tanzania) by I. LEACH, July/September 1990.
- 41. US/RAF/88/100 US/KEN/88/100 Mission report by E. MACHANGA, Aug./Sept. 1990
- 42.* US/RAF/88/100 US/ETH/88/100 Mission report in Ethiopia TANNERY MACHINERY MAINTENANCE SENIMAR, ADDIS ABABA by J. BERG, October 1990.
- 43.* US/RAF/88/100 US/ETH/88/100 Technical report on NLSC and Anbessa Shoe factory by S. LINZ, October 1990.
- 44.* <u>US/RAF/88/100</u> and associated country projects Semaine du Cuir 1990, by Leather Unit, October 1990.
- 45.* <u>US/RAF/88/100/102/ and associated country projects Mission report by Mr. J. BERG.</u> November/December 1990.
- 46.* <u>US/RAF/88/100/ and associated country projects Mission report in Zimbabwe. "HIDES AND SKINS IMPROVEMENT SEMINAR, BULAMAYO, ZIMBABWE" by A. CALABRO.</u> November 1990.
- 47.* US/RAF/88/100 Meeting with Donor countries
- 48.* US/RAF/88/100 PAPER to be presented at the ECDC workshop at Bulawayo, Zimbabwe, July 1991, by D. MANLY.
- 49.* US/RAF/88/100 "Salting of hides and skins", by T. DEVASSY, February 1991.
- 5û. US/RAF/88/100 Report on a mission to Malawi, by Mr. G. FELSNER, November 1990.
- 51.* US/RAF/88/100 Technical report of a mission to Zimbabwe, by O. BIRKHAUG, December 1990.
- 52.* US/RAF/88/100 Technical report of a mission in KENYA, TANZANIA and ZAMBIA, by A. LESUISSE, November/December 1990.
- 53.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya, by O. KLOETZER, January 1991.

- 54.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya by Mr. D. H. SHILKIN, Tannery Machinery Maintenance Consultant, December 1990.
- 55. US/RAF/88/100 US/KEN/88/100 Visit to Sagana Tannery, by Mr. G. H. SHILKIN, Tannery Machinery Maintenance Consultant, November 1990.
- 56. US/RAF/88/100 US/KEN/88/100 Visit to AHITI, by Mr. G. H. SHILKIN, Tannery Machinery Maintenance Consultant. November 1990.
- 57.* US/RAF/88/100 US/KEN/88/100 Mission report to Leather Masters Ltd, by D. TRACY, November 1990.
- 58.* US/RAF/88/100 US/MLW/88/100 Mission report to Liwonde, Malawi, by D. TRACY, November 1990.
- 59.* US/RAF/88/100 US/ZIM/88/100 Mission report to Zimbabwe, by D. TRACY, July to November 1990.
- 60* US/RAF/88/100 "Introduction to Leather Goods manufacture", by D. TRACY, November/December 1990. [part of document 2IM NO 59]
- 61.* US/RAF/88/100 US/ETH/88/100 technical report by T.J. DEVASSY, January 1991.
- 62.* US/RAF/88/100 US/ETH/88/100 technical report of a mission at Awash Tannery (Maintenance seminar) by A. RONGVED, October 1990.
- 63.* US/RAF/88/100 US/ETH/88/100 Technical report by D. TRACY, January/May 1990.
- 64.* US/RAF/88/100 US/ZIM/88/100 Technical report on a mission to Zimbabwe by H. ECKERT, April/May 1990.
- 65.* US/RAF/88/100 US/ETH/88/100 Technical report on Anbessa Shoe Factory, by S. LINZ, March 1991.
- 66. US/RAF/88/100 US/KEN/88/100 Technical report on a training course at KIRDI by C. MARZO, February 1991.
- 67. US/RAF/88/100 US/KEN/88/100 Preliminary report on Sagana Tanneries Ltd, by C. MARZO, February 1991.
- 68. US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by M. KIRUTHU, February 1991.
- 69. US/RAF/88/100 US/MLW/ZAM/ZIM/88/100 Technical report by Mr. G. FELSNER, CTA, Feb/March 1991.
- 70.* US/RAF/88/100 US/ZAM/KEN/URT/88/100 [echnical report on a mission to Zambia, Kenya and Tanzania, by D. TRACY, February/April 1991.
- 71.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission in Kenya, by G. CLOMFERO, January 1991.
- 72.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya, by Mr. S. ROBERTS, February/March 1991.

- 73.* US/RAF/88/100 US/URT/88/100 Technical report on evaluation possibilities at Tanzania Tanneries, Moshi, by Mr. A. LESUISSE, April 1991.
- 74.* US/RAF/88/100 Paper presented at the Regional Leather Tanning and Finishing Seminar, by H. ECKERT, April 1991.
- 75.* US/RAF/88/100 US/ETH/88/100 Technical report on a mission to Ethiopia, by E. ECKERT, February/March 1991.
- 76.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya, by E. ECKERT, March/April 1991.
- 77.* US/RAF/88/100 US/SUD/88/100 Technical report on a mission to Sudan, by Mr. A. LESUISSE, May 1991.
- 78* US/RAF/88/100 US/MLW/88/100 Technical report on a mission to Malawi, by Mr. A. LESUISSE, May 1991.
- 79.* <u>US/RAF/88/100 [No 1: complete set, for in-house] Report or Joint UNIDO/KIRDI LEATHER TANNING AND FINISHING SEMINAR IN NAIROBI, by J. BERG/A. CALABRO, April 1991.</u>
- 80.* <u>US/RAF/88/100 [No 2: not complete, for national experts] Report on Joint UNIDO/KIRDI LEATHER TANNING AND FINISHING SEMINAR, IN NAIROBI, by J. BERG/A. CALABRO.</u>
- 81. US/RAF/88/100 US/ETH/KEN/URT/ZAM/ZIM/88/100 Technical report , by A. LESUISSE, February/March 1991.
- 82. US/RAF/88/100 US/MLW/88/100 Report on a mission to Malawi, by I. LEACH, November/December 1990.
- 83. US/RAF/88/100 US/URT/ZIM/88/100 Report on a mission to Tanzania and Zimbabwe by I. LEACH, September/December 1990 and January 1991.
- 84.* US/RAF/88/100 US/NAM/88/100 Technical report on a mission to Namibia by G. FELSMER, May 1991.
- 85.* US/RAF/88/100 US/ZIM/88/100 Technical report on a mission to Zimbabwe by O. BIRKHAUG, May 1991.
- 86.* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya by C. MARZO, August 1991.
- 87.* US/RAF/88/100 US/ZAM/88/100 Round Table Meeting in Lusaka, August 1991.
- 88.* US/RAF/88/100 US/ZIM/ZAM/KEN/SUD Report on a mission to Zimbabwe, Zambia, Kenya and Sudan (TPR) by Mr. J. BERG, July/August 1991.
- 89.* US/RAF/88/100 Mission Report: Semaine Internationale du Cuir 1991. by J. BERG/A. CALABRO. September 1991
- 90.* US/RAF/88/100 Report on a mission to Zimbabwe, Kenya and Zambia, by H. IMAM. March/September 1991.
- 91.* US/RAF/88/100 US/KEN/88/100 Prefeasibility study on LIK, Kenya, by S. LINZ, September 1991.

- 92.* US/RAF/88/100 US/MLW/88/100 Technical report on a mission to Malawi, by G. FELSMER, September 1991.
- 93.* US/RAF/88/100 Paper " A profile of women in the leather industries in eastern and southern Africa" by H. CHIGUDU, October 1991.
- 94. * US/RAF/88/100 report ITC, by D. MANLY, January 1990/July 1991.
- 95.* US/RAF/88/100 US/SUD/88/100 Prefeasibility study, SATA, by S. LINZ, June 1991.
- 96. ECDC WORKSHOP, Bulawayo, Zimbabwe, July/August 1991.
- 97. US/RAF/88/100 US/ETH/KEN/MLW/SOM/SUD/URT/ZAM/ZIM/100 by D. MANLY, January-May 1991, PART II.
- 98.* US/RAF/88/100 US/KEN/SUD/88/100 Report on effluents in Sudan and Kenya, by q. CLONFERO, October 1991.
- 99. US/RAF/88/100 US/KEN/88/100 Feasibility study/Kisumu in Kenya, by K-Leather.
- 100. US/RAF/88/100 Terminal statement by T. DEVASSY, May 1991.
- 101. *US/RAF/88/100 Report of the evaluation mission, by Messrs FORAN and EL KHAIR, October 1991.
- 102. Assistance to Liwonde Tannery Establishing a business plan, by S. Haeggblom, November 1991.
- 103. US/RAF/88/100 Comments on Ewbank preece report on hides/skins improvement in Africa, by E. MACHANGA.
- 104. US/RAF/88/100 US/KEN/88/100 Technical report on a mission in Kenya, Nov. 90/April 91.
- 105. US/RAF/99/100 Policy quidelines on hides/skins, by E. MACHANGA, May 1991.
- 106. US/RAF/88/100 Terminal report, by E. MACHANGA
- 107. US/RAF/88/100 US/ETH/88/100 Mission report, by M. BECI, October 1991.
- 108* US/RAF/88/100 US/SUD/88/100 Technical report on a mission to the Sudan, by H. HECKERT, September 1991.
- 109* US/RAF/88/100 US/KEN/88/100 Technical report on a mission to Kenya, by S. KIRUTHU, January/May 1991.
- 110* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by P. SINTUREL, December 1991.
- 111* US/RAF/88/100 OUTPUT 1 Improved policy guidelines and industrial strategy for the development of the leather industry, by D. MANLY and S. KIRUTHU, December 1991.
- 112* US/RAF/88/100 OUTPUT 4 Guidelines for grading of hides and skins by quality, by A. LESUISSE, December 1991.

- 113. US/RAF/88/100 US/SUD/KEN/88/100 same report as no 58, which was not accepted by Mr. Buljan.
- 114* US/RAF/88/100 OUTPUT 1 / FRENCH
- 115* US/RAF/88/100 OUTPUT 4 / FRENCH
- 116. US/RAF/88/100 OUTPUT 1 / SPANISH
- 117. US/RAF/88/100 OUTPUT 4 / SPANISH
- 118. US/RAF/88/100 Pre-feasibility study DERAS, by ECKERT, FELSMER, LESUISSE, MARZO, ZINK, March 1992.
- 119* US/RAF/88/100 US/KEN/URT/88/100 Mission report to Kenya Tanzania. by J. BERG. February 1992.
- 120* <u>US/RAF/88/100</u> <u>Report on the Third Session of the Sub-Group on Hides and Skins and national meeting, Rome, by Mr. BERG, April 1992.</u>
- 122* US/RAF/91/194 Mission report. by Ms. CALABRO. November 1992.
- 123* US/RAF/88/100 Report on a mission to Morogoro/Leather Goods Seminar, by Mr. P. SINTUREL, March/April 1992.
- [124* US/RAF/88/100 Programme presentation for donors meeting, February 1992, concerning phase II].
- 125* US/RAF/88/100 OUTPUT 1 FINAL VERSION. May 1992
- 126* US/RAP/91/194 Technical report, first part, by Mr. KLOTZER, February/April 1992
- 127. US/RAF/88/100 US/KEN/88/100 Technical report on a mission in Kenya, for DERAS, by H. ECKERT, November 1991.
- 128. US/RAF/88/100 US/ZIM/88/100 Technical report on a mission in Zimbabwe, by H. ECKERT, October/November 1991.
- 129. US/RAF/88/100 US/KEN/88/100 Technical report on a mission in Kenya, by E. ECKERT, November/December 1991.
- 130. US/RAF/88/100 US/ZAM/88/100 Technical report on a mission in Zambia, by H. ECKERT, September/October 1991.
- 131* US/RAF/88/100 Technical report on a mission in KEN/URT/MLW/ZAM, by A. ZINK, June 1991.
- 132. US/RAF/88/100 US/URT/MLW/88/100 Technical report by Messrs. FELSMER/NISHIDA, March/April 1992
- 133. US/RAF/88/100 US/KEN/88/100 Technical report on production of sole leather in Kenya, by C. MARZO, April/May 1992.
- 134* US/RAF/88/100 US/ZIM/88/100 Technical report on application of CAD system in Zimbabwe, by F. SCHMEL, April 1992.

- 135. US/RAF/88/100 Terminal report, by E. LEACH, (July 1969-July 1991), Rome June 1991.
- 136. US/RAF/88/100 US/URT/88/100 Technical report on a mission in the region of Shinyanga, by E. LEACH, April/May 1992.
- 137. US/RAF/88/100 US/URT/88/100 Technical report on a mission in Shinyanga and Hwanza, by E. LEACH, December 91/March 92.
- 148. US/RAF/88/100 US/MLW/88/100 Technical report on a mission in Malawi, by E. LEACH, November/December 1991.
- 149. US/RAF/88/100 US/MLW/URT/ZAM/88/100 Terminal report, by E. LEACH, (July 1990-July 1992).
- 150. US/RAF/88/100 US/ZAM/88/100 Technical report in the Eastern and Western provinces of Zambia, by E. LEACH, March/April 1992.
- 151. US/RAF/88/199 US/URT/88/100 Technical report in the Shinyanga region, by E. LEACH, June/October 1991.
- 152.*US/RAF/88/100 US/BOT/UGA/MLW/ZIM/NAM/KEN by Mr. J. BERG. June/July 1992
- 154.*US/RAF/88/100 US/KEN/ZAM/88/100 Technical report on a mission to Kenya and Zambia, by W. FORAN, May/June 1992.
- 155* US/RAP/91/194 Technical report on a mission to Tanzania, Kenya and Ethiopia, by P. SINTUREL, June 1992.
- 156* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by S. KIRUTHU, April/June 1992.
- 157* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, part one, by D. TRACY, July/September 1992.
- 158* US/RAF/88/100 US/MLW/88/100 Technical report on a mission to Malawi, part one, by D. TRACY, June/July 1992.
- 159* US/RAF/88/100 US/ETH/88/100 Technical report on a mission in Awash Tannery, Ethiopia, by B. BAROTHY, December 1991.
- 160* US/RAF/88/100 US/ETH/MLW/SUD/ZAM/88/100 Technical reports on a mission to ETH/MLW/SUD/ZAM, by S. KIRUTHU, July 1992.
- 161* US/RAF/88/100 US/SUD/88/100 Technical report on a mission to the Sudan, by A. ZINK, June/July 1992.
- 162* US/RAF/88/100 US/ZAM/88/100 Technical report on a mission to Zambia, by A. ZINK. May/June 1992.
- 163* US/RAF/88/100 US/URT/88/100 Technical reports on two missions in Tanzania, by A. ZINK, June and August 1992.
- 164* US/RAF/88/100 US/KEN/URT/ZAM/88/100 Technical report on a mission to Kenya, Tanzania, Zambia, by G. CLONFERO, June 1992.

- 165* US/RAF/88/100 US/SUD/88/100 Technical report on a mission to the Sudan, by S. LINZ, September 1992.
- 166* US/RAF/88/100 US/ETH/88/100 Technical repoport on a mission to Ethiopia, by C. MARZO, June 1992.
- 167* US/RAF/88/100 US/KEN/88/100 Technical report on a mission in Kenya by A. ZINK, Jan-July 92.
- 168* US/RAF/88/100 Hides and Skins Improvement Handbook, by T.DEVASSY and G. ARGAW, October 1989.
- 169* US/RAF/88/100 [Original Hides and Skins Improvement Seminar], November 1990.
- 170* US/RAF/91/194 EXPORT PROMOTION AND JOINT VENTURE FOR SELECTED AFRICAN LEATHER AND LEATHER PRODUCTS MANUFACTURERS
- 171* Leaflet: LEATHER AND LEATHER PRODUCTS INDUSTRIES
- 172* US/RAF/88/100 REGIONAL SEMINAR ON POLLUTION CONTROL IN THE LEATHER INDUSTRY, Nairobi, Kenya, June 1992
- 173* US/RAF/91/194 EXPORT PROMOTION AND JOINT VENTURE FOR SELECTED AFRICAN LEATHER AND LEATHER PRODUCTS NANUFACTUERS. FINAL REPORT.
- 174* US/RAF/88/100 US/ZIM/88/100 Technical report on a mission to Superior Footwear Company, by W. FORAN, October/November 1992.
- US/RAF/88/100 US/URT/91/110 Technical report on missions at Morogoro Leather Goods Company, Twins Leather Goods and Shah Industries, by D. TRACY, October/November 1992, part one of split mission.
- 176 US/RAF/88/100 US/MLW/88/100 Technical report on a workshop at the Leather Goods Training and Production Unit, by D. TRACY, November/December 1992, part one of split mission.
- 177* US/RAF/88/100 FINAL REPORT FAO/PROJECT FINDINGS AND RECOMMENDATIONS by FAO, November 1992.
- 178* US/RAF/88/100 Interventi nell'area della protezione ambientale, by C. CLONFERO, January 1993.
- 179* US/RAF/88/100 US/RAF/88/102 Summary of the results achieved focusing on the contribution of Italy, by A. CALABRO, January 1993.
- 180* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania by C. MARZO, February/March 1992.
- 181* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by S. KIRUTHU, April/May/June 1992.
- 190 US/RAF/88/100 US/URT/88/100 Technical report on a missiont to Moshi and Arusha, by G. FELSNER, November 1992.
- 191 US/RAF/88/100 US/ETH/KEN/UNRT/ZAM/ZIM/88/100 Technical report by A. LESUISSE, February/March 1991.

- 192* US/RAF/88/100 US/KEN/ZAM/ZIM/88/100 Technical report on a mission to Zambia (only) by A. LESUISSE, March 1992.
- 193 US/RAF/91/194 Technical report on a mission to Morocco, Kenya, Zimbabwe, Ethiopia, Egypt, by R. Mezeray, October 1992.
- 194 US/RAF/88/100 Terminal report by M. BECI, December 1991
- 195* US/RAF/88/100 Technical report on a mission to UGANDA by G. FELSNER, June 1991.
- 196 US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania by C. MARZO, October 1991.
- 197 US/RAF/88/100 US/ETH/88/100 Technical/final report by T. DEVASSY, January 1993.
- 198 US/RAF/88/100 US/KEN/URT/ZAM/88/100 Technical report by G. CLONFERO, March 1992.
- 199* US/RAF/88/100 US/SUD/88/100 Technical report on a mission in Sudan by C. MARZO, June/July 1992.
- 200 US/RAF/88/100 Technical report on a mission to Botswana by G. FELSNER, November 1991.
- 201 US/RAF/88/100 US/MLW/URT/ZAM/88/100 Technical missions by G. FELSNER October 1992.
- 202* US/RAF/83/100 US/ZAM/88/100 Mission report on Zambia, by C. MARZO, September 1992.
- 203* US/RAF/88/100 US/URT/88/100 Mission report on Tanzania, by A. ZINK, November 1992
- 204* US/RAF/88/100 Women industrial workers in the leather industry, by H . CHIGUDU, October 1992
- 205* <u>US/RAF/88/100 US/ETH/KEN/URT/SUD/88/100 Mission reports on missions in ETH/KEN/URT/SUD by J. BERG. SIRA. November/December 1992.</u>
- 206* US/RAF/88/100 US/MLW/88/100 Mission report in Malawi Workshop at Leather Goods Training and Production Unit, by D.TRACY, November/December 1992, part two of split mission.
- 207* US/URT/91/110 Mission report in Tanzania Morogoro Leather Goods Company/Twins Leather Goods/Shah Industries, by D. TRACY, October/November 1992, part two of split mission.
- 208 US/RAF/88/100, Mission report in Vienna, by B. BAROTHY, March 1993
- 209 US/RAF/88/100 US/ETH/88/100 Draft terminal statement by T. DEVASSY, (Debriefing), January 1993.
- 210 US/RAF/88/100 Progress report on a mission to Uganda, February 1993, by G. FELSNER.

- 211* US/RAF/88/100 US/URT/88/100, Mission report on a mission to Tanzania, by S. KIRUTHU, March 1993
- 212* US/RAF/88/100 US/ZIM/88/100 Mission report in leather goods for women in the leather industry, Bulawayo, by N. HAUSSER, March 1993.
- 213* US/RAF/88/100 US/ZIM/88/100 Mission report in leather goods for women in the leather industry, Bulawayo, by H. CHIGUDU, March 1993.
- 214* US/RAF/88/100 US/URT/88/100 US/URT/91/110 Mission report at Afroleather, by S. KIRUTHU, March 1993.
- 215* US/RAF/88/100- Technical report pre-investment study for a model shoe factory, by J. BERG, April 1993.
- 216* US/RAF/88/100 US/KEN/URT/ZIM/88/100 Mission report by J. BERG, April 1993.
- 217* US/RAF/88/100 US/URT/88/100 Mission report at Mwanza tannery effluent treatment plant, by S. RANTALA, April 1993.
- 218* US/RAF/88/100 Draft policy paper for leather industry sector, by S. KIRUTHU, February 1993
- 219* US/RAF/88/100 Mission reports to Tanzania, Botswana, Zambia, Malawi, by G. FELSNER, May 1993.
- 220* US/RAF/88/100 Technical report on missions to Kenya, Tanzania, Malawi, Zambia, Zimbabwe, by R. GLENK, June/July 1993.
- 221* US/RAF/88/100 Technical report on a mission to Uganda, by G. FELSNER, April 1993.
- 222* US/RAF/88/100 US/MLW/88/100 Technical report on a mission to Malawi, by C. MARZO, August 1993
- 223* US/RAF/91/194 OUT OF AFRICA FINAL REPORT September 1993
- 224* US/RAF/88/100 US/ETH/KEN/88/100 Sub-contract Final report by G. CLONFERO, (Awash tannery, Sagana tannery), July 1993.
- 225 TF/ZIM/90/001 Final report on an assignment at LIZ, by J. HOF, June 1991/May 1993.
- 226* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by A. ZINK, April/May 1993.
- 227 US/RAF/88/100 US/URT/88/100 Technical report on a mission to Moshi and Arusha, by J. MURIUKI, January 1993.
- 228* US/RAF/88/100 US/KEN/URT/MLW/ZAM/ZIM/88/100 Technical report on a mission to KEN/URT/MLW/ZAM/ZIM by Messrs. R. GLENK and A. ZINK, June/July 1993.
- 229* US/RAF/88/100 US/URT/88/100 Technical report on a mission to Tanzania, by C. MARZO, January 1993.

- 230* US/RAF/88/100 US/ZAM/88/100 Technical report on a mission to Zambia, by C. MARZO, November/December 1992.
- 231* US/RAF/88/100 Technical report on Semaine du Cuir, Paris, 1992, by A. ZINK.
- 232* US/RAF/88/100 US/ZIM/88/100 Mission report to Zimbabwe by M. NAGY, August 1993.
- 233* US/RAF/88/100 SUB-CONTRACT 93/053 Final report, Utilisation of tannery waste for the manufacture of animal feed products, November 1993, by H. Zäpfel.
- 234* US/RAF/88/100 US/RAF/92/200 US/ETH/88/100 DG/US/ETH/92/200 Mission report to Ethiopia, by J. BERG, November 1993.
- 235* US/RAF/88/100 and associated country projects Mission report by A. CALABRO, November/December 1993.
- 236 US/RAF/88/100 Simulation model for the leather industry, by E. GONZALEZ, January 1994.

Annex 3

INTERNATIONAL EXPERTS US/RAF/88/100

POST NO.	AND TITLE	NAME OF E	(PERT	STARTING DA	TE_
11-01	CTA	G. Felsne	er (AUS)	January	1989 completed
11-02	H+S Impr (FAO)	•		October	1989 completed
11-03	" " (FAO)	E. Leach	(UK)	July	1990 completed
11-04	Tannery Exp	Marzo	(SPA)	November	1990 completed
11-05	Finish Exp	H. Eckert		January	1990 completed
11-06	Maint Exp	A. Rongve		July	1989 completed
11-06B	# #	A Zink	(PER)		1991 completed
11-07	Leath.Goods	D. Tracy	(UK)	October	1989 completed
11-08	Footwear	J. Barada	1 1.	October	1989 completed
11-08B	* * * #	O. Birkha	• •	November	1990 completed
11-09	Marketing(ITC)		(UK)	January	1990 completed
11-10	Effluent	A. Lesuis		•	1989 completed
11-10B		G. Clonfe	•	April	1990 completed
11-10B1	# #	G. Clonfe		May	1992 completed
11-10C	* * *	P. Rantal	-	April	1193 completed
11-11	Women Dev.	H. Chigue	• •	May	1991 completed
11-50	Consultants	_		various expert	•
11-51	Co-ordinator	A. Lesuis		July	1991 completed
11-52	Computer Exp	B. Baroth	· · · · · ·	March	1990 completed
11-53	Shoe Eng	S. Linz	(FRG)	August	1990 completed
11-53B	n n ~	S. Linz	(FRG)	•	1992 completed
11-54	Sagana Eval	S. Kiruth		July	1990 completed
11-55	H+S Impr (FAO)	T. Devass	y (IND)	January	1990 completed
11-56	" " " (UNIDO			October	1991 completed
11-57	Prep.ass PTA	M. Nestvo	old (NOR)	June	1990 completed
11-58	Prep.ass PTA	S. Kiruth	nu (KEN)	June	1990 completed
11-59	Joint Venture	0. Kloeta	er (FRG)	November	1990 completed
11-60	Machinery Inst	G. Shilki	in (AUL)	October	1990 completed
11-61	Computer Exp.	B. Baroth	ıy (HUN)	April	1991 completed
11-62	Fish Skin Exp.	S. Robert	s (AUL)	March	1991 completed
11-63	Revolving Con.	S. Kiruti	nu (KEN)	February	1991 completed
11-64	Chief Evaluat.	W. Foran	(IRE)	April	1991 completed
11-64	Footwear cons.	W. Foran	(IRE)	April	1992 completed
11-65	Maint. Exp.	A. Zink	(PER)	May	1991 completed
11-66	Maint. Exp	H. Imam	(IND)	February	1991 completed
11-67	Evaluator	M. El-Kha	ir (EGY)	July	1991 completed
11-68	Economist	M. Beci	(ITA)	July	1991 completed
11-69	H/S Consultant			July	1991 completed
11-70	Leather goods	P. Sintu	rel (FRA)	November	1991 completed
11-71	Sen PTA Consul	S. Kiruth	nu (KEN)	April	1992 completed
11-72	CAD Consult.	F. Schmel	. (HUN)	April	1992 completed
11-73	Leather cons.	L. Sykes		April	1992 completed
11-74	Tannery cons.	M. Kumar	(IND)	April	1992 completed
11-75	Leather Goods		(UK)	June	1992 completed
11-76	Senior Consul.	_	(FIN)	June	1992 completed
11-77	Leather Goods	R. Hausse	1 1.	March	1993 completed
11-78	Machin, Maint,		(FRG)	April	1993 completed
11-79	Footwear desi.		(HUN)	August	1993 completed
11-80	Footwear Trai.			October	1993 completed
11-81	Computer Anal.	E. Gonzal	ez (VEN)	November	1993 completed

Annex 4

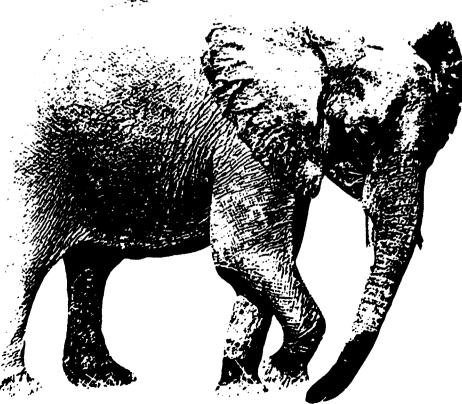
NEWSPAPER CLIPPINGS





Out of

ARRA



frica has a large livestock base but is bedevilled by poor husbandry. primitive slaughter slabs, little or no preservation, patchy collection facilities and a reputation for unreliability and deteriorating quality.

All is not lost, however, and since the late eighties UNIDO have been active in eight countries in East Africa: Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe. This is a multi-funded project which is looking at the problems of low rate of recovery, effluent treatment, and improvement of both hides and skins and products. Research had clearly indicated the enormous waste of raw stock, underutilisation of production capabilities, low productivity and lack of trained personnel at all levels. The programme is jointly operated by UNIDO, FAO and ITC. Sadly a similar project for West Africa for Burkina Faso. Burundi. Cameroon. Mali, Niger, Rwanda and Senegal did not attract sufficient funding

attract sufficient funding.

More recently the FAO Sub-Group on Hides and Skins (Rome, April 1992) put forward a proposal for a study on the marketing of African hides and skins







It is the old story, Africa is resource rich, yet cash poor. But having a rich vein is not enough if you do not have the technology to mine it, the knowledge to recognise the true value of what you have or the marketing expertise required to sell your product

with the emphasis on commercial aspects. This is still in its early form and countries which might be selected for study are: Algeria, Burkina Faso, Ethiopia, Kenya, Mali, Morocco, Nigeria, Tanzania, Tunisia and Zimbabwe.

It has been recognised that the best way to help Africa is to provide technology and training and allow the people of Africa to become self-supporting and this is a laudable aim. The encouragement towards added value, however, is fraught with difficulty. Perhaps the biggest problem is with a valuable resource which is in pretty short supply in Africa. Water. A great deal of it is needed to process leather, even if effluent treatment is of a very high order and the water can be recycled. And, of course, effluent treatment is still very low priority in many African countries.

In the December issue of African Business there was a story by Alfred Taban, Khartoum, which says that the Sudanese government have banned the export of raw hides in a bid to add more value to the product before export. A one-year study found that 'countries which export processed hides get \$100

per hide' whereas Sudan was only getting \$25 per raw hide. It was further observed that local tanneries had the capacity to process seven million hides a year but throughput was currently only 5.5 million.

Yet, in the same issue of African Business there is a feature titled Water

Scarcity is Set to Worsen and under a sub-heading Sudan is Vulnerable it says that: 'Among the most vulnerable countries are Sudan, Egypt, Syria, Iraq. Cambodia and the Netherlands, because they all rely on out-of-country sources for more than two-thirds of their renewable fresh water supplies.



Photographs on these pages by Anthony Nicholls



AFRICA SPECIAL



The value of adding v

Nor are lack of water and inadequate environmental controls the only problems. The further you process your hide or skin the fewer your potential customers. And a valuable rawhide can be rendered worthless by poor tanning. With a worldwide problem of deteriorating quality in hides and skins, sophisticated tanning techniques are required to upgrade the basic raw material to provide a quality finished leather. In their understandable drive towards further processing the African tanneries have to overcome their considerable lack of experience in this field.

However, after decades of flawed and ineffectual aid projects, the UNIDO scheme could mean sustainable progress for the African leather sector. Until recent years, international aid and technical backing in Africa's leather sector was largely misdirected and often caused as many problems as it solved.

One failure was that financial input and other aid packages coming into African states were not sufficiently focused or thought through. For example, tanneries were built without considera-

tion of the infrastructure they required in terms of hide collection and other raw material supplies.

East and West vied for of states, leading to the endorsement of vast, showpiece development projects which just could not be sustained because of lack of administrative and technical skills. Among these collossal tanneries with capacity to process far more hides and skins than could ever be recovered in the immediate area, even if collection schemes were established as part of the project.

Much tannery equipment supplied was also shoddy and, since the plants lacked staff with the technical skills necessary vent lt vide tries resu the e nies Mo plan vels T rece don func lead plan proj C sy, a Zim

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26 PATRICH LANTIADY 100



expert for UNIDO and as one of LEATHER'S contributors. His reports on the progress of each country will appear either in this issue or in April along with coverage of his home country. In addition we are including further information

the UNIDO

)'Shaughneser Institute of eted a tour of



The per capita GNP (Gross National Product) was only US \$121 at the end of the 1980s and may be even lower now, a legacy of the war and poor economic climate. But the transitional government, which took office after the fall of Mengistu, has plans - based on better utilisation of natural resources for recovery.

The task facing the new admministration is made no easier by unsettled conditions which persist in remote areas and the projected rise in population from 51 million to 70 million by the year 2000. The kernel of Africa's problems lies in population growth, not in socialism, colonialism or oppressionism. Nevertheless, daunting though they are, the problems are being tackled, and nowhere is this clearer than in the animal livestock

and derivatives sector.

The Ethiopian livestock population is around 30 million cattle, 24 million sheep and lamb, and 18 million goats; the largest in Africa. Annual off-take is low, perhaps two million cattle and about 14 million goat and sheep combined. Utilisation is also low: only 1.4 million hides and 12.4 million skins reach the domestic market. All are processed either to semiprocessed for export or to finished leather for the domestic use. Export of raw stock was banned in 1988.

Tanners say Ethiopian hides and skins are the best in Africa, and deny this judgement stems from national pride! Nevertheless, the sheer size of herds and flocks contributes to assured supplies in spite of periodic droughts and epidemics

of disease.

Ethiopian cattle are small compared with European breeds, but make good leather. Sheepskins are of good substance, have a low fat content and high tear resistance. The same is true of goat and, until 1974, when war and unrest became rampant, the hides and skins industry was prosperous.

Thereafter conditions understandably deteriorated: dipping ceased in many areas and it became difficult to deliver salt and insecticides; slaughterhouses fell into disuse; veterinary services were largely suspended; quality and output

Since 1990 some lost ground has been recovered as a result of coordinated action by the transitional government and UNIDO. Slaughterhouses have been rehabilitated, veterinary services reintroduced, and instruction in hides improvment provided. Raw stock, originating from a target area for hides and skins improvement in the south, shows marked improvement and similar results are hoped for from a second target areae in

Organised slaughter facilities in Ethiopia account for only 5% of the national kill. The balance takes place at individual households, usually on open ground, with peaks during religious festivals.

Ethiopia

Conditions in Ethiopia have improved since the departure of President Mengistu and cessation of the war in Eritrea. A lightening of spirit is evident everywhere. despite desperate problems which still beset the country. But there are indications of tribalism in higher echelons. though this is being resisted by the middle classes. Roy O'Shaughnessy reports



Home slaughter defects are common in most skins marketed.

A 1988 ban on raw exports reduced competition between dealers and placed more emphasis on quality. Licenced dealers collect stock on market days and raw material, originating from even the remotest areas, now finds its way to urban tanneries. Also, the involvement of previously export orientated dealers in domestic trade has increased collections.

Prices for raw hides and skins are reviewed every three months and fixed according to international trends. These factors help explain increased collections, better prices paid, and marginally

more attention to quality.

Despite the improvements, tanners still sufter from shortages and poor quality raw material. The possibilities for better exploitation of livestock are immense — a 100% increase in bovine hide output from some areas is feasible — and must be achieved if national development plans are to succeed. This is recognised by government, industry and UNI-DO, and it is certain improvement procedures will continue to receive priority.

But the real question is how to influence rurai dwellers, many nomadic, who cling to traditional practises and own the

herds and flocks?

Ethiopia's five year development plan for the leather sector, 1992-1996, calls for a 175% increase in leather related exports to a value of US\$193 million. The installed capacity of Ethiopian tanneries is estimated as in excess of 14.8 million skins and 1.3 million hides annually. This includes about 80% of hides and 60% of skins to crust and finished leather. Thus, there is sufficient production capacity to meet national targets, but it is dependent on raw material collections and grades.

Modern tanning in Ethiopia began in





the 1930s with the building of two private tanneries. Development was slow until 1970 when five more were established. In 1975 all were absorbed by the government and placed under the NLSC (National Leather and Shoe Corporation) which administered eight tanneries, six shoe factories and one leathergoods unit. The private sector survived in the form of three or four small tanneries and several footwear and leather garment plants, also

Contrary to experience elsewhere, the placing of the industry under state control did not lead to stagnation and collapse. A combination of good management by the NLSC, integrated development and governmental support, contributed to admirable progress. Between 1984 and 1989 the annual value of leather related exports rose from US\$32.7 million to US\$56.4 million. But finished leather products accounted for less than 14% of total export value.

Ultimately, protracted war drained the economy and administrative control broke down in rural areas. This led to fewer collections and poor quality. The transitional government, when it replaced the Mengistu regime, moved fast to recognise Eritrea and stop hostilities, acted to improve hides and skins supply, and reformed financial policies to make foreign currency for industrial imports mere easily available.

Also, dissolution of the NLSC was decided and enterprises previously under the national umbrella now function as individual entities. This helped the economy to some extent, and a few people believe full recovery is round the corner. But this is overly optimistic and there is still a long way to go.

The government is said to favour privatisation of former state enterprises. But prospective domestic buyers have not come forward. And foreign investors remain chary pending installation of a democratically elected government.

Despite problems of adjustment after the Mengistu administration crumbled, the leather industry has performed well. Export earnings climbed to US\$70 million during 1990.

Leul Berhane, general manager of Awash Tannery, said there had been development in the leather industry over several years. Credit was due to the NLSC for this and for helping put Ethiopian leather on the world map by attendance at international forums. Subject to further donor agency aid and national policies designed to heal divisions, even more could be achieved, he said.

Short term, he added, development plans called for the conversion of all raw material to finished leather for export. but long term the aim was all finished leather to finished products for export. Footwear, garments and leathergoods production was the only way to maximise foreign exchange earnings.

The turn of the century could see the goal realised, but only with further development and sound planning. Only three Ethiopian tanneries had a finished leather capability. It would take time, capital investment and training.

The years since the Gulf crisis had been difficult, he said, but demand had built up recently from the Far East. 'High production costs in Japan have resulted in their investing in south east Asia, and this in turn to importation of semiprocessed from countries such as ours. Three years back our tanneries all carried heavy stocks. Today semi-processed stocks are virtually nil and production is followed by almost immediate export.'

Berhane stressed value added production had paid dividends. Semi-processed and pickled, he said, used to be the main production line, but now there was more crust. When all exports were in this form, the time would be ripe for a move to large scale finished leather production.

The small amounts of finished leather now made went almost entirely to shoe and leathergoods plants supplying the domestic market. But some government plants, which produced military boots for the defence forces, also exported to



THIOPIA

neighbouring countries and a proportion of leathergoods manufacture, mainly garments and school bags, were exported to Canada, the USA and Europe.

But there is a big difference between exporting small numbers of selected goods and the bringing of the bulk of manufactured products to world market standards at competitive prices. Nevertheless, the commercial side does show promise and experience gained with finished products in the domestic market will prove useful later', he said.

Transitional government policies have encouraged industry: there is more freedom to act on commercial grounds as opposed to governmental behests; devaluation has made it easier to export and, though imports cost more, the balance of advantage lies with better export potential. Labour discipline is better but there is a danger in the accepted need for labour reductions. There is some suspicions that retrenchment is being used to get rid of staff considered politically unsuitable.

Executives have said that overstaffing inherited from the socialist era was a burden. Unemployment was already rampant but indiscriminate retrenchment would only make matters worse and could, in the extreme, lead to civil unrest and to reduced consumer demand (currently less than 10% of the population wear shoes).

It would be better to rely on natural wastage but this would take time. Ideally production would expand to levels which of-

fer full employment to the labour force. Rural conditions were in a deplorable state when the transitional government took control in 1991. Since then there has been improvement, especially in raw material from UNIDO selected target areas. But equipment, spares and chemicals are also easier to obtain and, with 40 years of experience, technical skills are not a problem.

International standards can be met in all classes of manufacture. The demand for Ethiopian wet-blue and crust in export markets proves this. Awash Tannery was quoted as an example - a three million birr loss has been converted over a year or two into a 10 million birr profit, and the bulk of earnings came from exported wet-blue and crust.

Leather products sector

This sector consists of three shoe factories and a leathergoods plant previously controlled by the NLSC plus several long established private plants. Public and private factories alike have performed well and production has increased.

Expansion of footwear production has been helped by governments' adoption of an import substitution policy and legislated protection from foreign competition. A predictable side effect of protection is insufficient attention to quality, especially in products for domestic sale, and this proved so when domestic footwear was examined

Generally the leather used in uppers varies from just fair to poor and the origin of defects lies more often in the raw material than at the door of tanneries. But defects relating to construction were usually avoidable and stemmed from

poor operator skills or carelessness. This need for training and indicates a supervision

As elsewhere in Africa, Ethiopian consumers are on average poor; price rather than quality is the decisive factor. Thus, defective output finds a ready local sale and quality output goes to export. This is as true of tanneries as it is of shoe factories; poor quality hides and skins are processed to leather for domestic consumption and the best kept aside for export. At shoe factories there is no incentive to demand good leather.

If, as industry believes, more prosperous times lie ahead, the expectations of consumers will rise and shoddy output will become unacceptable. Footwear plants will have to improve their quality control and national plans for finished product exports in the future add weight

General manager of the Anbessa Shoe Factory, Astawisign Tefera said his constraints now were the same as when the plant was part of the NSLC: overstaffing, plentiful leather supply of inconsistent quality, devaluation which made necessary imports expensive. There was a need for training and improved skills. The domestic market was depressed because people were poor and there was much unemployment. This would remain until conditions returned to normal on a countrywide scale.

A profitable domestic market, he went on, was a prerequisite to success in export markets where profit margins were invariably tight. Ethiopia had lost outlets for stitched uppers and finished footwear in Eastern Europe and new customers were being sought in Western

Europe. But standards there were high and meeting them would take

He concluded: 'It is easy to itemise problems but more difficult to overcome them. Sustained effort is needed. Much has been done to alleviate difficulties by the coordinated efforts of transition government, UNIDO and our industry. But there is no easy solution. We will need technical and financial aid for some time.

It is difficult not to agree with Mr Tefera. There are signs that the infrastructure in terms of training, chemicals and components production, environmental protection and production control systems, cannot keep up with existing and planned expansion. But the problem areas are receiving attention, with the overall aim of building an integrated leather industry using modern methods and contributing to national prosperity.

Heartening features of the Ethiopian scene are determination to face realities and the fact that

UNIDO projects executed in the past have operated efficiently after handover. The country has tremendous potential for development and has decided to move all leather production from the wet-blue and crust stages to finished leather by the middle of the decade, with a gradual shift thereafter to finished products manufacture, shoe uppers, shoes, jackets, bags

The Five Year Plan (1992-1996) sees leather exports rising by 175% to a value of US\$193 million. This is not over optimistic and neither is the objective that finished products should account, by the turn of the century, for 75% of leather related export earnings. But these targets will be in jeapardy unless accompanied by growth in related sub- sectors.

Continued improvement in hides and skins quality is needed; strengthening of finishing capacities at tanneries; upgrading of effluent treatment systems; modernisation of shoe and leathergoods plants, including the introduction of new technologies as appropriate and, finally, replacement of lost East European outlets by aggressive marketing in home, regional and world trading areas.



Kenya

UNIDO support is starting to make things happen in the Kenyan leather sector, according to Roy O'Shaughnessy

hen the Unido African leather industry project began annual off-take of hides in Kenya was 1.5 million, a little over 10% of the herd. This was largely due to the tradition that cattle represent wealth among rural people, so slaughter is avoided if possible.

Caprine off-take was around 30% at 3.6 million, while ovine was just 150,000, or

about 2% of the flock.

In spite of this low raw materials production record, collection facilities in the country are fair. Most of the hides and skins reaching tanners or merchants and facilities at slaughterhouses near urban centres are middling to good. Those in rural areas are not generally as well equipped, but have been upgraded.

To make more of their rich resource of raw material and hide and skin collection and processing facilities, the Kenyan government, in concert with Unido, have recently overseen an improvement in quality standards.

Records show hide output at the conclusion of the Unido project as 70% firsts and seconds, 27% thirds and fourths, and a mere 3% rejects. This is a real improvement on pre-project conditions.

Much of the rise in standards, of course, depends on the criteria adopted and

the training of graders and Unido is now trying to achieve regional uniformity to one set of criteria.

Deliveries to tanneries as a consequence of the scheme have increased from one to 1.5 million hides, and skins from three to 4.5 million. These are significant increases. But there is still a discrepancy between estimated tanning capacity (2.7 million hides and 8.4 million skins) and actual raw stock availability at plants. The reasons why statistical off-take and collections are very much



Above: Sagana Tanneries effluent plant is commissioned. Left to right: G M Murungi; M Wanjohi; Mrs Afra Sianchetti (Italian Embassy); J D Whaley (UNDP); Y Awale Left: Installation of a Pajusco Tecnologie drum supplied through Unido

higher than deliveries is not clear. But this could be because tanneries are not in full production, a result of environmental issues, and the fact that much of East Africa is subjected to smuggling.

Overall export of raw stock is now around 1,000 tonnes of hides (3% of off-take at most), 100,000 sheep and 300,000 goat skins which is mainly accounted for by 'on the hoof' movement in border areas. Officially sanctioned exports are almost all in the form of either wet-blue or finished leather.

At the close of the Unido phase one programme, light leather production either as wet-blue or crust, or as finished leather mainly for domestic use, stood at around 55 million sq ft annually for bovine leather. Goat and sheepskin leather combined was about 26 million ft'. Both figures were up on the pre-Unido scheme totals in 1987.

Tunneries

At the latest report Kenya has a total of 12 operative tanneries. The plant at

Gwafa has closed, the Kutali factory is under receivership and the Bawazir Tannerv is still being built.

Most of the country's tanneries are mechanised and can process to wet-blue or crust for export, but only five go to finished leather for domestic use. Of these, two - the Alfarama Tannery and the Leather Industries of Kenya Tannery - also process corrected grain for export to Europe.

The Bawazir Tannery, when operational, will process finished leather for both domestic and export markets.

As a result of Unido activities, output at most plants has risen and under phase two it is hoped that more will achieve export standards and contribute to the country's all important foreign currency carnings.

One obstacle to expanded production Kenyan tanners have yet to overcome is that, apart from Sagana, Alfarama, Leather Industries of Kenya and Kutali Tannery, they have poor effluent treatment systems. Aware of environmental hazards, the ministry of water development has adopted a tough line on the issue since 1987. It had forced some plants to shut down and threatened others with closure pending improvements to their waste processing. It has also limited throughput at tanneries to the capacity

New Deras tannery

In November 1993 Deras opened their new tannery at Njiru in Kenya. It is one of the biggest and most modern in the whole of Africa

jiru is just the latest of the Deras Group's tanneries in Africa. They also have offices in the UK, Italy, Spain, Portugal, France and Greece. And that is by no means all.

The Kenyan tannery has been built at a cost of US\$2 million and is located just a few km outside Nairobi.

Njiru was also chosen as the site for a small Deras tannery ten years ago. The new tannery is built on 5.1 acreas of land and has a total area of 3,100 m2. It can process about six million ft' of domestic hides to the crust stage and a finishing unit is now also in preparation.

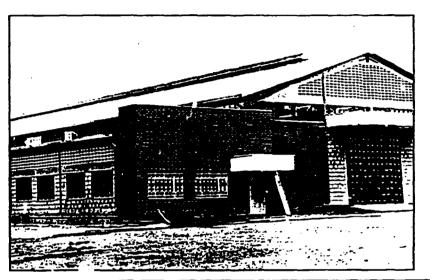
Thus, together with the old tannery situated nearby, a total of approximately 35,000 whole hides can be processed in a month. Sheep and goat skins are being processed in the Deras tannery located in Nanyuki, Nairobi.

The equipment installed in the new tannery encompasses all the latest technology and was manufactured in Italy. The new tannery, like all Deras tanneries, is fully equipped with effluent plant according to international standards.

The provision of further capacity for Deras in Kenya will allow a substantial increase in turnover for the group which is firmly established in many African countries such as Nigeria, Zimbabwe, Uganda, Tanzania and Sudan.

The goods produced will be exported to the important European and Far Eastern markets where Deras are increasing their market effort with great

The Deras Group is a family tanning business set up in Ethiopia in the 1930s.

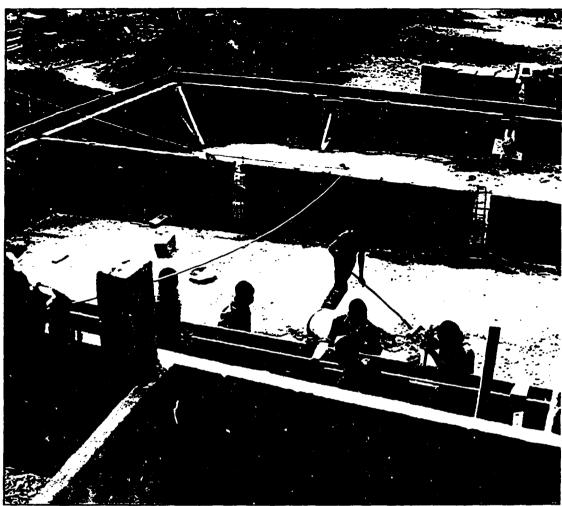




Interior and exterior shots of the new Deras tannery



Construction of sludge settlement tanks. Unido has recommended upgrading of effluent treatment systems at most African tanneries and since 1987 a tough line has been adopted by the Ministry of Water Development. Some plants have been closed and others threatened with closure pending improvements to waste processing



of their treatment systems.

Responding to the pressure, the Sagama Tannery now have a renovated effluent system designed and equipped by Unido with funding from Italy. The new plant was commissioned on December 2, 1992.

The effluent plants at Alfarama and Kutali have also been improved, again with Unido assistance and Italian funding.

Apart from financing effluent disposal improvement in Kenya, Italy has also provided in excess of US\$3.5 million for rehabilitation and modernisation of tanneries in the country.

Footwear

About 40% of Kenyans who wear shoes obtain them from small scale, handicraftbased manufacturers. These so-called 'informal' operators have virtually no overheads and have been known to buy imported and domestically made shoes, dismantle and copy them. Except for the use of cheap grade leather the results are almost identical to the original. The shoes sell cheaply and are all that many Kenyans can afford.

These 'informal' sector activities have a depressive effect on retail outlets and without them it is estimated by some in the 'official' domestic shoe industry that they would increase by 66%, assuming the buyers went over to retail outlets. But condemnation of the informal sector operators is difficult to support since there is much unemployment and poverty in the country and many people can only afford their products.

The real answer for the mainstream manufacturers lies in their ability to price their footwear within the reach of poor sections of the community.

In total there are 16 shoe factories in Kenya, the Bata Shoe Company being the biggest.

Apart from 'informal' competition. the 'formal' sector also has to contend with severe competition from East Asia and the Pacific basin. Compounding their problems, the government levies a 50% vat on domestic footwear and a 25% tax on imported raw materials, components and accessories. Further, the duty on imported shoes was recently lowered from 65% to about 40%, which is below the level of vat.

Some manufacturers, like Joy Shoes and Valentine Shoes, are contending with the pressures, but others are suffering and one, Tiger Shoes, is reported to be on the brink of closure.

Total Kenyan shoe production at the end of the last decade fell to only 1.4 million pairs, of which 10% - valued at US\$600,000 - were exported to neighbouring countries. At the same time, about 100,000 pairs annually were imdomestic ported for up-market consumers.

In terms of quality generally Kenyan footwear is said to be far from EC standards but, at the same time, is not cheap enough to compete with Asian origin shoes. Nevertheless, Kenyan shoes are of reasonable quality and the foundations for improved design and finish do exist.

Survival and development of the industry hinges on efficiency and a remedy for the shortage of technical and supervisory skills and management appreciate this. Since 1987 they have taken advantage of all the international assistance available and have made progress.

To date the help given by Unido has been limited because policy emphasis for phase one of their leather industry project has focused on hides, skins and tanneries. The Kenyan shoe makers, like those in other East African countries, are looking to phase two for succour.

Somalia: war halts all

This survey describes conditions in Somalia before the present wave of political instability began in 1989 and degenerated into violence in 1991. Since then much of the success achieved by Unido has been reversed by the conflict

omalia has a rich livestock resource of 5 million camels, 5 million cattle, 19 million goats and 13 million sheep, giving an estimated annual off-take of 500,000 million cattle, 4.7 million goat and 3.4 million sheep. The major problem faced by the leather industry was that collections were appalling.

In the eighties, it was estimated that a total of 380,000 cattle hides, 3.7 million goat and 2.7 million sheepskins were lost to the domestic market annually. And this high rate of losses was attributed mainly to 'on the hoof exports', a polite

term for smuggling.

Another obstacle for the country's leather sector is that hides and skins are generally poor quality and mostly ground dried. Because of the nomadic lifestyle, most livestock is home slaughtered and through-cuts, gouges and other post slaughter defects are common. Before the civil war, a few municipal slaughter houses did exist, but often facilities were basic.

Difficulties have also occurred in livestock rearing. The nomad peoples of the country are experienced at animal husbandry so disease related defects have never been an issue. However, periodic drought and lack of food have led to an overall deterioration in animal nutrition and hide quality.

The current conflict in the country has inevitably also impacted on the livestock population. The only real consolation which can be taken is that the nomad farmers are resilient and, if there has been major depletion of the national herds since 1991, will undoubtedly build



Unido recommended the abolition of the SLA and liberalisation of trade practices

them up again when stability returns.

The Somalian leather sector has also had to cope with entrenched corruption in the civil service and inefficient management. In one prime example of the impact that the combination can have, a modern, 100,000-head-a-year slaughter plant built with Russian aid in Kismayo a few years ago had fallen into disuse by 1990.

The state owned hides and skins

public sector tanneries to form the Somalia Leather Agency.

The SLA monopoly included hides and skins collection and leather exports, the supply of raw materials to tanneries, and the operation of tanneries and shoe outlets. The problem with this new organisation was that it paid abysmal prices to

agency held a monopoly for collections

until 1981, when it amalgamated with

the small dealers who made collections. Thus, incentives for collection and improvement of standards were minimal. Instead there was every encouragement to clandestine cross-border traffic.

The 1987 Unido report on the industry recommended abolition of the SLA and liberalisation of trade practices. These proposals were finally adopted and, by 1990, new trading patterns were evolving and prices paid for raw stock had increased. Perhaps the most useful aspect of Unido activities in Somalia were the good relations developed between government and Unido personnel; Unido proposals were viewed as fair and impartial and received some consideration.

Leather processing

The Somalia leather industry in 1990 consisted of seven tanneries, four of which were state-owned and three private. There were also 25 small cottage type plants employing traditional methods.

The state-owned 'KM 7' tannery in Mogadishu was built in the 1970s with expertise and aid from Yugoslavia. Capacity was 75,000 hides and 625,000 skins to wet-blue for export and a small proportion to finished for domestic use. It was the 'mos: successful' of the state owned plants, achieving 53% capacity working for a short while. This subsequently fell to about 3%.

The Kismayo Tannery, also state owned, was built in 1976 with a processing capacity of 125,000 hides annually. Production achieved a maximum of 25%, but then fell drastically.

The state-owned Burao and Hageisa tanneries were designed to process 300,000 hides and 1.2 million skins respectively — but these too were reported never to have achieved more than 25% of planned production.

The poor results from the state tanneries in Somalia are typical of similar enterprises elsewhere in Africa. Many were built during the cold war as a means



The tannery at Mogadishu



hope of progress



Dried goat and sheepskins

of currying favour with African states, rather than for realistic purposes of industrial development.

At first privately owned tanneries fared better than the grandiose plants built for political reasons. The Mogadishu Mission Tannery, for example, which began operations in 1946, reached capacity production of 75,000 hides annually. By 1990, however, political and economic instability began to take hold here too and production fell to 30% of



Wet-blue skins for export

capacity. Two other private tanneries, at Batoon and Bravo, suffered a similar fate, for the same reasons.

The cottage tanning industry is located mainly in the Bravo area. Production methods are completely manual and handed down from generation to generation by an artisan class largely untouched by modern ways. Materials used are all indigenous.

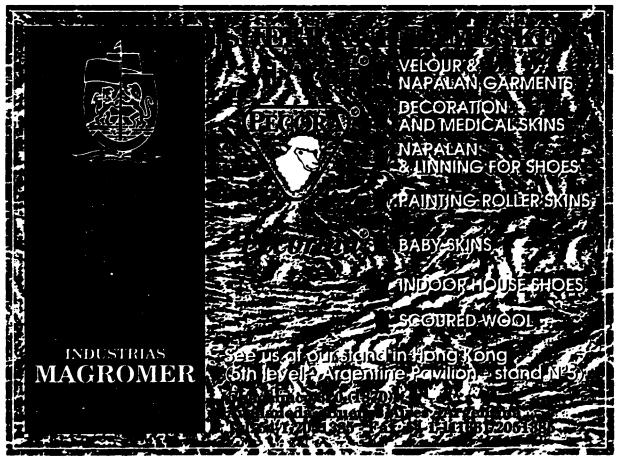
In the past this sector was self supporting and it is possible that is still is. Local

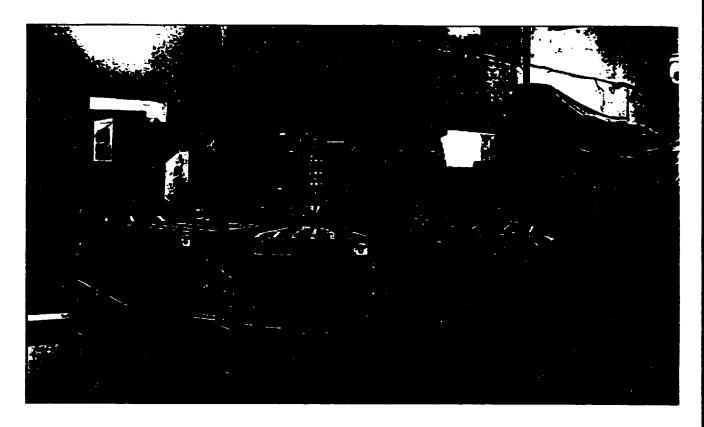


Through-feed equipment at Mogadishe

needs are served by these artisans.

Overall in 1990, while many problems remained to be overcome, the leather industry in Somalia was showing signs of improvement thanks to the Unido All-Africa project and trade liberalisation proposals which had been adopted. Then, in 1991 came the current wave of violence. The harm done must be immense, and will take years of dedicated effort to undo and that can only start once peace is well and truly established.





Sudanese were courteous, charming and friendly. There was an almost total lack of crime and it was safe to walk alone after dark. This is more than can be said for many western countries.

Industry is in a parlous state due to years of close state involvement and the traditionalist attitudes of long established business owners. But change is in the air: government has relinquished direct involvement in industry and a thrusting vounger element — clearly encouraged by events elsewhere — is calling for recognition of merit rather than social status. The chances for real progress are better than for a long time. There is, however, the danger of US backed trade restrictions.

Sudan has an area of 2.5 million km² and a human population of only 24 million, of whom 20% live in either Khartoum or Omdurman. Once miles apart, the two have merged to become the trade centre of Sudan.

With a temperature of 40°C plus in winter and mid 50s up in summer, a degree of lethargy is understandable. Even Japanese contract workers, reputably the most conscientious in the world, find working difficult.

Livestock populations at 22.4 million cattle, 14 million goat and 19 million sheep are the second largest in Africa, exceeded only by those of Ethiopia. But availability is just 1.5 million hides, 2.5 million goat and 4 million sheepskins annually. Animal distributions are widespread and ownership in the hands of nomadic people who inhabit remote areas, shun urban contacts, and hold

Sudan

Many African countries experience drought and famine. In the Sudan the continuing civil war has to be added and the burden of being unpopular with the US government. The Sudan tour was thus approached with mixed feelings. Roy O'Shaughnessy reports

iivestock as symbols of wealth and food not as objects for trade.

The national herd and flocks are at the limits set by traditional methods and available grazing. Stock improvement is not practised. All livestock are indigenous and, because of natural selection, are suited to the environment. There is no commercial ranching.

Modern slaughter facilities exist only in Khartoum and Omdurman. Cattle are moved in 'on the hoof' from outlying areas. Many do not survive the trek and losses are high. Because of distances involved and financial limitations, plans to improve facilities along stock routes have not materialised. Urban abattoirs account for only 30% of the kill.

In country districts standards are poor, only one abattoir to every 17,000 km', and home slaughter is the norm. Hides and skins exports go to Italy, Greece and contiguous Arab countries. But earnings are not optimum because of quality defects and the fact that export is as raw not wet-blue.

Until recently a licence was needed to export. Holders were allowed to retain part of the foreign currency earned. Export licences were difficult to obtain and those who had them held virtual monopolies. In the case of hides and skins a licence was, in effect, an incentive to export raw rather than sell domestically, and tanners were deprived of their basic need. Trade liberalisation has, however, changed things for the better.

Hides and skins improvement

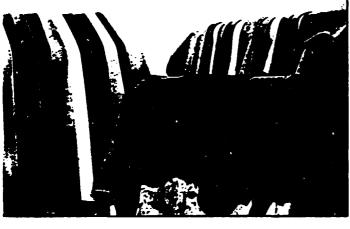
Awai Gubeir is in charge of the National







A formal sector private shoe plant



Afretan find

Finished leather for the domestic market

Centre for Hides and Skins Improvement. He said quality had fallen after independence. Cattle dips and slaughter slabs had fallen into disrepair and people trained in improvement procedures had lost motivation. A comprehensive grading system laid down by Mr A Knew in 1946, and incorporated into legislation, had fallen into disuse.

The main problems in improving quality and output of hides and skins, he said, were remoteness of producing areas and the resistance to change of nomadic owners. Poor road systems contributed when animals were moved on the hoof to abattoirs. On the other hand, facilities were poor in rural areas but, even if correctly processed, hides were subject to frictional and heat damage during transport over rough roads from rural to

urban centres. Unido had assisted in all the usual ways: technical expertise, rehabilitation of slaughter slabs and supply of proper tools, training etc, but the most important gains, he thought, were two.

First, the integrated approach adopted and continuity of application. This, Mr Gubeir said, contrasted favourably with random selection of aid projects by other agencies and little follow-up.

Second, and more fundamental, was Unido's creation of a national awareness of what the problems were and the need for industry and government to cooperate in finding solutions.

During the second phase of the Unido project, the government's financial contribution would be eight times that of Unido, he said, and the National Centre would train 90 inspectors to follow up on

the work of junior field staff in the planned new target areas.

Government would meet most costs except for the wages of employees at privately owned slabs and drying sheds. The privatisation of such facilities was an innovation which, it was hoped, would enhance producer incentive to quality.

Tanneries, Mr Gubeir said, had helped by truly paying better prices for good grades and sending out their staff to instruct producers about defects and their elimination.

Finally, Awai Gubeir said, government had recently banned the export of raw hide. This would help tanneries work to capacity. The intervention was not interference in industrial affairs. It had been taken after consultation with the leather sector in the national interest.

But hide merchants took a different view. They said the ban contradicted the open market policy and that adequate supply of raw stock to tanneries could have been assured by other means. But they did not spell out what these were.

Merchants also deplored the competition from newcomers which had followed open market trading. The new entrants, they said, bought in lots and paid the same price for everything, good or bad. This damaged relations between primary producers and established merchants and reduced the power of reputable merchants to insist on quality. One senses vested interest.

Impartial observers say merchants brought the ban on themselves; they paid primary producers ridiculously low prices and exported raw stock in quantity, irrespective of domestic demand, because the returns were quicker and in hard currencies.

Merchants reply that they are dependent on supplies from remote areas, have to give buyers large sums of money to do the collections, and have no control over field operations. Prices were low because quality was generally poor.

This, of course, is partly correct. But the Unido project and the National Hides Improvement Centre have upgraded raw material production with noteworthy success and, despite protestations, it is clear established merchants have had things very much their own way. A few have abused the privilege.

The new regulations forbid export of raw stock. But, when tanneries approach capacity working, it would be only commonsense to permit export of surplus raw if it can be shown tanneries do not have the capacity to contract tan the surplus to wet-blue or crust for merchants.

A real problem in the Sudan is that years of political instability and economic stagnation have resulted in a wide-spread cynicism.

A symptom is that commerce and industry alike are dedicated to their own advantage and national considerations take a second place. It will take years of political and economic stability to rectify the situation. But the authorities are trying hard.

They have made wise decisions. These include trade liberalisation, moves to revitalise the leather sector, recognition of two exchange rates — an official rate, under which foreign currency is freely available, and a black market rate open to competition.

Leather Production Sudan have six tanneries, three previously state owned, two private and one joint venture. There are also many rural cottage-type tanneries using traditional methods.

The latter, and formal private tanneries, have proved vastly more successful than the plants which used to be publicly owned. But the ex-public sector is near to recovery thanks to impending privatisation.

Typical of the 'up and coming' younger element is Sallah Salim. He runs both a hides and skins buying agency and also a small tannery. He visited Zimbabwe early in 1993 under Unido sponsorship. Salim said he benefited from study at Zimbabwean medium scale plants which, operating under conditions typical of Africa, were yet able to market semi-processed, finished leather, footwear and other products, in Furope and the USA. 'If they can do it, why cannot wa?'

He said raw collections in Sudan were sufficient to serve all tanneries and leave a surplus for export. But, he said, any surpluses should be part-processed before export. Full production would place a strain on existing effluent treatment systems, and also some merchants might



build wet-blue plants to avoid putting raw out to contract tannage, so imposing greater environmental strain.

There had already been a proposal to build a central treatment plant to serve existing and new tanneries which might be built.

The causes of defects in raw stock and finished leather were known and could be corrected. But, peculiar to the Islamic world, he said, were fantastic fluctuations in the number and quality of skins available. This was particularly so when pilgrims made a sacrifice before departure for Mecca.

His tannery, a small one, had received 17,000 skins against a normal delivery of 1,500, and most had been home killed and so poorly cured.

This comment was echoed later by managements at the Afrotan and White Nile Tanneries. They had received 240,000 and 100,000 skins above normal over five days.

Mr Salim was grateful to Unido for expertise and equipment made available and which he had paid for in Sudanese currency.

Efficiency had improved markedly. A new problem was that, before the ban on raw exports, the foreign currency he earned from raw stock exports was used to buy imports for his tannery. This was no longer possible. His tannery now had to wait until payment was received for exports before ordering chemicals and spares. This was a drawback and buying foreign exchange was expensive.

There was no incentive. Mr Salim said, to produce quality leathers for the domestic market. Footwear manufacturers bought on price only; they did not differentiate between good and bad.

Per capita income in the Sudan was among the lowest in the world and so consumer demand was entirely price orientated. This was why merchants retained the best raw material for export and tanners preferred export of wet-blue production rather than taking it to finished for local use. He quoted facts and figures: finished leather sold on the domestic market for about 90 Sudanese pounds per ft while wet-blues exported fetched near 155 Sudan pounds per ft and asked which was a more attractive proposition.

Excessive taxation acted against domestic sales. The basic tax was 36%, on a stepped up basis over three stages, with a further 10% on finished footwear. This was equivalent to 50% tax on top of tannery and footwear factory mark-ups.

There were additional taxes levied on raw stock moved across provincial borders, and there could be as many as five between the point of purchase and arrival at a tannery.

Sallah Salim said he welcomed freeing of the economy. Within limits industry could now do what it liked. But there would be merit in government setting up an industry board to oversee pricing structures and ensure the leather sector did not price itself out of export markets.

Wet-blue and crust from the Sudan were not yet fully accepted, he said. International buyers were chary because of past bureaucratic problems and failures to meet commitments on time. But he saw things getting better. There was, at last, real encouragement to compete and do well. He felt the domestic economy was on the road to recovery and a buoyant domestic support base was essential to success in export fields.

Salim's views were supported by the executives of larger tanneries. Afrotan, about 40km from Khartoum, are a medium size plant processing 700 skins per day plus 400 hides. The plant is prosperous, works at capacity, and most of production is exported. Excellent management, good housekeeping, preventive



Damaged and irreparable equipment

Workshop run from a private home which offers better conditions. Often they leave a lot to be desired



Afrotan offer efficiency and consistent quality



maintenance, technical know-how, are evident in consistent quality and output.

Afrotan could become, if not already, the model for restructuring of ex-public sector plants.

The general manager, Mr el Kobani, said now government had banned raw exports, it was up to tanneries to cooperate and aim for full production to at least the wet-blue stage. World demand existed. If good faith was shown here, it was likely restrictions on the import of plastics and polyurethanes would follow. This would favour processing finished leather and downstream footwear manufacture.

'Government is on the right track both in freeing the economy and, when desirable, legislating to give domestic industry a boost. This was', he said, 'a very different thing from state interference and falls correctly — following consultations with trade associations — within the scope of government'. Few will argue with this.

Public sector tunneries

The public sector tanneries are Khartoum Tannery, the White Nile Tannery and the Gezira Tannery. Mostly built during the Cold War, they are monuments to the East-West rivalries of that time and the

sometimes woolly thinking which raised finance for their construction.

In size they evoke images of limitless floor space and delapidated machinery. The combined capacity of the three plants was 600,000 plus hides per annum and 1.7 million skins. The Khartoum and White Nile plants never achieved expectations and, by 1985, production at the former had fallen to about 50% of capacity and at the latter to less than 20%.

The Gezira Tannery, built and equipped with French aid in 1976, fared better. Annual capacity was 300,000 hides and 750,000 skins and, with French technical and administrative assistance, the plant ran well up to full capacity, with 30% of production taken to finished and the rest exported as crust. Production fell after departure of the French and, by 1985, was only 25% of possible.

In 1989 the Sudan government gave Unido the go-ahead for rehabilitation of state owned plants. The intention to privatise the White Nile Tannery was announced during 1991 and, later, extended to Khartoum and Gezira also. Prospective buyers were slow to make an appearance amd the hammering out of transfer arrangements has taken time, but is now well under way.

The failure of state tanneries is attributed to many causes which include lack of formalised buying systems, the need to compete with private hide merchants, budgetary constraints in importing new equipment, chemicals, etc. Higher leather prices than other countries in the region, lack of technically trained personnel, excessive labour recruitment, pegging of leather prices at below manufacturing cost, high interest rates, have also been blamed.

But the reasons advanced are not entirely factual. Nowhere was this clearer than at the White Nile Tannery with reference to technical skills. The tannery manager. Mr Bafad, is highly qualified, skilled and efficient. It was difficult to fault either him or the middle and lower level supervisors under his control.

Mr Bafad said White Nile had been taken over by a private consortium which included banking interests. Since then, operating under strictly business principles, staff complements had been halved and production doubled, from 20% of capacity to 40%. Production would approach installed capacity when the ban on raw exports took effect and new equipment on order was commissioned.

Some merchants, he said, were resisting the ban on raw exports and others, who also had tannery interests, were undecided what line to adopt. White Nile exported wet-blue on their own account but would be prepared to contract tan for merchants if asked.

Mr Bafad said the National Centre for Hides and Skins Improvement and Unioo were doing a good job. The quality of raw material had improved but was still not as free of defects as tanneries would like. A proposal to permit private ownership of slaughterhouses was a good one because 'tug-of-wars between involved ministries will cease with benefit to all concerned'.

Quality at the White Nile, apart from grain defects common to Africa and some disease damage, was good. Tannage was very fair and stretch excellent. Machine operations such as sammying, shaving and buffing, were performed with skill. This was impressive because much of the equipment, supplied in 1975 by Yugoslavia, was of vintage design even when new and trouble prone from the beginning. Central Europe has not been noted for technical innovation in the manufacture of tannery machinery and equipment.

Mr Bafad said imports needed by tanneries were now easily available because a percentage of export earnings reverted to manufacturers. This made for better quality. White Nile produced two grades, export and domestic, but the end aim was to bring domestic market standards onto a par with export lines.

Asked his assessment of efficiency at White Nile, he said: 'More preventive maintenance is badly needed and I would welcome assistance. There is no shortage of skills while production is confined to wet-blue for export and finished leather for local and neighbouring country use. Most of our technical staff are qualified tanners and some, including myself, were trained in Europe. But, if we start looking at finished leather for export to Europe and the Americas, then development of skills at floor level will have to be given priority.'

Mr Bafad declared himself pleased with conditions at White Nile both in technical and managerial senses. Marketing and promotion was now more professional and there was more inter-



sector cooperation. As examples he quoted tannery participation in Unido field hides improvement demonstrations and agreement between his and Khartoum tannery managements for joint use of the White Nile effluent treatment plant, with shared operational costs.

A visit to the Khartoum Tannery vielded much the same impression; technical staff are knowledgeable, capable and confident. They believe that under privatisation the leather processing sector will become viable and that full recovery is not far away.

There is not much wrong with the technical staff at Sudanese tanneries. The problems experienced have resulted almost entirely from poor top management, state involvement in industry, and shady deals. The excellent performance of private tanneries, like Afrotan, prove beyond doubt that Sudanese technicians are capable and, given support and leadership from managements, are as good as those anywhere.

Footwear

Shoe making is a traditional craft in Sudan. The use of modern technology started in the 1950s with establishment of Bata International. In 1962 the Bata plant had a capacity of 14 million annually, making it the biggest shoe factory in the Middle East. Encouraged by this, other plants opened. Ultimately there were 70 private manufacturers and production ranged from one to five million units annually. Today there are only 25 left, some of which are closed and the others at low performance.

The formal footwear sector was prosperous until the late 1970s and, in fact, dominated the leather industry. The Nationalised Corporation, which included Bata and 18 other ex-private plants, was the largest producer. About 15% of output was leather shoes. Exports to neighbouring countries flourished. Decline began in early 1980 and reached disaster proportions by the end of the decade.

The causes do not lie entirely at the door of nationalisation. Sudan's financial base came under strain from 1980 because of rebellion in the south, a fall in world prices for commodities exported, political instability and maladministration. Devaluation and foreign exchange shortages helped, imports became more expensive and harder to get.

Tanneries were badly hit. Production fell and prices increased to cover overheads. The footwear sector, also in difficulties, cut back on leather usage and moved to synthetics. This, in a country with huge livestock resources on tap.

Four categories of shoe are made in Sudan — plastics, flip-flops, cloth and leather. Production of all has fallen. Overall market demand is now about 35 million, all types, but mostly for plastic because of cheapness. Availability is,



Tannery manager Mr Bafad, White Nile Tannery, extreme right with Mr Abbo, Unido national expert, on his right

however, far less. Plastic shoe capacity is 30 million pairs annually. Actual is only about 9 million because much production equipment is unuseable.

Flip-flops are a simple open sole unit, cut from waste imported from China. They are more popular than closed plastic constructions because of cheapness and comfort in the hot climate. Overall capacity approaches 60 million but production is a mere 25% of this. Poor machine maintenance has resulted in imprecise cutting of waste, frequent breakdowns, and resulting intermittent

Cloth and leather shoes are in demand because of suitability to climatic and rural conditions. But construction of the former, despite the simple technology involved, & limited by the need to import suitable cloth. This is ironic, remembering Sudan is a major cotton producer.

Annual production at 300,000 pairs is 13% of the capacity of the plants making cloth lines, and would be less but for military orders for canvas boots.

The plight of leather footwear is much the same: 20 factories able to produce 10 million units annually, but only seven operational and their combined output at most 1.5 million. Despite consumer preference for leather, shoes originating from formal sector manufacturers are too expensive for the average Sudanese.

Like Sudan's tanneries, formal footwear plants are huge and the need to meet high overheads, especially during recession, contributes to outpricing of footwear. But the major reason for high prices, as with leather, lies in the multiplicity of taxes.

Excessive taxation also encourages a lively trade in smuggled goods. Contraband footwear and associated raw materials and components — not subject to duties — sell for far less than local equivalents. Clandestine trade is hard to eradicate: Sudan's frontiers, eight in all. are remote and difficult to police. Besides, the incentive is there. The answer to competition from illicit goods and reducing domestic costs lies in review and simplification of the tax structure. All manufacturers stressed this. They accepted the need for taxation, but questioned the multiplicity and complexity of the tax structure.

Workshops

The shift of formal footwear factories to synthetics resulted in a burgeoning informal sector known as 'Workshops' This is the colloquial name for informal shoe factories. They are run by modest entrepreneurs, usually from small and cramped premises, are equipped with a minimum of machinery, and use traditional methods. There are about 400 workshops in the country, most of them in Khartoum and Omdurman.

Workshops fill a vital role because they produce mainly leather uppered footwear, but some plastics also, at prices affordable by the masses. But, because tanners process only low grade hides for the domestic market, quality is not good even though constructional standards are

often very fair indeed.

Workshop environments leave a lot to be desired and are occasionally atrocious crowded working conditions, one small room serving as raw material store, production floor, despatch room, showroom and canteen, is commonplace, and this in ambient temperatures exceeding 40°C.

Workshops produce most of the 2.5 million leather shoes sold annually, but the poor quality leather used inhibits sales to higher income groups.

Prospects for recovery of the Sudan leather industry are better now than they have been for years, though by no means certain. Trade associations have become more active and cooperation between sub-sectors is better. Consultation between government and industry is now routine and plans to assist, formulated in concert with Unido, include upgrading of workshops.

Like other African states, Sudan is disillusioned with the fruits of nationalisation. It is at last on a progressive track. The resilience of its people in adversity - the masses who are so poor and survive only by reason of fortitude, inspire admiration, sympathy and a desire to help.

Labour, by European and even Far Eastern standards, is cheap. Traditional craftsmen are skilled and ready to adopt modern methods. There is no reason why footwear made in Sudan in liaison with foreign investors should not compete successfully with Asian exports to the EC. After all, distances between Europe and Africa are half those to Asia. This is, surely, worth thinking about.

t first the leather sector was placed under the control of the NDC (National Development Corporation) and, later, under the aegis of the monolithic TLAI (Tanzania Leather and Associated Industries). The TLAI had near dictatorial powers and the unilateral decisions it made were usually at odds with professional opinion.

At the same time, the export earnings of industry were diverted to social services like health and education, rural electrification etc, which were non-productive in the short term. Industry became starved of foreign exchange for imports. The results were analogous to post World War II policy in Britain, when high expenditure on (needed) soservices retarded

In Tanzania, however, the negative results of a similar policy far outweighed the positive — and were worsened by the break-up of the East Africa Community and devaluation of their currencies to differing levels. Further, the two year war with Uganda depleted foreign reserves and the appointment of ruling party members, frequently without qualifications and experience, to executive posts in industry aggravated the situation.

The leather industry began to founder. Production fell and some plants closed. The IMF and World Bank proposed trade liberalisation in 1983. Government concurred — but allowed the TLAI to retain control of the leather industry --- and so a step in the right direction was nullified. Managements were prohibited from reducing staff even when capacity utilisation dropped to below 10%.

Finally, with disaster looming, the Tanzanian government adopted a privatisation and open market trading policy. Privatisation is now well under way and the industrial sector is more optimistic about the future. Flotation of the Tanzanian shilling at its true value has helped and also the repeal of restrictive rulings. The mandatory presence of ruling party members at management meetings, for example, has been abolished, with acclaim from executives who rightly saw a political presence as intimidatory.

Optimism is, however, tinged with caution. It will take time to unscramble public ownership. Nevertheless, the public mood is that at last Tanzania has taken a decisive step along a sensible path.

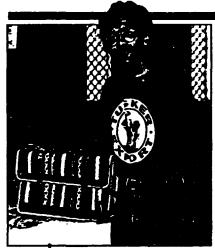
Hides and skins

The livestock population is 13 million cattle, 8 million goat and 3.5 million sheep. Off-take rates are only 8%, 25% and 15% respectively, yielding one million hides, nearly eight million goat skins and half a million sheepskins annually. Collections in 1986 were a mere 40% of available hides, with goat and sheep collections even lower at 11% and 16%.

Since the start of the Unido project,

Tanzania: state ownership is now on the way out

Tanzanian managements were all agreed that trade prospects were bright at Independence in 1961. But, they said, the country then embarked on a mistaken public ownership policy. This saw private enterprises nationalised and the building of many state owned plants. Conditions for industrial operation began to resemble an obstacle course



Indigenous art from Shah Industries

collections have increased to 75% of availability for hides, 27% and 55% for goat and sheep. These increases are significant but still below potential, and off-take remains poor compared with Zimbabwe and South Africa.

Avoidable defects - brand marks, poor fleshing and cuts — are common, as are thorn scratches and disease defects. There has, however, been a distinct improvement in grades from the Shinyanga area targeted by Unido for an improvement exercise. Field activities include supply of proper tools, training of field officers, the rehabilitation and building of rural slaughter slabs and drying sheds at strategic locations, and transport to enable monitoring of results.

Collections for cattle, goat and sheep rose by an average of 13%; fourth grades (rejects) reduced by 7% and firsts and seconds increased by 6%. Significant gains, yes, but they only make a marginal difference when incorporated into national statistics. To be truly effective the

project needs to cover the country. This is a mamn. oth task which is only possible given continuity of application and this, in practical terms, means continued support from donor nations.

Hide merchants

There are three major hide merchants in Tanzania. Africa Trade Development (ATD) are the largest and control 75% of the trade. Barham Chaakar is managing director. Astute and objective, he spoke on behalf of merchants. Trade in hides and skins, he said, had at one time been profitable and relatively trouble free. Exports were routed either via Dar es Salaam or through Kisama on Lake Victoria. The transport and distribution systems had worked well for a few years after independence despite governmental takeover of raw material marketing. Later, however, pilferage and smuggling became serious, road and rail maintenance deteriorated, and transit delays became common. These difficulties, combined with others, resulted in higher overheads, lower collections and finan-

Trade liberalisation during the 1990s. Mr Chaakar said, was a welcome move; the currency found its true value. But persistent devaluation had made it increasingly expensive to import spares and chemicals and, by 1990, production from tanneries had fallen drastically and. consequently, domestic hides and skins

Managements gradually lost control of the situation and continued government involvement in industry, despite trade liberalisation, made matters worse. Privatisation, should have been introduced at the same time as liberalisation.

Barham Chaakar emphasised he was





Mwanza and other ex public tanneries are all undergoing rehabilitation

grateful for Unido help, both in its technical aspects and the part played in making government aware of the benefits which would accrue from efficient exploitation of leather sector resources. He was certain, he said, that the leather industry would prosper once privatisation procedures were completed.

Finally, Mr Chaakar said he believed the centre of world footwear and leather production will one day shift to Africa just as it has previously moved from Europe to Asia. Current world demand for wet-blue from Africa supports this view. Demand for finished leather will follow and, ultimately, a need for footwear and leathergoods as well."

Barham Chaakar acts on his judgements. ATD have negotiated a controlling interest in two of the three state owned tanneries. Rejuvenation of the tanning sector is on the cards in the new economic climate. This could have an electric effect on primary producers and a ripple effect on consumer spending. A shortage of raw material to meet domestic needs could follow. The portents are there and, if they materialise, calls for prohibition of raw exports are likely.

Tanneries

At independence there was only one tannery in Tanzania. The government then built up a tanning capacity sufficient to meet all domestic needs for finished leather. Sadly, under the TLAI, two of the three state tanneries ceased operation. The third just managed to survive. All three plants today, because privatisation is in the offing, show signs of life.

The performance of public utilities in Tanzania is, perhaps, an object lesson in the futility of state participation in industry. Tanzania Tanneries were established in 1968 as a joint venture between the state and A B Ehrnberg of Sweden. Ehrnberg's were bought out in 1979. Annual capacity was 10 million ft² prior to nationalisation and the plant was operated at 90% capacity.

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By 1984 performance had fallen to 51% and in 1988 to only 12%. In 1990 Unido provided help and output recovered to 50% of capacity, with 60% of production going to finished leather for the domestic market and the rest to export.

Morogoro tannery was built with Bulgarian assistance in 1978 with a capacity of 10 million feet annually. Output was 31% of capacity in 1979, picking up to about 40% in the early 1980s, but plunging to 6% in 1989. Thereafter operations ceased.

Mwanza tannery, on Lake Victoria, was built in 1974 under an agreement between an Italian contractor and the State. The contractor also supplied the machinery, much of it secondhand. Management was initially entrusted to Technotan International, also of Italy.

Mwanza tannery is vast with an annual capacity of 7.5 million ft³ chrome tanned leather; 540,000 kg veg tanned. Production started in 1978, reached 33% of capacity under the Italians, but without them fell to 8% by 1988 and ceased later.

The prime reasons for public enterprise failure generally were foreign exchange shortages and a consequent inability to replace ageing equipment. Contributory factors were labour indiscipline, poor management, little or no preventive maintenance, corruption and nepotism. All became endemic as the maladministration inherent in state organisations took hold.

Tanzanians are determined to correct

past errors. They are convinced privatisation is a good move. Tanzania Tanneries is to be taken over by Aga Khan Tanning and ATD's Barham Chaakar has won a controlling interest in the Morogoro and Mwanza plants.

The ex-parastatal tanneries are basically well designed and all are undergoing extensive rehabilitation. Backed by adequate capital, assured raw materials supply and sound management structures, their profitable working is assured. Unido have plans to assist.

Production at Morogoro is planned to commence in January 1994 with an annual output of 10 million ft² and a production mix of around 50% wet-blue, 35% crust and 23% finished; the latter for domestic and neighbouring country consumption.

Mwanza, where Unido are upgrading the effluent treatment system, was due to start late 1993 with a target of 10 million ft' wet-blue and crust for 1994 and expansion thereafter.

Rejuvenation of Tanzanian tanneries will come to pass. A happier, more confident spirit prevails at all levels. Employees at public sector tanneries are counting the days to private ownership.

Additional to the ex-parastatals, there are three small, privately owned plants. Himo Tannery are one. They were established in 1926 and make vegetable tanned leather only, using mostly obsolete equipment dating back 50 years or more. Upgrading would mean high capital investment in equipment and new buildings would be necessary. The owners are said to be happy with things as they are and see no cause for change, on the grounds that they remained viable through the difficult 1970s and 80s.

Himo will, however, face unfamiliar problems in the future. Private ownership of previously state tanneries will result in competition from well equipped plants no longer fettered by artificial constraints. The competitive edge will be much sharper than when trade adversaries were inept state-run enterprises.

Aswan Tannery, also privately owned, are 25 miles from Dar es Salaam. They process 300 hides daily to wet-blue. They have ambitions to go to crust. If domestic demand builds up, production would include finished for local sale. But this is conjecture based on trade talk. Aswan tannery were not visited.

Another privately owned plant, Afro Leather Industries, became operational in 1988. Production today is near capacity at 500 hides daily, all to wet-blue for export. Vegetable retannage for domestic use is under consideration and Afro could easily move to full finishing when downstream demand warrants. This is likely to be sooner rather than later because incentives for footwear manufacture are now better.

The Afro plant is small and well laid out. Available space is intelligently used



but there is congestion. Expanded production would call for heavy capital investment.

The tannery manager — a graduate of the Central Leather Research Institute, Madras — has the hallmarks of that institution: technical knowledge and practical skills of a high order. He sees expansion as a welcome challenge. Afro Leather, given more drum capacity, could become a force in the leather sector.

Questioned about Tanzanian leather industry potential, Afro's managing director, Salim Mawji, said: 'Our own tannery started production at 50% of planned capacity, soon achieved 75%, and is now operating at nearly 100%. But nationalised tanneries just do not work. The private sector has the personal commitment needed for success, but this quality is usually lacking in state enterprises.'

Salim Mawji said prospects were excellent now privatisation was policy, and would be better still when a buyer for the Bora Shoe Factory — originally a Bata plant nationalised by the Nyerere regime was found. 'Bora Shoe is the only shoe factory in Tanzania capable of taking the bulk of output from the exstate tanneries', Mr Mawji said. He added that equipment at Bora was old but still usable; much of it had been barely used during the nationalised period.

Design capacity at Bora was 10 million units a year, he continued, and 25% of this was for leather uppers. This was equivalent to 250,000 hides, only a quarter of hides collected, and would take care of the poorer hide grades which could be reserved for domestic sale, leaving the best for export as semi-processed.

Tannery managements generally supported Salim Mawji's views. But some questioned whether shoe factories would indefinitely accept poor grade leather if it became possible to import desired quality at competitive prices. However, they added, imported chemicals were more easily available and this would make for better quality from low grade raw. Italian tanners, they said, were famous for converting mediocre hides to fair quality finished. Tanzanians would learn similar skills.

The confidence of Tanzanian managements now contrasts favourably with the near despair of the previous era and deserves encouragement -- but encouragement leavened with caution. The likely time scale for acquiring Italian finishing skills is being underestimated.

Effluent treatment

Waste disposal in Tanzania is substandard. There is little control legislation and miniscule enforcement. At Mwanza, for instance, tannery waste used to be run directly into Lake Victoria. Solid waste at Afro Leather Industries

is still dumped adjacent to the factory and treatment facilities available are not fully utilised. At other plants waste disposal equipment purchased has not been commissioned, ostensibly because of lack of technical know-how, but actually to minimise 'unnecessary' expenditure in the absence of enforcement.

Unido encourage upgrading of treatment systems by stressing the long-term dangers of environmental disregard. They also help with expertise and equipment but more needs doing. Funds are the limiting factor.

A strong case could be made out for donor nations, through Unido, tying funding to adoption of approved waste disposal procedures. Alternatively, an agreed percentage of aid funds could be ear-marked for effluent disposal until approved standards are attained.

Footwear

Tanzania has several shoe factories, two of which are state owned and both of are up for privatisation. Return to full production would mean an annual demand for 10 million ft' finished leather, a welcome boost for the tannery industry. But both plants need structural change and renovation of equipment. Joint ventures, preferably foreign, are being sought. Investment seems a safe bet, especially now that external investors can remit a percentage of profits.

Tanzania has several private shoe factories, mostly medium to small scale. They worked at about 50% of capacity until recently. All have plans for expansion now the scene is set for economic

recovery.

Leathergoods

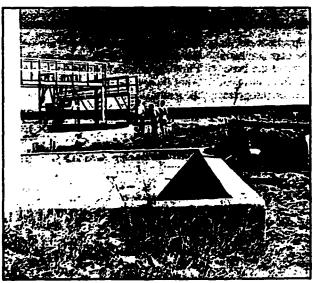
Leathergoods manufacture stayed profitable throughout the years of economic woe. The Morogoro Leather Company, the only parastatal to consistently perform well, are not up for privatisation. Management sees leather products (as opposed to textile) as being the best

course for survival. The objective is high quality items for export and medium for the local market. The company operated particularly well since 1990, when Unido provided assistance, and are considered a major success of the All-Africa improvement project.

Private leathergoods plants are also successful. The bulk of production is exported, mainly through duty free shops which serve tourists. The sector obtains most raw materials loc-

ally. Designs are based on indigenous artistry. Construction skills are fair to good and getting better all the time. A major problem is the poor quality leather supplied by tanners. This will have to change if a secure place is to be won in world markets. In the case of tourist sales, however, quality is not a decisive factor because souvenirs are sought rather than quality and durability.

The Tanzanian leather sector has been in recession for years due to misguided political and industrial policies over which it had no control. But, thankfully, convalescence has begun, albeit slowly. Given continuation of current policy, the future will see recovery, a recovery which would be hastened by foreign investment. This, surely, is a golden opportunity for Western entrepreneurs: investment in a country disillusioned with public ownership and ready to learn from past mistakes.



There are upgrading plans for Mwanza effluent plant

these are reported to be in trouble.

Tanzania Shoe Company became operational in 1957 as the East Africa Bata Shoe Company. They were nationalised in 1967 and given the present name, but are commonly known as Bora Shoe. Rubber and pu plants were added after state takeover and shoe capacity was expanded. Actual production exceeded 6 million units annually under Bata administration, but fell to less than 11% of capacity by 1988, with construction confined to canvas shoes and bicycle tubes and tyres.

Morangora Shoe Co, state owned from inception, had an annual capacity of four million units, two million each of textile and leather uppers. The plant opened in 1981 managed by Italian consultants. The results were a fiasco. Production reached 4% of capacity in 1983 and fell to less than 0.6% by 1988.

Tanzania Shoe and Morangora Shoe

Zambian economy will

he potential for cattle production is, however, immense and today, with IMF backing, the economy is being restructured on an agricultural basis, this being the sector with the most undeveloped potential.

Erratic rains can, however, cause great damage; the national herd reduced by 20% during the 1981 drought. Figures for the 1991 season, when the rains failed again, are not yet available but are

probably similar.

Zambia is perhaps the most urbanised country in Africa; 40% of the population live in towns. Industrialisation was severely hampered under the Kaunda regime and both the mining sector (which generated downstream industry) and agriculture suffered.

The leather industry, however, expanded from the mid 1970s on but by 1990 both it, and industry as a whole, had faltered. Since then, with IMF assistance, the policies of President Chiluba, who took office in 1991, have resulted in a return of confidence in the business sector, and some improvement in the economy.

The leather sector has benefited from Unido assistance since 1989 and is in a healthier state than it was two or three years ago. The major credit for this must go to the executives of Zambian industry who, in trying circumstances over many years, showed the enterprise and resilience necessary to business survival.

Hides and skins production

In Zambia, as elsewhere, statistics and their interpretation vary in reliability. There has been no animal census since 1978, before the drought of 1981 and 1991, and the beginning of the restructuring programme. Approximate animal populations are estimated at 2.86 million bovine, 400,000 goat, 75,000 sheep and 200,000 pig.

Commercial farms hold about one million (30%) of the cattle and annual off-take is 15%. The subsistence farming sector, where off-trade is only 7.5%, own the remainder. The national kill is estimated at 320,000 but much rural slaughter is not recorded and many hides are not marketed. A mere 70% or less of hides available were collected in 1989.

Work done since, under the Unido programme, resulted in a 5% plus increase in collections in two districts. If this success can be extended to a national basis, the increase in hide supply will be significant.

Off-take for goat and sheep is reportedly 10%. This is abnormally low and not believable. More likely, it reflects the



Typical Zambian cattle owned by subsistence level farmers

Zambia has a human population of about eight million and shares borders with Tanzania, Malawi, Mozambique, Zimbabwe, Botswana, Angola and Zaire. At independence in 1964 Zambia's economy rested on copper. But there were many productive commercial farms, and the country was then an exporter of maize and tobacco. In 1975 copper slumped and the economy deteriorated

numbers collected rather than actual slaughter.

Farming methods

The commercial farming sector is efficient and there are plans to attract farmers disillusioned by the compulsory land acquisition policy in Zimbabwe, to move to Zambia.

Efficient production methods cannot be claimed for the subsistence level sector. With a few exceptions, such farmers cling to traditional methods; available dipping facilities are hardly used.

Following the 1975 slump in copper, government and aid authorities cooperated in the promotion of approved husbandry and slaughter practises. 352 auxiliaries were instructed at Farmers Training Centres and expected to disseminate the techniques learned. By 1989 the objectives, education of subsistence farmers in approved procedures, were not being met. The auxiliary trainers were inactive. Momentum was lost because of lack of interest.

Since initiation of the Unido project in 1989, much has been done to reactivate dipping and training programmes.

Farmer and butcher courses now operate on a continuing basis, with useful results, but much remains to be done before truly worthwhile gains are registered.

State slaughter and trading practices

The ZCSC (Zambia Cold Storage Commission) is parastatal. There are eight plants located at the main urban centres and ZCSC do not receive a government subsidy. Operational conditions at some of the plants are poor. Only four could be



be agriculturally based



A rural drying shed in Zambia



Mrs Manamwamba, Bimzzi

described as major abattoirs with byproduct facilities. The plant at Livingstone was built to EC standards. The seven others require extensive modification if they are to be brought up to similar standards.

Annual throughput is about 45,000 catt's. 50% of slaughter is for farmers, a slaughter fee is raised, and the meat and hides are returned for private sale. The other 50% are cattle purchased outright and the bulk of such output is sold to domestic tanneries for conversion to wet-blue and finished leather.

Parastatal abattoirs, together with municipal and private abattoirs, account for about half the national kill. The ZCSC, however, have a clear monopoly in hide supply because substantial quantities of the better hides originate from their plants and are wet-salted.

The ZCSC claim their domestic prices

are lower than international parity levels. Tanners disagree and say the commission's prices are excessive because no overseas transport costs are incurred on domestic sales. In the past there have been boycotts, with the ZCSC having to stockpile. At other times there has been intense competition and price wars.

Fluctuating conditions can result in the collapse of grading systems and reduced standards for aspects governing quality. In extreme instances sales by piece rather than weight occur, and reflect a marketing structure unlikely to resist declining

Perhaps the most useful Unido contribution to the Zambian leather sector was the recommendation that a trade association be set up. This materialised in LIAZ (Leather Industries Association of Zambia) which, over the last two years, has done much towards stabilising the situation. It has provided a vehicle for a common approach towards problems affecting the industry.

But all issues have not been resolved. An uneasy relationship between the ZCSC and tanners persists concerning levels of supply and raw prices. Tannery managements are worried about future sourcing and distribution in view of installed capacities.

The situation is likely to worsen now the state-owned SIDO tannery (Small Industries Development Organisation) is operational. Tanners fear it might receive preferential supply. In consequence, tanneries also buy hides direct from commercial and rural farmers to augment stocks, even though quality from rural outlets is poor and many buying points

The ZCSC does not put raw stock out to tender for conversion to semiprocessed. The latter is, however, a possibility feared by private tanners. They believe, if the ZCSC moved to value added wet-blue exports, the puolicly owned SIDO plant would receive special favour. Their fears could be groundless. Certainly — at present — the ZCSC sell equitably to all tanneries for processing either to wet-blue (which managements may elect to export) or to finished for local use.

The Commission works closely with Unido and LIAZ to improve raw material quality and has seconded staff to them to help in the demonstration of hides improvement techniques.

Facilities at these abattoirs vary from poor to good. Their services are used by commercial farmers and a few traditional ones. The fees levied are unduly high and are often channelled into general revenue instead of abattoir improvement. This encourages home slaughter and poor quality hides.

There are over 200 slaughter slabs in the rural areas. Of these, 72 are run by district councils and a slaughter fee is raised. Supervision is often poor, equipment minimal, and instances have occurred of the slaughter of diseased animals in the presence of veterinary personnel, with no action taken. At some slabs purpose-built pits for condemned offal were used to discard hides, without any attempt to collect or preserve.

Much of this has been corrected and the Unido project has been instrumental in providing approved tools, together with instruction in their use. Slabs which had fallen into disuse have been renovated.

The second phase of the project proposes the construction of more and the provision of closer supervision and control of processing.

About 40% of national slaughter is carried out at slabs. The balance of 10% of the national kill is carried out in villages. A large number of these hides are not recovered. Significant improvements at district council level, during the next phase of the Unido project, should yield improvement in both numbers collected and quality of raw material.

FAO statistics reflect hide production in Zambia has hovered round 200,000 for the last ten years. With an average 10% off-take and an estimated bovine popula-

ZAMBIA

tion of 2.86 million, expected production should be around 286,000 pieces. Data gathered by Unido, however, showed only 153,638 hides were collected in 1990, an extraction rate of 54%. Collections have definitely increased since 1990 but still lag well below the national

In the absence of an animal census and accurate recording of all slaughter, a reliable percentage determination of collection against slaughter is not possible. Unido phase 2 plans give priority to raw

material processing and marketing, and also to gathering statistical data.

Tanning sector

There are four tanneries in Zambia. The wish of all is to move from wet-blue to finished leather in order to add value, but the intention has been frustrated over the years by contradictions in government policies. Government interference has now lessened

and managements say the outlook has improved.

Prior to the establishment of the SIDO tannery all tanneries were privately owned. The future of SIDO is not clear but, in view of the move to liberalisation, presumably they could be put up for privatisation. Much may depend on how

they perform in comparison with the existing private tanneries. SIDO only came on stream recently and, in the new political climate, their performance will certainly be judged against that of the

private sector.

Unido initiated a tannery rehabilitation programme during phase 1 operations. At that time all Zambian tanneries suffered from broken down equipment, lack of spares and low productivity. These condition threatened the supply of finished leather to the domestic footwear and leathergoods factories. Assistance to the tanning industry, especially to Bata, has resulted in increased productivity and better capacity utilisation, as well as an increased flow of leather to finished product manufacturers. However the problems of obsolete equipment, low productivity and effluent disposal, remain at some tanneries and are to be tackled during phase 2 operations.

The Bata tannery at Kafue has a capacity of 700 hides per day and utilisation is about 90%. Bata's general manager in Zambia, Pierre Folshweiler said things were looking up and were certainly better insofar as Bata were concerned. When he was appointed general manager two years ago, there were two major problems: supply of suitable leather to the Bata shoe division and run-down tannery equipment. The latter had occurred from the inability during the Kaunda regime to obtain sufficient foreign exchange for replacement of



obsolete equipment and spares.

Since economic liberalisation the industrial climate has improved and helped in the solution of problems, and the making of better products. Bata welcomed competition because it kept 'everyone on their toes'. The Bata tannery sold finished leather to domestic competitors, and this despite the fact that they could easily absorb all output from their own tannery.

defects. Charles

Siulapwa, Unido

The Bata tannery is now running very well, thanks not only to the staff, but also to the impact of Unido which had given invaluable help during rehabilitation of the plant. The finishing department of the tannery, however, was still not quite as Mr Folshweiler would like it, but this would come, and was the next area to be tackled.

President Chiluba's administration had taken office in November 1991. Mr Folshweiler said, 'and its adoption of a trade liberalisation policy was wise and courageous'. Output from the tannery is expected to increase by 20% during 1993. Bata needs a 10% increase in production to cater for planned footwear production during 1994 --- and a further 10% for competitors who are also expanding.

Folshweiler said ine effluent treatment plant at the Kafue tannery was also working well, but still fe'l a little short of Bata standards, which were higher than the environmental standards called for by government.

Asked the major problem faced by tanneries, Mr Folshweiler said this was the shortage of hides and poor quality. Wet-blue exports to Europe, because of rising demand, were taking the cream of hides, leaving inferior stock for domestic usc. Bata did not export wet-blue and had for many years been the only producer of

finished leather. Other tanneries did export wet-blue. This made for shortages of quality raw stock.

On the subject of raw stock improvement, Folshweiler said very few hides available were of good grade and this applied to skins also. Zambian hides, Le said, suffered from excessive branding and poor slaughter technique, and this meant many rejects. Unido and government and the veterinary department, he went on, were doing useful work in the field, but the results were not yet significant nationally. In his view the problem was one of price.

Rural producers had, until recently, little incentive to pay attention to quality; twelve months previously, country hides fetched only US\$2.50 per piece from itinerant buyers. This had been partly corrected: a country hide now commanded US\$8 plus against US\$12 to US\$15 for a commercial origin hide. This was more realistic and, as long as prices kept up with inflation, he saw subsistence producers more motivated towards quality.

The importation of equipment and chemicals is now easier, and Folshweiler saw tannery production rising to meet increased domestic demand. There was a hides shortage, with pressure in some quarters for a ban on raw exports or a limitation on wet-blue export to a maximum of 10% to 20% of availability.

A gentleman's agreement existed that wet-blue would not be exported for six months, and the position would then be reviewed. But the fact was many rural hides did not find buyers and went to waste. This was largely because of poor quality but, if tanners did not utilise all resources, government might refuse to limit exports.

Commenting generally Pierre Folshweiler said Zambian labour needed training, but performed comparably to anywhere in the world if training was

Asaria Leather Industries, Lusaka,



have a capacity of 350 hides per day but actual production is 200. The tannery used to produce only wet-blue; now there are finishing facilities and the tannery makes industrial gloving and upper leathers.

Mr Mehta, managing director, said the shortage of hides would worsen and he saw tanneries having to import hides. At present 90% of Asaria's production is wet-blue and the rest is taken to crust or finished. Wet-blue output goes to the EEC and the Far East.

Mr Mehta said quality of finished leather was a problem, because the best quality hides went to wet-blue for export. Other difficulties were that devaluation made it difficult to finance needed imports and taxation compounded the financial problems.

Company tax was 15% on exports, he said, and 45% on domestic products. This was an encouragement to export

but, at the same tinte, there were continuous demands for finished leathers to supply the domestic market and complaints about the quality.

Labour costs used to be low, but inflation led to wage increases. If this went on Zambian leather would outprice itself.

Mr Mehta saw his tannery exporting crust to the EC within two to three years and finished leather in about five years time. But much of this was conjecture, he said, and perhaps wishful thinking. Liberalisation meant different things to different people. The end results, he said,

might be good or bad. It was difficult to plan for the future in conditions of uncertainty; liberalisation had only been the policy for 18 months, and its effect on industry was not yet clear.

Mr Mehta ended by saying an environmental association had been set up in Zambia and would request legislation. In the hard times which were being experienced, this would place a burden on tanneries. His plant had a treatment system which was functional. It had been equipped by Unido with the civil work completed by Asaria and the treatment system was now operational. Other sources, however, insisted this was not correct: the Asaria effluent treatment plant was not functional because, in the absence of legislation, the proprietors were not prepared to accept the running costs involved.

Kembe Tannery and SIDO Tannery are both in Kabwe, known in colonial days as Broken Hill. Kembe's production is 200 hides per day to wet-blue against installed capacity of 300. A finishing facility has just been commissioned. Upholstery leathers are supplied to the domestic market and also leather for footballs and leathergoods.

The SIDO tannery, which is state

owned, has a capacity of 300 hides a day to wet-blue for export. Equipment for the production of finished leather is now to hand and is to be put into use shortly.

Official policy in Zambia today is to discard parastatal enterprises and move to a privatised economy. Whether such rumours have a factual basis is doubtful. If the tannery proves profitable, there is little reason why government should wash their hands of it.

Finished leather products

The Bata Shoe Company is impressive, as most Bata plants are. The shoe factory has a capacity of nearly 12,000 pairs per day of which 3,500 are leather uppered. The leather footwear is well up to Bata standards in spite of poor quality raw material. This reflects well on Bata technical expertise, supervision and staff training.

There are three other shoe factories in

different things to different Bata Tannery has been rehabilitated

Zambia: Copperbelt Footwear, Universal Shoes and Kamra Shoes. Copperbelt Footwear Ltd make 500 pairs per day: leather, plastic and textile uppered. All production goes to the domestic market except for safety shoes exported to Namibia. Copperbelt Footwear were established in 1969 under foreign ownership but are now wholly Zambian owned.

Universal and Kamra Shoes are not in production. They plan to come on stream again when current problems are solved. Installed capacity at Kamra is 500 pairs per day, mostly leather, but some textiles and plastics. Before closure actual production was about 200.

Since most of the Zambian population is urbanised, the footwear sub-sector is important nationally. But the problems are legion: lack of quality hides for processing leather to international standards equipment and spares problems, por technique and fashion styling. These are limiting factors in all companies except Bata. Component manufacture is also a need.

The government of Zambia has to acknowledge that the footwear industry is relatively embryonic and, again with the exception of Bata, needs more international and governmental support to

facilitate development. In the field of ieather products, particularly footwear, the government should shield manufacturers from unfair trade practices — such as the dumping of cheap footwear products which are supported through subsidies in the countries of origin. Finally Zambian manufacturers need to place more emphasis on quality.

Unido phase 2 plans give attention to all the factors quoted. The next year or two should see the Zambian footwear industry in a stronger position than it is

today.

Mrs Manamwamba, director of Bimzzi Leather Goods Company, describes herself as a frustrated academic. She has degrees in sociology and economics, and was at one time a consultant to Unido and the ILO. The concept of women's development in leather aroused her imagination in 1970. She took the plunge and started Bimzzi in 1980. The success of

Bimzzi leathergoods shows beyond argument that women do as well in industry as men.

The company started with three staff, minimum equipment and plenty of enthusiasm. Today, the business is thriving. It has 65 employees, of which more than 50 are women. This leaves Mrs Manamwamba open to charges of anti-male discrimination!

A full range of leathergoods, including garments, safari knapsacks and school bags, is marketed. Annual consumption of leather is 100,000 ft², and would be higher but for the

shortage of leather of suitable quality.

Bimzzi Leather Goods has been quality conscious from the beginning and tries hard to use only suitable leather in manufacture.

Mrs Manamwamba said of the four tanneries in Zambia only Bata used to produce finished. Other tanneries now made finished leather and her problems had eased a little. But, despite this, only 25% of leather received was truly acceptable quality. Her standards were, therefore, difficult to maintain.

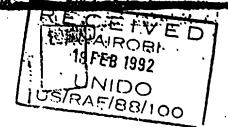
Most of Bimzzi's production goes to the domestic market and the PTA (Preferential Trade Area), especially Kenya. Enquiries have been received from the EC and the Far East. Samples sent were not acceptable because of leather quality. But their workmanship had been praised. Thus the basic raw material had prevented her penetration of world markets.

Bimzzi also produce footballs. Output is near FIFA standards. Again, leather quality is the limiting factor. When a solution is found Bimzzi intend applying for FIFA certification.

The Bimzzi plant is professional in every sense. They have received technical and training assistance from Unido in the past, and hope for more.

Enter Enquiry No. 023

UNIDO fund boosted



UNIDO FUND IN CASH BOOST

Business Review Reporter BATA has contributed about RI.S million to the UNIDO RO.000 million revolving fund nimed at developing Jambia's feather landstry.

Presenting the X1,591,327.00 cheque to the Cleather Industries Association of Zambia chairman Mr Chris Spyron during the Innocting of the UNIDO revolving fund at Famodal Blood, yesterday Deputy Minister of Commerce and Endustry Mr Dipuk Patel thembed UNIDO for its efforts in the development of the country's leuther industry.

Air Patri said to ensure

try, Government find invested about K250 million refublishing a Kabne based SIDO ammery plant.

i But he said the SiMO turnery project was just, a "white elephant" with production capacity of 2.000 hides a day which was far from meeting the country's scather requirements considering that it could not accommodate the 256.000 hides available in Zambia.

The minister challenged other donor agencies to take a leaf from UNIDO in bankling leather goods production and the private sector as a whole.

UNIDO country directer. Dr Eartle Taylor said the

porpanisation was storely succeeding in developing the leather industry in Zambia.

the suid the private sector acted as the engine of the economic growth and thus seeded adequate Hancisi support.

The K 100 million UNIDO revolving fund would bring afforduble credit to the private sector and wishin the reach of small and medium scale benther entrepreneurs.

The fund would noblise international resources for the primitalian of the action.

He orged the Leather Industries Association of Zimble (Litz) and fund Irantess to continue exercising proper business management and akilis.

When he rereised the cheque Mr Spyror thanked UNIDO and Bats for the continued financial help to the beather industry.

69

Hides and skins exports from Zimbabwe began late in the 19th century while leather manufacture started during World War II when Bata built a tannery and military boot plant. Roy O'Shaughnessy is on his home ground here



Zimbabwe prospered

ther shoe factories opened after the war but used mainly imported leathers. Almost all hides and skins, apart from Bata consumption, were exported.

The Unilateral Declaration of Independence in 1965 saw international sanctions imposed. Bata expanded production and new tanneries opened. When independence was recognised in 1980 there were four tanneries and 60% of hides produced - about 300,000 hides annually - were processed to either wet-blue or finished and demand for leather and footwear was met entirely from local sources.

The sanctions era was ideal for new enterprises: the domestic market was captive and government was anxious for national self-sufficiency.

Industry as a whole prospered. The favourable conditions held — despite problems such as employee biased labour legislation and perennial foreign currency shortages until 1991. Since then recession has come with a vengeance and, today, all seven tanneries in Zimbabwe face an uphill task.

The underlying causes of leather industry problems lie in the past, but the reason for their sudden appearance has been the government's switch in policy from a closed socialist type economy to an open one called ESAP (Economic Structural Adjustment Programme).

Implementation of the policy is well underway and constitutes a major change in Zimbabwe's economic patterns. The purpose is to reverse the socialist policies introduced in 1980 which severely damaged the industrial infrastructure.

ESAP involves removal of all restraints on industry and change to a competitive free market trading situation. This includes gradual repeal of tariffs protecting domestic manufacturers from foreign competition, the stopping of subsidies to parastatals, and easing import restrictions on machinery and chemicals needed by industry.

In line with the new policy many raw materials needed by industry have been placed on Open General Import Licence (OGIL) and exporting companies can retain part of their foreign currency earnings against needed imports. Negative aspects are, however, increased duties on some imports and devaluation of the Zimbabwe dollar to nearer its true value. The results are steep increases in input costs and price hikes to consumers. Lower income groups now find it difficult to survive and industry is under pressure; many small businesses have closed and large companies have retrenched.

Devaluation of the currency undoubtedly helps exporters by making Zimbabwean goods cheaper in international markets, but it also makes imports more expensive. The domestic market has contracted as a result of consumer resistance to high prices and government anti-inflationary measures reduce money supply. In consequence, footwear purchases fell to less than 50% of normal during 1992, but have picked up a little last year.

The need for exports becomes essential in a contracting domestic market situation, but there are difficulties. Govemment used to control beef producer prices at artificially low levels and so producers shifted sales to private abattoirs without the modern processing facilities of the parastatal CSC. Hide quality

Also, the drought of 1992 resulted in under nutrition and one million cattle deaths. Tanners complain that first grade domestic hides (suitable for export quality leather) are unobtainable, and they must now import raw stock at astronomic prices because of the weak dollar. This is clearly counter productive to success in the world arena.





Participants in the Unido shoe design and pattern cutting course with Roy O'Shaughnessy, kneeling left and Alemayehu Chuffa, standing left. Above: animals to slaughter at new CSC abattoir. Right: Msasa hair-off impala



under sanctions era

All domestic prices have risen. Power costs, for example, have doubled over eighteen months and manufacturers cannot absorb such increases without raising prices. This again reduces demand. Leather footwear now sells at prices beyond the range of lower income

A future danger is the prospect of the domestic market being opened, as ultimately it must be, to external competition. Footwear from the Far East, especially synthetics, could be landed in Zimbabwe at prices domestic manufacturers cannot match.

Zimbabwe executives certainly have the ability to cope successfully with the testing times ahead. But a problem for some will be adaptation to the new situation. Zimbabwean industry operated within a controlled economy for nearly thirty years. The controls were at first designed to counter international trade restrictions but, after independence was achieved, they were retained as part of socialist economic doctrine.

Few Zimbabwean executives have experience of anything other than a controlled economy. The move to open market trading must pose problems for some. Nevertheless, executives spoken to all had confidence in the future.

The Zimbabwe Bata Shoe Co Ltd, Gweru, are a progressive organisation motivated not only towards profits, but also to furthering national interests and employee welfare. Bata employ 3,500 people in Zimbabwe. In an African context this means 20,000 or more are reliant on the company.

Bata play an active part in the preparation of leather and shoe related specifications by the Standards Association of Zimbabwe, and are also members of trade and technical bodies such as LIZ (Leather Institute of Zimbabwe) and FMTA (Footwear Manufacturers and Tanners Association).

General manager Ed Duthie said production planned for 1992 was 13 million units but they had fallen slightly short of target. About 17% of total footwear production — 2.2 million pairs — were leather uppered, and the plant tannery had made all the leather required.

Production of leather to European standards is difficult because of the few full grain quality hides available. Bata, therefore, aim their footwear production at the middle and lower income groups which readily accept corrected grain leathers. Demand for up-market footwear in Africa is limited, Mr Duthie added.

Exports make up about 20% of Bata production, Duthie said, of which 5% was destined to Europe and 15% to South Africa and neighbouring states.

He thought the larger Zimbabwean tanneries and footwear plants would be able to hold successfully against imported leather and shoes because they had established retail outlets and enjoyed short transport hauls. But some smaller companies would fail unless they were able to hold on to a viable share of the domestic market

Profit margins were wider domestically than in the export field but the market was shrinking. In the future the smaller businessman would find it harder to retain a sufficient share.

1992 had been a difficult year Duthie said, and especially so after May when the rains had obviously failed. A positive feature had been adoption of the ESAP policy by government. It was a courageous decision because, during its early phases, the poorer sections of the population would suffer most from rising prices. But there was no question that the long term goals of ESAP were desirable and everyone would benefit finally.

ESAP was going well, though marginally off track and a little behind schedule. OGIL needed extension to include



machinery and components but ERS, the Export Retention Scheme, had yielded good results.

Bata is cooperating with competitors to overcome disabilities affecting the leather industry. If industry learns from past mistakes and government persevere with ESAP, which Duthie believes is the only way to go, things will come out well in the end. ESAP has been criticised because of steep increases in input costs but these were unavoidable and would level out in time. He exhorted others in the leather industry to copy the Bata policy of not passing on rising costs unless absolutely necessary. Bata had not put up prices since 1991. It was also policy to keep retrenchments to a minimum. These policies were in the national interest, helped keep people at work and maintain consumer demand.

Good rains through 1993 and 1994 would solve many problems, he con-cluded, but Bata had contingency plans in the event of poor rains again. Also, great strides had been made in the tannery effluent treatment system, and further improvements were in hand. Discharge was now possible directly into the municipal sewers. The tannery was in a healthy state, ready for the time when hides became freely available.

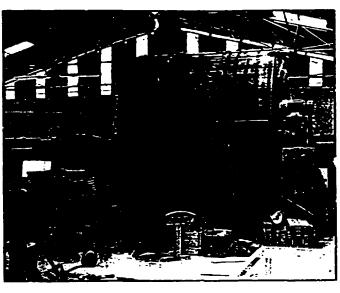
Belmont Leather, Bulawayo, and Eagle Tanning, Marondera, are both part of the G & D Shoes Group. Belmont used to process 25 tonnes of raw hides daily and Eagle 14 tonnes, all to wet-blue. Finished leather production ran at 50,000 ft² per day.

When the drought broke farmers started rebuilding decimated herds, and there is now a shortage of hides. This, added to the recession and a contracting domestic market, resulted in closure of the Eagle plant and a fall in production through 1992. Output began to pick up mid-1993 as steps to import hides took

A problem for Zimbabwean tanneries is, however, not just the shortage of domestic hides but more so an absence of top grades. To some extent this is self inflicted; the CSC, the major hide supplier, exports 25% of production each month, 8,000-9,000 hides, as wet-blue and a large proportion are of good grade.

Wet Blue Industries, a consortium of Belmont Leather, the CSC and private hide merchants S M Lurie & Co, contract tan for the parastatal. Belmont, additionally, export about 4,000 wet-blue a month on their own account. A similar number processed for Lurie's are also exported. Other tanneries also export a part of their production.

Tanners condemn the CSC for the very few top grade hides available, only about 8% of hides offering, but the CSC say tanners forget they are also to blame. A deciding factor, however, is that in the past tanners found themselves betwixt and between: on the one hand external Right: recently commissioned drum at Bata, Gwern. Every effort is being made to prepare the tannery for the future; below: Derswiss director, Ngwenya on right with factory foreman





customers calling for quality wet-blue and a desperate need to earn foreign currency (in return for licences from government permitting the import of essential chemicals) and, on the other, a loss of raw material suitable for full grain leather production for export footwear. With the advent of ESAP and OGIL imported chemicals are more readily available and the necessity to export wet-blue should ease.

Belmont sheepskin production is about 2,000 per month, a fall from the 8,000 of last year, and is converted mostly to garment leathers. Goat, at 2,000 monthly, goes for men's and ladies' uppers and poorer grades to linings. Upholstery leather is not produced. Zimbabwe Tanning, a subsidiary of Belmont, process 200 heavies per day to sole leather. Most is exported, though a fair proportion goes to G & D Shoes for soles.

1994 will see local hides still in short supply as efforts to rebuild the national nerd continue. This assumes good rains again. But, should this not be the case, the results will be catastrophic - not only for the leather industry but the country as a whole. Agriculture is the mainstay of the economy. In any event goat, comparatively drought resistant, will come into more common use for uppers, and imports of hides are likely to rise. Zimbabwean tanners, interestingly, prefer the local hides because yield is better, 1.8 ft per kg against 1.4 for European origin.

Supply of imported essentials is no longer the problem it used to be. Andy Duff, tannery director for the G & D Group, said the wheeling and dealing for chemicals necessary before ESAP was over and he was at last able to standardise on chemicals, hold lower stocks, and produce better quality leather.

Duff paid tribute to the Unido Tannery Rehabilitation Project of 1992. Without the equipment Belmont had received and been able to pay for in Zimbabwe currency — Belmont Leather would now be in serious straits. Much of the equipment used during the sanctions period and thereafter were museum pieces. The position now was better but equipment and spares remained a problem.

The solution lav in a modernisation programme combined with thorough reconditioning of older equipment. But over sophisticated items should be avoided because, under African conditions, servicing and maintenance of electronic equipment is very difficult.

Like Ed Duthic, Andy Duff believes the Zimbabwean leather sector can hold its own against foreign competition. He agrees also that 'the main export markets will always be in the Africa region rather than Europe'

Duff said there was a need in Africa for a cheap hard wearing shoe which gave value for money. 'The continental market is vast', he said, 'and at most only 10% of Africa's peoples wear shoes. Sales possibilities would be fantastic if a shoe affordable by the masses is

Apart from African possibilities', Duff said, 'the European and US markets

ZIMBABWE



need close attention. Zimbabwe has a crying need for hard currency earnings but to substantially penetrate sophisticated markets, a major review of leather and footwear industry practises is necessary.

In Africa, far less affluent than Europe, footwear is made to last and is of strong construction. Fashion changes are not frequent and styling tends to be archaic in the view of European buyers. Manufacturers are attuned to local conditions and, in some quarters, there is resistance to change.

If outlets in European and US markets are to be found, Zimbabwean tanneries will have to meet European and US preferences.

Belmont employ nearly 400 people. They produce sufficient finished leather to cater for the output of G & D Shoes (8,000 pairs per day) and Castillian Leather, the leathergoods division of the group. Belmont are also suppliers of finished leather to competing domestic shoe manufacturers.

Belmont are a skills conscious tannery: staff include four graduates of Nene College, Northampton, and a further three due to qualify at HND level shortly.

Owned by Zimbabwean born Alan Feigenbaum, G & D Shoes, from humble beginnings (50 pairs per day in the late 1960s), have become the largest producers of leather shoes in Zimbabwe and Belmont Leather the biggest tannery. Alan Feigenbaum has the knack of selecting able people.

Andy Duff, also Zimbabwean born, is of British stock. A farmer for ten years, he left agriculture to join Eagle Tanning in 1970. Employed in the workshops, he built tanning drums and paddles and looked after maintenance. After the take over of Eagle by the G & D group, he joined Belmont Leather.

The original Belmont Leather tannery was small and had been a hides shed. It has grown with the years, in a series of stop-gap responses to urgent needs. Despite inspired modifications to buildings, layout and flow lines, which have improved performance, there are inherent limitations to future progress and efficiency. The long term answer lies in a new tannery building.

The G & D group is alert to the challenges ahead. A programme for upgrading was prepared immediately government gave warning of its ESAP policy, and has yielded dividends.

Deraswiss (Pvt) Ltd, Kadoma, are part of the Deras Group operating in many countries. Negotiations to operate in Zimbabwe started in 1987 but government approval was delayed until 1989 due to opposition from existing tanneries. They rightly said that a domestic hide shortage existed and, as legislation prohibited the import of hides, a further tannery would only make the situation

worse with greater competition for raw.

The Deraswiss plant at Kadoma was officially opened in April 1991 by Enos Chikowore, minister of public construction and national housing. He said the new venture would initially produce wetblue only. In a second phase it would move to crust leather and, finally, to finished leather. Deraswiss would then supply leathergoods and footwear plants which did not have associated tanneries.

Production of value added leathers beyond the wet-blue has not yet started because of recession and the recent drought, and is unlikely to begin in the short term. Asman Ngwenva, director at Kadoma, and Tassos Dimitriadis, general manager, admitted to difficulties in obtaining suitable hides. They said raw stock was expensive and CSC quality had fallen. They believed this had happened because the parastatal now bought communal origin cattle.

Minimal labour at Imponente Tanning

Previously the greater part of throughput had been commercial origin animals.

The move of commercial producers away from the CSC was, they said, a direct result of past government control of beef producer prices at levels below the commercial costs of production. Excessive control had now been scrapped. but too late; commercial farmers retained their links with private abattoirs because it was possible to negotiate. CSC policy was too rigid. Also the private abattoirs gave a more efficient service and many had credit and trading facilities which were superior to those of the CSC.

Deraswiss production is marketed through agents in Italy and the service provided is excellent, Ngwenya said. He emphasised that marketing was always difficult and made more so in Zimbabwe by a fall in hide quality. There were many advantages in using the services of an agent, he said. The priority now, however, was to achieve and maintain selection grading standards which enabled semi-processeds to sell readily in world markets

Asman Ngwenya believes the need at Deraswiss is to process to finished leather, despite shortages of raw material and the capital necessary for equipment. This would conform with understandings reached with government when the plant was opened. But, in conditions of recession, he felt crust and finished leather production was a long way off. The first goal was to survive until things got better.

Management at Deraswiss is such that they will pull through. A new Joker drum has been commissioned to expand wetblue production. This is hardly an indication of doubt about future prospects.

Msasa Gameskins (Pvt) Ltd are a small tannery which began by processing gameskins. The owner, Leigh-Smith, is Zimbabwean born, of pioneer stock. A textile printer by trade, he worked for Bayer (Zimbabwe) as a salesman for more than four years and his customers included tanners.

In 1989 Leigh-Smith decided to try running his own tannery. Without formal training and literally on a shoe string, he bought a few items of discarded tannery equipment. Today his turnover is Z\$1.5 million per annum.

Leigh-Smith David began by processing gameskins, hair-on, for the tourist trade but soon found throughout insufficient. This led him into

'having a go at anything' which included cheap grade industrial gloving and goatskin lining leathers and experimentation with conventional hair-off output from Zebra, Eland and Impala.

Within twelve months, Msasa Gameskins were producing goatskin upper and garment leathers of acceptable quality. A favourable factor was that, at the time, demand far exceeded supply and established tanneries - all of which run in tandem with associated footwear and leathergoods plants --- naturally give preference to their own subsidiaries. Independents had to take what was left. Msasa Gameskins were able to fill the breech.

These developments enabled Leigh-Smith to replace some ancient equipment and take on additional labour. The next





two years saw more nappa production and the winning of a major order from France for sheepskin and gameskin iackets.

Leigh-Smith believes there is tremendous potential in Zimbabwe's game population. The larger species, Eland, Kudu and Sable, make excellent upholstery leather and smaller species are suitable for garments and upper leathers. He said large numbers were culled each year (to keep populations within the capacity of natural vegetation to support them), but the skins were often not preserved and, when they were, were frequently so damaged by spread shot as to be useless. He said more efficient methods should be adopted and, in times of cattle hide scarcity, would go a long way towards alleviating bovine shortfalls.

Processing raw materials, Leigh-Smith said, has improved as a result of OGIL, though importation of machinery remains a problem. It had taken him two years to bring in a few sewing machines for his leathergoods section. The cause of the delay had been government bureaucracy and red tape. The new minister for industry, Chris Ushewokunze, had done much to improve the situation.

The main problem now was finance; his cash flow position was serious because interest rates were 40% plus on bridging loans necessary between export of goods and receipt of payment. The obtaining of long term finance for expansion was even more difficult. The Zimbabwe Investment Centre and the African Development Bank seemed more ready to fund large projects than small ones, and the Indigenous Business Fund did not cater for whites even though born in the country. Nevertheless, he was optimistic about the future.

South East Tanning (Pvt) Ltd are located at Chiredzi, near the Mozambique border. They officially opened in March 1992, but did not go into production until the end of the year. The tannery is financed by a consortium of crocodile and ostrich skin producers under the auspices of Topaz (The Ostrich Producers Association of Zimbabwe) and the CFAZ Crocodile Farmers Association of Zimbabwe).

The new tannery specialises in crocodile and ostrich skin to wet-blue but, when the necessary skills and experience have been gained, will progress to crust

The tannery technical director, John Kleynhans, was previously factory manager at Eagle Tanning. He has wide experience with conventional hides and skins plus gameskins, including elephant and hippo. But particularly croc, and to a lesser extent ostrich, are new departures. Since joining South East, however, Kleynhans has visited croc and ostrich tanneries in Japan, the US and Europe, to gain practical experience.



Tannery floor at South East Tanning

South East are looking first at 1,500 crocodile bellies and 150 ostrich a month to wet-blue. They hope to build up to 3,000 and 300 respectively and after that, if Topaz & CFAZ plans materialise, production could climb.

Questioned about teething difficulties, the manager said there were a few with flay and preservation of ostrich. The tannery had run open days to demonstrate technique - farmers usually carried out cure in their own premises and the position should improve. He added that an ostrich abattoir complying with EEC standards was planned for Harare (specifically to promote ostrich meat exports) and flav and preservation would then improve even more.

Some overseas customers, he remarked, had complained about drawn grain in exported croc, even though the skins looked fine at the time of despatch. This could be connected with pickling or, possibly, with liming, but could also be a business ploy. The croc market was an exacting one and South East, with time and experience, would learn what was, and what was not, justified.

The same was true with ostrich, he said. In Zimbabwe it took eleven days to wet-blue from wet-salted. In the US processing time was three days at most, and could be as little as two.

Allowing for lower wage scales in Zimbabwe, it was still difficult to match production costs in the US because of differences in efficiency. South East were reviewing process recipes, flow lines, production planning and control, in fact every facet of production, and this would continue until productivity matched that of competitors anywhere.

South East Tanning's primary objective, Kleynhans said, was to earn a name for quality croc and ostrich leathers. They also intended to specialise in general purpose leathers from impala, warthog, wildcheest and other gameskins, and quality of output would remain the watchword.

Assessment of South East Tanning's long term viability is difficult because they have only been in production a few months. But the portents are fair: their basic raw materials, croc, ostrich and gameskins, are not nearly as affected by periodic drought as the national cattle herd. Delivery costs of processing chemicals are only marginally greater than those of tanneries in the main city centres. Engineering back-up available.

A negative cost factor is, however, the distances skins will have to travel for processing; most producers are located in distant Mashonaland province to the north and Matabeleland province to the west. Were it not for this, salt preservation could have been dispensed with and short term chemical cure adopted, with attendant reductions in preservation and effluent treatment costs. But all this must have been taken into account when the Chiredzi location was chosen.

The South East Tanning venture, if successful, will not only benefit the Chiredzi area, which sadly needs employment opportunities, but also enhance export earnings as a result of increased product value. The venture can only be welcomed and wished success.

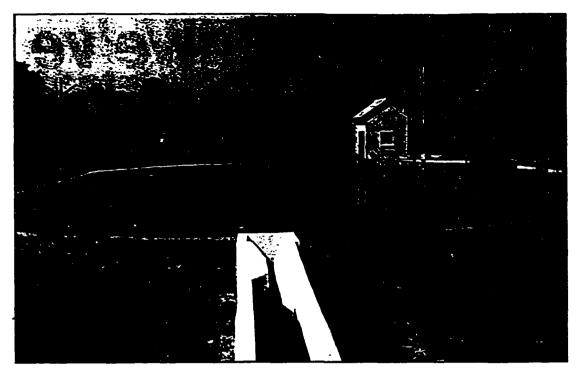
Imponente Tanning (Pvt) Ltd are part of the Superior Group of Companies founded in 1967 by Manuel C da Costa, an immigrant from Portugal. He is still chairman of the group but his son, Carlos, took over as managing director in 1983.

The group today includes: a tanning and footwear plant, a hide buying agency, a component manufacturing division, an engineering sector for machinery construction, retail outlets, management consultancy and property divisions. The group employs 450 people and, under the direction of Carlos Costa, has made great strides

Carlos Touguinha is responsible for Imponente's production operations. He used to be tannery manager, but was



Arration tank at South East Tanning. Zimbabwe tanneries generally maintain good effluent treatment systems



appointed tannery technical director during 1991 in recognition of his services. The tannery produces full grain, moccasin, goat nappa, lining, suedes and upholstery leathers, and also wet-blue and crust for domestic use and export.

Finished leather production in 1990 was 2,200,000 ft² and has risen steadily. By the end of 1993 output will exceed 5.5 million ft³. Leather quality, too, has improved. Australian importers of Imponente's upholstery leathers have praised both quality and adherence to delivery schedules. They have shown their satisfaction by placing repeat orders.

The successes of Imponente Tanning are traceable to two factors. Firstly, professional management; good forward planning and willingness to invest in well thought out plans. Secondly, sound and thorough implementation of plans at both executive and floor levels.

Both Carlos Costa and Touguinha grew up in the business. The latter is the son of the original tanner brought out from Portugal by M C da Costa in the early 1970s.

Since 1990 over Z\$6.6 million has been invested in new machinery for the tannery. Part was due to assistance under the Unido Tannery Rehabilitation Project but by far the most was raised internally. Apart from new plant and equipment, the tannery has been subjected to a detailed ergonomics study. As a result layout has been revamped, handling aids provided, floors relaid and graded for efficient drainage, and generous provision made for gangways, incoming raw material storage and finished leather despatch areas.

The results are obvious: a clean tannery, smooth production flow lines, a total absence of bottlenecks and ease of supervision; all of which make for maximum production at peak quality and minimal cost. Additionally, a laboratory responsible for monitoring effluent and chemical and physical quality control, has been equipped and properly staffed. The tannery is now the best equipped and most modern in the country.

The dividends from the tannery modernisation and development programme have begun to accrue both at home and abroad. On the home scene footwear marketed by the group's footwear division, Superior Footwear, is recognised as up-market and good value. Abroad, international buyers have shown satisfaction by placing further orders and complimenting the quality of initial deliveries. William Lamb Footwear UK, for example, recently rated uppers received as being 'as good as anything required in Eurone'

Of the 3.3 million ft' of finished leather produced during 1992, about 49% was exported either as stitched uppers and finished shoes, or as garment and upholstery leathers. Exports went to South Africa, Mauritius, Australia, the Far East and Europe.

Questioned about the situation in Zinibabwe and the likely impact of ESAP, the managing director said he was 100% confident about the future of the leather industry and the country. He believes ESAP is the correct economic course, but agreed there were storms ahead. He thought some companies might find adiustment difficult.

Costa said he saw shortages of raw hide (which were likely to become more severe) and bureaucratic controls as the main constraints. But, with ESAP underway, hides could now be imported, controls had been reduced, and essential imported chemicals were more available.

He agreed input costs had risen steeply because of devaluation, but felt the position would stabilise when the currency reached its true value. In the meantime, there would be hardships for industry and consumers alike.

At grass roots level disillusionment with the ESAP policy could result and protest demonstrations follow. This was a real danger many people thought, possibly with the government suffering a loss of nerve and slowing or reversing the economic programme. But he did not see this happening. Government had shown much political courage in adopting ESAP and he believed they would stick with it until fruition.

On trends and markets, he thought crust and upper exports would rise, and similarly footwear, because they represented increased product value. Quality and competitive pricing would always be the deciding factors in world markets. Imponente had achieved successes here but were not complaisant, and constantly sought to improve quality and reduce costs. At one time he had seen expansion of inter-Africa trade yielding enormous benefits but - apart from South Africa and Zimbabwe - his hopes had not materialised.

Imponente Tanning, in fact the Superfor Group as a whole, have made tremendous progress. This will undoubtedly continue. Turnover, for example, has increased ten fold, over in the past few years and, today, is more than Z\$50 million annually. Since 1980 we have always invested 10% of turnover in plant, equipment and land', Costa said, and this shows our confidence in the future of the country and the leather industry'.

THE United Nations Industrial Development Organisation has two leather projects underway in Africa; an all-Africa hides and skins, leather and leather products improvement project, and a tannery rehabilitation project. In this issue, ROY O'SHAUGHNESSY, a key UNIDO executive, examines the tannery rehabilitation project in Zimbabwe.

Welcome equipment for tanneries

THE tannery project is funded by Italy and beneficiaries in the English-speaking section are Ethiopia, Somalia, Sudan, Kenya, Zambia, Tanzania, Malawi and Zimbabwe.

The major Zimbabwean tanneries had already prepared modernisation plans when the project started in 1989, but implementation was difficult due to foreign exchange shortage.

Research showed that extensive benefits were possible in terms of higher productivity, increased employment, and improved export potential, provided the necessary machines could be imported. Secondary benefits were foreseen in downstream sectors like footwear, leather clothing and goods, and upholstery leather.

The various tannery modernisation projects were studied by UNIDO, and almost all requests for assistance were approved. Purchase orders for equipment were processed in December 1989, and delivery began in mid-1990 with completion by January 1991.

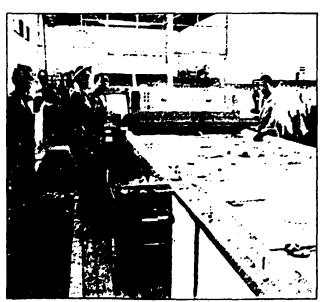
Equipment supplied

This includes several Vallero drums, one Poletto fleshing machine, two Finvac vacuum dri 's, one Flamar shaving machine, one conditioning unit, one overhead chain conveyor, and one toggling machine. The external value of tannery equipment supplied exceeds Z\$2 million, a generous "shot in the arm" for Zimbabwean tanneries, particularly as there are only three tannery groups.

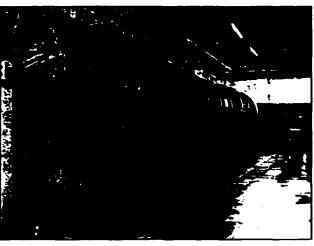
The benefits of the UNIDO project extend far beyond the tanneries which have received equipment. In effect the items supplied have not been donated to tanneries - rather they have been able to pay for the equipment in local currency and the monies generated by this are administered by the Leather Institute of Zimbabwe in conjunction with UNIDO, for the benefit of the local and regional leather industry.

The Zimbabwean tanning industry clearly has the technical knowhow and financial resources to undertake expansion and rehabilitation projects, but faces problems of foreign exchange for the upgrading of plant and machinery. UNIDO assistance was therefore aimed at overcoming this problem rather than providing financial assistance to tanneries.

Discussions with all concerned - Government officials, tannery representatives and LIZ managerial staff, resulted in agreement that beneficiaries under the UNIDO rehabilitation project would contribute equivalent amounts in Zimbabwean dollars to LIZ for the further development of the hides and leather industry.



The new conditioning unit in use ... the benefits go far beyond the tanneries.



Tannery layouts have been altered to improve flow lines and provide space for additional equipment.

Benefits and improvements

The partial meeting of tannery expansion needs by UNIDO has made it easier for the Minister of Industry & Trade to view sympathetically remaining tanner applications for import permits.

Almost all local tanneries have identified problems of layout, lack of storage facitilies, and a need for structural modifications, if equipment is to be used to maximum capability. Thus the UNIDO project has acted in many ways as a catalyst for change and review.

Arrangements at tanneries for approved equipment have included removal of obsolete items, changes in layout, the building of dust free areas, provision of new drainage systems, a more efficient internal transport system for hides and skins, and the study and elimination of wittlenecks and steps to reduce congestion.

Machinery provided under the project has been available for three months at most, yet the benefits were immediately noticeable, and are already substantial.

New drums have meant energy savings of 25% and water savings of 30% with an associated reduction in effluent discharge; new fleshing machines have resulted in better fleshing and a 45% increase in offtake. The latter is equivalent to a 13% saving in chrome tanning salts useage; the Finvac vacuum driers have led to improved quality output at the retannage stage and a yield increase of 3% minimum, while the rotary sprayer has reduced finishing products and pigment useage by about 30%. This is an important factor in conditions of foreign exchange shortage.

At one plant, productivity has increased by nearly 32%. Output is up by 33 sq feet per man, per day, and this is expected to rise to 66 sq feet in the near future.

Human Resources

The continuing success of the tannery project can only be assured by a complementary development of human resources. UNIDO provides assistance in this sphere by sponsoring the visits of experts to Zimbabwe.

A series of practically oriented technical seminars were held during 1990 and dealt with a wide range of topics.

The Zimbabwean hides, leather, and footwear industry is deeply appreciative of assistance received from UNIDO in the provision of both equipment and technical expertise; it looks forward with confidence to increased productivity, more consistent quality, and greater competitiveness in export markets — perhaps even a breakthrough into the lucrative EEC markets.

The possibility of this becoming a reality is enhanced by the planned provision, by UNIDO, of a computer aided system. This will be located at the Leather Institute of Zimbabwe and will serve both the Zimbabwe footwear manufacturing sector and the participating countries of the All Africa project.

Successful UNIDO tannery project primes export drive

As part of a wider All-Africa hides and skins, leather and leather products improvement scheme, the United Nations

Development Organisation is implementing a tannery rehabilitation project.

Its purpose is to modernise existing tannery plants, so fitting them to produce quality leathers for domestic consumption and also to reach export market standards.

the rehabilitation project is funded by Italy and administered by UNIDO. In the Zimbabwean context, the project has been an outstanding success both for UNIDO and local tanneries.

There are three major tannery groups in Zimbabwe and all had modernisation plans prepared prior to the UNIDO project starting mid 1989.

But adoption of the plans was difficult: Zimbabwe, in common with most African countries, is very short of foreign exchange and manufacturers require government permission to import plant and equipment.

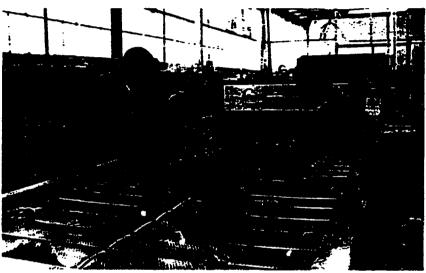
Import allocations are difficult to obtain even when availability of needed equipment would yield extensive benefits in terms of improved productivity, increased employment and better export potential.

Additional benefits

The various tannery plans were studied by UNIDO within the framework of the proposed rehabilitation project but additional benefits were also identified in the downstream sectors of footwear, leather clothing and goods, and leather upholstered furniture, which fall under the All-Africa improvement scheme.

Almost all planning requests were ultimately approved. UNIDO placed the necessary purchase orders during 1989 and deliveries were vitually completed by December 1990.

Equipment provided includes Vallero drums, Poletto fleshing machines, Finvac vacuum driers, Flamar shaving machines, spraying booths, buffing and dedusting units, staking and conditioning units, an overhead chain conveyor and a toggling machine.



Toggling up - a rest improvement on the more obsolete frame method previously used

The three Zimbabwean tannery groups have thus received a generous 'shot in the arm' worth in excess of Z\$2,000,000. All import and related bridging costs payable in local currency were met by recipients in order to allow 'be maximum amount of equipment to be obtained.

Disruptions to production during commissioning of equipment were few because necessary reception and installation arrangements were started immediately supply of equipment was first approved by UNIDO, well before deliveries began.

UNIDO recognised the Zimbabwean tanning industry had the technical ability and financial resources to undertake major expansion and modernisation projects, and agreed that the major constraint lay in the national shortage of foreign currency and difficulties in obtaining import permits from the Ministry of Industry and Trade.

Accordingly. UNIDO assistance was aimed at overcoming the foreign ex-

change problems rather than towards providing financial assistance as such. Discussions with all concerned — governmental officials and tannery representatives — yielded ready agreement that beneficiaries under the project would contribute equivalent amounts locally in Zimbabwean dellars for the further development of the domestic hides and leather industry.

Suitable vehicle

UNIDO further recognised that the Leather Institute of Zimbabwe (LIZ), as an idependent and non-profit making organisation, was the most suitable vehicle both for channelling equipment aid to tanneries and also for utilising the responsive funds to be generated by tannery payments in Zimbabwe currency against equipment received from UNIDO.

A direct result of these two pivotal decisions is that UNIDO's Z\$2.0 million external aid contribution is more than doubled - for every US\$ invested by UNIDO in imported equip-

ment, an equivalent amount in Zimbabwe dollars is invested locally in hides and leather improvement programmes under the auspices of the LIZ.

The partial meeting of tannery equipment needs by UNIDO has made it easier for the Ministry of Industry and Trade to view outstanding tanner applications with sympathy.

All tanneries submitting bids to UNIDO for aid identified in the process problems of layout, storage and structural modification which required correction if equipment requested was to be used to best advantage. Thus, the project acted in many ways as a catalyst for review and improvement of adverse factors which had long been accepted.

Reception arrangements at tanneries prior to equipment arrival were necessary and involved not only removal of obsolete items but also building of dust-free areas, new drainage systems, developement of more efficient internal handling systems and steps to reduce congestion, all of which contribute to efficiency.

Immense benefits

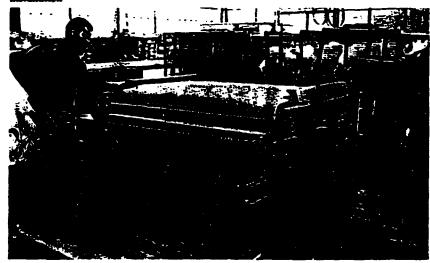
Measurable benefits accruing from the project are immense. The new new drums have meant energy savings of 25 per cent and water usage reductions of 30 per cent, the latter of great significance in frequent drought conditions. The new fleshing machines have resulted in a better flesh and a 45 per cent increase ir off-take, equivalent to a 13 per cent saving in imported chrome tanning salts usage. The Finvac driers have resulted in improved quality output at the retannage stage and a 3 per cent increase in yield. The rotary sprayers have reduced finishing chemicals usage, many imported by approximately 30 per cent. Productivity has improved at one plant by nearly 32 per cent - output is up by 33 square feet per man per day and this is expected to rise to 66 per cent in the near future.

Continuous benefits from the rehabilitation project can only be assured by a corresponding development of human resources. This is recognised. All tanneries operate formalized skills transfer and manpower development programmes.

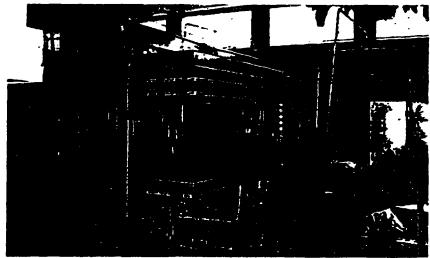
UNIDO has assisted in the sphere of skills transfer. 1990 and 1991 have seen specialists in leather finishing, footwear construction, marketing, leather goods manufacture, machine maintenance provide 'hands on' instruction at shop floor, supervisory and managerial levels.



Loading up dryer capacity has increased significantly as a result of the overhead conveyor installation



A hot day and the operator is happy the machine is doing the hard work



The new Finnes dryer at Belmont Leather, Bulawayo, has gone a long way towards improving yield and uniform machine extraction

Seminars with a practical bias have been held in Zimbabwe, Kenya, Ethiopia and have covered a wide range of topics. Attendance was financed by UNIDO and delegates were drawn from all countries participating in the UNIDO All-Africa project.

The leather industry in Zimbabwe looks forward with confidence to improved productivity, more consistent quality and more success in export markets. A major breakthrough into the lucrative EEC market is the ultimate objective.

reimaschinen: Dose Maschinenbau GmbH; Götz GmbH & Co.; Heusch GmbH & Co. KG; Kela Spezialmaschinen GmbH; Klöckner Ferromatik Desma GmbH; Leibrock Maschinenfabrik GmbH; Schon & Cie. AG:

- Lederhandel und Lederfaserstoffe:
 W. P. Bossert GmbH; Bungert's Gerbhaut Handels GmbH; Lederett Lederfaserstoffe GmbH.
- Chemische Trennmittel für die Schuhindustrie: Acmos Chemie.
 Der deutsche Gemeinschaftsstand war an günstiger Stelle in der Eingangsnähe der Messehalle 3 plaziert. Es beteiligten sich keine deutschen Firmen außerhalb des Gemeinschaftsstandes der Bundesrepublik Deutschland.

Veranstalter des deutschen Gemeinschaftsstandes war das Bundesministerium für Wirtschaft (BMWi) in Zusammenarbeit mit dem Ausstellungs- und Messe-Ausschuß der Deutschen Wirtschaft. Die Trägerschaft lag bei der Fachgemeinschaft Bekleidungs- und Ledertechnik im VDMA. Die deutsche Beteiligung wurde vom ISC-International Service Center Köln-Messe organisiert und durchgeführt.

Die Messe aus Ausstellersicht

Hauptziele der deutschen Aussteller auf der 4. China Leather waren Kundenwerbung, Kontaktpflege sowie Verkauf und Marktbeobachtung. Von den Maschinenherstellern wurden die gesteckten Ziele nicht erreicht. Der Messeerfolg war nicht zufriedenstellend. Dem Nachmessegeschäft werden nur geringe Chancen eingeräumt. Die schlechte Besucherqualität wurde als wesentliche Beanstandung an der Leather China beklagt. Aus diesem Grunde ist empfohlen worden, die Besucherwerbung von seiten der zuständigen chinesischen Institutionen und von Adsale Exhibition Services Ltd. zu intensivieren. Fener muß aus Ausstellersicht dafür Sorge getragen werden, daß im Vorfeld der Leather China in Beijing keine andere Fachmesse für Schuhe und Leder in der Volksrepublik China, wie in diesem 'ahr die China Leather im Oktober 1993 in Shanghai, durchgeführt wird. Diese Veranstaltung war möglicherweise ein Grund für den schlechten Besuch auf der Leather China in Beijing.

Die Leder- und Lederfaserstoffaussteller beurteilten den Messeerfolg mit befriedigend bis gut. Sie erwarten ein gutes und aussichtsreiches Nachmessegeschäft. Der Großteil der deutschen Aussteller will sich voraussichtlich erneut im Rahmen einer offiziellen deutschen Beteiligung auf der Leather China im Oktober 1995 in Beijing beteiligen. Ihr exakter Termin jedoch steht heute überhaupt noch nicht fest. —jo—

UNIDO setzt neue Zeichen

11. Leder Panel in Nairobi

Das 11. Leder Panel der UNIDO trat vom 29. November bis 3. Dezember in der kenianischen Hauptstadt Nairobi zusammen. Ein Fazit der Arbeit in den letzten Jahren wurde gezogen, in denen die Verbesserung des Rohwarenaufkommens, die Lösung ökologischer Fragen und Herausforderungen sowie im technologischen Bereich insbesondere umweltfreundliche Gerbund Zurichtprobleme im Vordergrund standen. Regionale Schwerpunkte dieser Arbeit waren Südostasien und

Mit einem System von Konsultationen hat die UNIDO (United Nations Industrial Organization) eine Einrichtung geschaffen, um mit aktionsorientierten Hilfen der Industrie-(Geber-)Länder die Industrialisierung in den Entwicklungs-(Nehmer)Ländern zu fördern.

So wurde nach der ersten Konsultationsveranstaltung im Jahr 1977 in Innsbruck mit der Errichtung des "UNIDO Leather and Leather Products Industry Panel" ein Steuerungsinstrument geschaffen. In ihm kommen Fachleute aus allen um Leder und Schuh angesiedelten Sektoren und aus allen Erdteilen in zeitlichen Abständen zusammen, um über die einzuschlagenden Wege zu beraten, die weiteren Planungen mit den jeweiligen Entwicklungen abzustimmen und so mit einem Minimum an

finanziellem Einsatz ein Maximum an Leistung herauszuholen.

Auf diesem ersten Konsultationstreffen in Innsbruck gingen 1977 die Wogen der Diskussionen hoch. Die Entwicklungsländer stellten lautstark Forderungen, denen die Industrieländer ebenfalls mit Lautstarke entgegentraten.

Die Ausgangslage – ein Rückblick

Um den gegenwärtigen Stand der UNIDO-Arbeit zu verstehen, ist ein kurzer Rückolick notwendig:

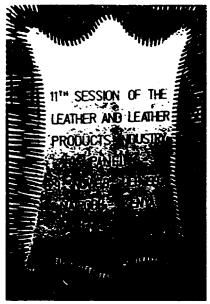
Im Jahr 1975 wurden von 3,2 Milliarden Paar Schuhen der Weltproduktion 2,1 Milliarden Paar = 65% in den klassischen Industrielandern hergestellt und 1,1 Milliarden Paar (= 35%) in den Entwicklungslandern. Die Entwicklungslander stellten damals die Forderung auf, bis zum Jahr 2000 das umgekehrte Verhältnis zu erreichen.

Man stritt sich – kam dann aber in den nächsten Jahren noch weitere neun Mal zusammen, um die einzelnen Regionalund Sektoralprogramme – auch in Abstimmung mit den anderen UNO-Unterorganisationen – FAO (Food and Agriculture Organization) für den Ernährungs- und landwirtschaftlichen Bereich



Gruppenbild der Teilnehmer des 11. UNIDO-Leather Panels im Golf & Country Club in Nairobi-Kenia Panelmitglieder: Hussein A. Awale (Kenia)*, Ibrahim Diane (Mali)*, Yehia Al-Mokadem (Agypten), Habib Laroussi (Tunesien)*, Ms. Song Xian Wen (VR China)*, Sanjoy Sen (Indien), Mohammad Naseem (Pakistan)*, Enio Klein (Brasilien)*, Jorge Chacon Solano (Costa Rica)*, Karel Holesinsky (Tschechien)*, Pertit Hellemaa (Finnland), Ferdinand Mencik (Frankreich), Pietro Torielli (Italien), Andres Colomer (Spanien), Guy Reaks (Intern. Council of Tanners), Horace Auberry (USA)*, Fur die UNIDO Hayat Mehdi, Peter R. Skupch Juhani Berg, Jakov Buljan; Ms. Aurelia Calabró, Gerhard Felsner, S. Bologna, S. Koivula, T. Pham. Fur das Intern. Trade Centre ITC-UNCTAD/GATT R. Sauer. Als Consultants. Michael L. Aloy (CTC-Lyon), Dr. S. Rajamani (CLRI-Madras), Dr. S. Kriuthu (Kenia). Als Beobachter. A. Sahasranaman (Madras), Roy. O'Shaughnessy (Zimbabwe), Siegfried Scheller (Deutschland). Ms. Ute Jagau (Protrade/Deutschland). Außerdem Reprasentanten der kenianischen Leder. Schuh- und Lederwarenindustrie.

1) Neue Mitglieder des Leather Panels



Das Logo des Nairobi Leather Panels. Ein afrikanisches Kunstwerk, naturlich aus Leder, im Folklorestil mit Lederflechtung gespannt.

und International Trade Centre ITC/ UNCTAD/GATT für Handelsfragen – zu konzipieren und dann auch durchzuziehen.

Die Arbeit mußte in drei Dimensionen geleistet werden:

- Zusammenarbeit mit den Geberländern
- Zusammenarbeit mit den Entwicklungsländern
- Zusammenarbeit mit FAO/ UNCTAD/GATT

Bei der in unserem Fachbereich Interdependenz von Viehzucht (Häute- und Fellaufkommen), Lederherstellung und Lederverarbeitung sowie Vermarktung des Leders und der daraus getertigten Artikel gab und gibt es Überlappungen in den Aufgaben- und Zuständigkeitsbereichen, die dadurch noch eskalieren, daß zusätzlich zu den von der UNIDO gesteuerten Aktivitäten nationale Entwicklungsprogramme auf bilateraler Ebene zwischen Geber- und Nehmerländer über halbstaatliche Institutionen wie GTZ/PROTRADE (Deutsche Gesellschaft für technische Zusammenarbeit) laufen.

In Nairobi wurde erfreulicher Weise durch die Teilnahme dieser verschiedenen "Entwicklungshelfer" deutlich, daß nach Anfangsschwierigkeiten Kompetenzkonflikte im Interesse der Sache weitestgehend vermieden werden konnten und ein gemeinsamer Nenner gefunden wurde, erfolgreich praktiziert wird und gute Ergebnisse gebracht hat. Dies gilt insbesondere für die Bemühungen um eine bessere quantitative Erfassung der Rohware und ihre qualitative Verbesserung.

Dies trat insbesondere in den afrikanischen Ländern in Ansatzen klar in Erscheinung und auch in den asiatischen Regionen.

So ist man auf dem besten Weg, dem erwarteten Anstieg des Welt-Schuhkonsums durch eine Steigerung des Hauteund Fellaufkommens Rechnung zu tragen und die Gefahren einer sich offnenden Schere zwischen Rohwarenaufkommen und Rohwarenverbrauch möglichst klein zu halten – oder noch besser:
Aufkommen und Verarbeitung in eine gesunde Relation zu bringen, um auf diese Art und Weise zu große – und gefährliche – Preissprünge zu vermeiden.

Diese Gefahr liegt durchaus im Bereich des Möglichen (Befürchteten), denn die steigenden Leder- und Schuhproduktionen in der boomenden südostasiatischen Region stehen in keinem tragbaren Verhältnis zu dem (relativ kleinen) Rohwarenaufkommen dieser Länder, die sich zunehmend auf dem Weltmarkt eindecken müssen.

Nach den Politikern nun die Fachleute

1977 in Innsbruck hatten nahezu ausschließlich die Diplomaten und Vertreter der einzelnen Staaten der Geber- und Nehmerländer die Forderungen und Gegenforderungen aufgestellt, sie mehr oder minder konträr diskutiert und heiße Wortgefechte geführt. Die Fachleute der Leder- und Schuhwirtschaft aus den klassischen Industrieländern waren frustriert nach Hause gegangen.

In der Zwischenzeit ist nun die praktische Arbeit vorangekommen. Zugegeben: In der Anfangsphase wurde schon einmal ein Entwicklungsprojekt auf Sand gebaut. Man mußte erst Erfahrungen in solch einem internationalen Gremium mit unterschiedlichen Interessenlagen sammeln und verarbeiten Der UNIDO-Staff besteht aus erfahrenen Personen, die lange Jahre selbst in der Praxis unserer Fachbereiche gestanden haben. Hinzu konnten nach und nach Mitarbeiter gewonnen werden Auf ihren Fachgebieten sind sie versierte Experten, die großtenteils noch in der praktischen Arbeit stehen und jeweils für einige Wochen oder Monate für spezielle Einsatze verpflichtet werden.

Was aber für die praktische Arbeit vor Ort gilt, hat auch für das Leather Pane! seine Bedeutung und Berechtigung. Die hier gehaltenen und zur Diskussion ozw. Verabschiedung gestellten Referate gingen tief in Theorie und Praxis. Dies trifft insbesondere für alle verfahrensmäßigen und technologischen Fragen und Probleme der Lederherstellung zu.

Fest auf Öko-Kurs

Nicht zuletzt seit der UNO Welt-Umweltkonferenz 1992 in Rio de Janeiro (Brasilien) haben die Fragen des Umweltschutzes, die hier in Europa schon lange diskutiert und deren Erfordernisse auch weitgehend praktiziert werden, weltweit relevante Bedeutung erlangt. Sie standen auch auf der umfassenden Tagesordnung des Leather Panels in Nairobi. Die dazu gehaltenen Referate zeichneten sich durch fachliche Kompetenz aus, angereichert durch zahlreiche Erfahrungen, die mit einzelnen Entwicklungsprojekten in der Dritten Welt gewonnen werden konnten. Doch für einen Teil der Panel-Mitglieder, die aus dem Bereich der Schuhfabrikation oder der Schuhmaschinenindustrie kamen, waren sie zu weit von ihren eigenen Fachgebieten entfernt. In der Diskussion wurden sie denn auch von den Gerbern und Leder-Chemikern und -Technikern wie Pertti Hellemaa (Finnland), Andres Colomer (Spanien), Guy Reaks (Intern. Tanners Council), Sanjoy Sen (Indien) und den

Mr. Cireen Josiah (Bildmitte), Handels- und Industrieminister von Kenia, sprach
den Dank an die UNIDO
aus und auch an die Geberländer für alle Aktivitäten und Hilfen zur Selbsthilfe – "Wir brauchen Beistand und Fortschritt. Insbesondere begrüßen wir
die Unterstutzung in Umweltfragen." Links im Bild:
UNIDO-Direktor Hayad
Mehdi und UNIDO Senior
Interregional Adviser Juhani
Berg



Experten Dr. S. Rajamani (Indien) und Michel Aloy (Frankreich) sowie Jakov Buljan (UNIDO) allein bestritten und angereichert. Die Vertreter der anderen Sparten waren zwar interessierte Zuhörer, konnten aber zur fachlichen Substinz nichts beitragen.

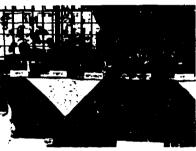
Co hieß es denn auch u. a. in den Empfehlungen, die am Schluß des Panels in Nairobi von allen Panel-Mitgliedern verabschiedet wurden: "Die Aktivitäten im Bereich des Leders und des Leather Industry Panels (LLIP) sollen weiter verstärkt werden. Ein kleines "Action Comzuttee", das aus maximal drei bis vier Panel-Mitgliedern besteht, soll errichtet werden, um ein Zwischenglied zwischen dem UNIDO-Panel und den Geberländern zu sein. Dieses Action Committee soll sich zweimal im Jahr treffen, um die weiteren Arbeiten zu verfolgen."

Auf diese Art und Weise wird es möglich sein, ein Ausufern der Panel Mee-



tings zu vermeiden, ihre Substanz aber durch einen konzentrierten Einblick in die in Frage stehenden Probleme zu erhöhen.

Durch die Teilnahme von Guy Reaks als Secretary der Internationalen Gerbervereinigung an diesen Panel Meetings ist auch sichergesteilt, daß der Part der lerlerherstellenden Industrie in diesem Panel wirkungsvoll repräsentiert wird, zumai seine Fachorganisation die nationalen Verbände der Lederindustrie sowohl in den klassischen Industrieländern als auch bis out wenige Ausnahinen in den Schwellen- und Entwicklungsländern umfaßt. Aus der Sicht der Lederindustrie ist dieses "Sicherheitsventil" notwendig, um irreale Höhenflüge zu vermeiden und die Arbeit auf dem Boden der verwirklichbaren Realitäten zu leisten. Wie notwendig so etwas ist, ging auch aus der Diskussion um ein ins Auge gefaßtes "Eco-Label"-Projekt, das - vorerst - auf Vorschlag der Gerbervertreter an ein



Von links nach rechts: Yehia Al-Mokadem (El-Nasr Tanning Co., Alexandria/Ägypten), Pertti Hellemaa (Friitala-Gruppe, Ulvila/Finnland), Ferdinand Mencik (Supervisory Council of Bata S.A., Paris), Andres Colomer (Colomer Munmany S.A., Barcelona/Spanien), Guy Reaks (International Council of Tanners, Lewes, United Kingdom), Horace Auberry (Wellco Enterprises Inc., Waynesville, NC, USA) und ein Mitarbeiter der FAO.





Von links nach rechts: Enio K'ein (FENAC S.A., Novo Hamburgo/Brasilien, Ms. Song Xian Wen (Leather Technology Centre, Shanghai/VR China), Karel Holesinsky (Ass. of Leather Industry, Prag/Tschechien), Sanjoy Sen (Indian Leather Technologists' Ass., Calcutta/Indien), R. Sauer (Senior Market Development Officer, Genf), Pietro Torielli (Torielli Rag. Pietro & C.S.p.A., Vigevano/Italien), Hussein A. Awale (Kenya Tanners Ass., Limuru/Kenia), Ibrahin Diané (Chef de Division des Industries Animales-OMBEVí, Bamako/Mali) und Mohammad Naseem (Mohamed Shafi Tanneries, Karachi/Pakistan).

Expertengremium überwiesen werden soll hervor, das das Projekt erneut durchdenken, überarbeiten und dann zur Diskussion stellen wird. Wir werden auf diese Idee – seine Vorteile und Gefahren – noch zurückkommen

Dies gilt auch für einzelne der sechzehn auf der Tagesordnung stehend Referate, sofern sie für unseren Leserkreis von Interesse sind.

Exkursion in die Praxis

Cas fünftägige Meeting wurde durch eine eintägige Exkursion zur Besichtigung von zwei der insgesamt sechzehn kenianischen Lederfabriken sowie einer Schuhfabrik und des im Aufbau befindlichen Produktions- und Trainings-Ceriters unterbrochen. Die Teilnehmer konnten sich von dem hohen Stand der technischen Einrichtungen und insbesondere auch von der Effizienz der weitläufigen modernen Kläranlagen überzeugen, die nach den Erfahrungen und Anregungen von UNIDO-Experten im Rahmen des Afrika-Programms der UNIDO entstanden, mit den Inhabern und Technikern Gespräche führen und sich ein eigenes Urteil über die Qualität der afrikanischen Rohware, die neuerdings arch durch Straußenfelle und Häute des Nilbarsches, der ein Gewicht bis 200 Kilogramm erreicht, bilden. Sie verließen diese Fabriken mit guten Eindrücken und wohl auch mit Überlegungen darüber, wie sie die Palette ihrer eigenen Fabrikation durch Wet-blues aus dieser Region ergänzen könnten.

Den Abschluß des fünftägigen Leather Panel Meetings bildete die Verabschiedung von vierzehn Empfehlungen für die UNIDO-Arbeit in den kommenden Jahren.

Leitsätze für die kommende UNIDO-Arbeit

Action Committee

Über die Verstärkung der Aktivitäten u. a. durch die Errichtung eines Action Committees haben wir bereits weiter oben gesprochen.

Verstärkte Zusammenarbeit mit UN-Gliedern

Eine verstärkte Zusammenarbeit zwischen den einzelnen UN-Teilen – speziell zwischen dem International Trace

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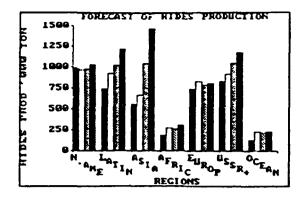
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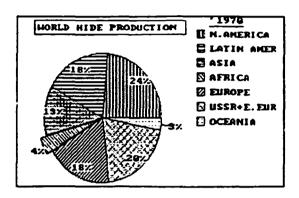
Pelzveredelung

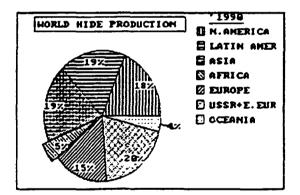
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Eigene Herstellung

Baby-Lammfelle, Medizinfelle, Autofelle, Kinderwagenfußsäcke, Dekorationsfelle, Hausschuhe







Centre (ITC) und der UNIDO – wird gefordert. Die Unterlagen, die vom ITC für gemeinsame Ausführung zwischen ITC und UNIDO hinsichtlich des Marketings für Schuhe und Lederwaren erarbeitet wurden, werden unterstützt. Es wird vorgeschlagen, bei den in Frage kommenden Geberländern die Finanzierung eines Fonds für die Beteiligung an internationalen Fachmessen zu beantragen.

Verbesserung der Häute- und Fellqualität

Weiterhin wird empfohlen, verstarkte Anstrengungen zu machen, einen Fond für die Verbesserung von Häuten und Fellen, Leder und Lederprodukte in den "frankophonen" afrikanischen Ländern einzurichten. Dieses Programm war bereits von dem Leather Panel entwikkelt worden. Da bisher Geberländer für ein solches Programm nicht gefunden

Der Weltanfall an Häuten

(in 1000 Tonnen)

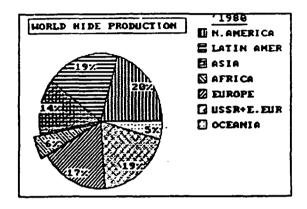
Diese Grafik zeigt den Anfall von Hauten in den verschiedenen Regionen in den drei Dekaden 1970, 1980, 1990 und voraussichtlich im Jahr 2000.

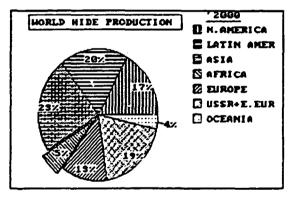
im Jahr 2000

(geschätzt). Die Industriestaaten wie Nordamerika und Europa lassen kein signifikantes Wachsturn erkennen. Die Hauptwachsturnsregionen werden Asien und Lateinamerika sein.

Prozentuale Anteile am Welt-Häuteaufkommen

	1970	1980	1990	2000
Nordamerika	247:	207:	187:	175:
Lateinamerika	18%	197:	19%	20:
Asien	19%	14%	197	237
Afrika	4%	6%	5%	5∻
Europa	18%	17%	15%	13%
Ruftand und				
Osteuropa	20%	19%	20%	19 ~.
Ozeanien	3 *	5 %	4%	4





werden konnten, wird der Vorschlag an die FAO zur weiteren Bearbeitung weitergeleitet, um einen Fond hierfür – vielleicht auch aus UNCTAD-Mitteln – zu finden. Nachdem ein entsprechender Antrag von der FAO vervollständigt ist, empfiehlt der Leather Panel sehr die baldige notwendige Realisierung.

integration der Frauen

Weitere Anstrengungen sollen für die Integration der Frauen in der Lederindustrie gemacht werden. Das Zimbabwe-Modell für die Ausbildung von weiblichen Unternehmern in der Kleinindustrie und die Bereitstellung von Werkzeugen, Ausstattung und Materialien auf Leihbasis oder zu niedrigen Krediten und die Ausübung eines Marketings der Produkte durch bereits bestehende Schuhfabriken wurde befürwortet. Es wird als ein interessantes Modell bezeichnet, das auch in

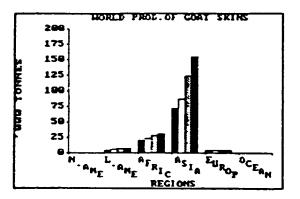
anderen Ländern eingeführt werden sollte. Detaillierte Vorschläge auf dem Panel Meeting – wir werden darüber noch kurz berichten – wurden gutgehei-

Mutual benefits

Das Panel stellte die Wichtigkeit von "mutual benefits" (Zuwendungen auf Gegenseitigkeit) für die Geber- und Empfängerländer heraus. Alle Projekte sollten auf solch eine Weise initiiert werden, daß die Gewinne solcher Kooperationen klar aufgezeigt werden. Ein Weg, solch eine Anregung zu realisieren, sind Johann and die Errichtung von hand die Errichtung von hand die Errichtung von Krediten and die Errichtung von die E

Ausbildung der Mitarbeiter

Die Erfahrungen, die mit dem UNIDO-Indienprogramm gemacht wurden, soll-



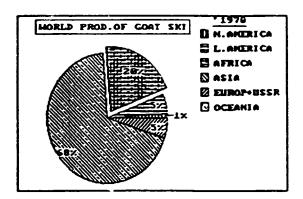
Weltanfall an Ziegenfellen

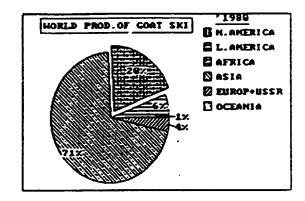
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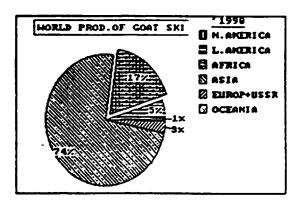
Die Hauptanfaligebiete liegen in allen drei Dekaden von 1970 bis 1990 im asiatischen Raum, und hier hauptsächlich in Indien, Pakistan und China. Die besten Wachstumdie hat weiterhin die Region Asien. An zweiter Stelle steht Afrika.

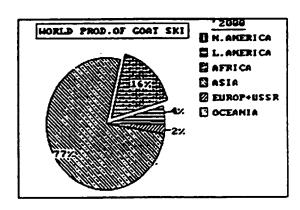
Prozentuale	Anteile	am	Welt-
Ziegenfellau	fkomme	en.	

	1970	1980	1990	2000
Nordamenka	1%	1%	1%	!
Laternamenka	5%	6%	5%	47
Alrika	20%	20%	175.	167.
Asien	68%	71%	747	777.
Europa und				
Rulland	5%	4%	3 5:	2 -
Ozeanien	-	-	-	-









ten auch der zweiten Phase des Afrikaprogramms nutzbar gemacht werden, hauptsächlich in Form der Ausbildung der Mitarbeiter, der Herstellung von Components, des Stylings und des Design. Die Errichtung einer Pilot-Schuhfabrik wurde empfohlen, aber unter sorgfältiger Beobachtung ihrer Erfolge. Die Ergebnisse könnten dann als Ratgeber für die Errichtung weiterer Fabriken dienen.

Afrikaprogramm auch für Häute und Felle

Das von der UNIDO eingeführte Leather and Footwear Industry Schema für Afrika soll weiterlaufen und auch ein entsprechendes Programm für ruhe Häute und Felle für jedes afrikanische Land herausgebracht werden, wie es sich in Indien bewährt hat. Das Grünentfleischen getrockneter Häute nach der Weiche unter afrikanischen Bedin-

gungen soll innerhalb des UNIDO-Projekts weiterhin untersucht und weitere Empfehlungen für geeignete Methoden und Modifikationen für Entfleischmaschinen vorgelegt werden.

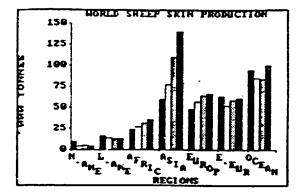
Revolving funds

Ermutigende Erfolge, die bisher mit Revolving funds operations erzielt wurden, sollen weiter gefördert werden. Im Klartext: Für ein Objekt zur Verfügung gestellte Mittel sollen in einen Fonds zurückgezahlt werden, aus dem dann weitere Projekte mit der gleichen Auflage unterstützt werden.

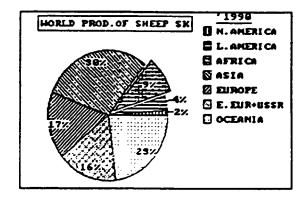
Verstärkung im Umweltschutzbereich Das Panel wiederholte die vorherigen Empfehlungen hinsichtlich der Wichtigkeit der Umwelt- und Abwasserreinigung in der Lederindustrie und erkannte die in Afrika erreichten Erfolge an, die oft sogar die empfohlenen Richtwerte übertrafen. Die UNIDO wird auf diesem Weg weitergehen und sich darum bemühen, finanzielle Mittel für die Abwasser-Kontrollprogramme und "saubere" Gerbtechnologien in allen Teilen der Welt zu finden.

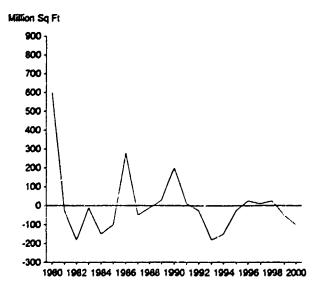
Weiterführung der Afrika- und Südostasienprogramme

Die Bemühungen und die Schwierigkeiten, denen sich die UNIDO in der Bereitstellung von Mitteln für die zweite Stufe des Afrikaprogramms und der Reinhaltungsprogramme im Südostasienprogramm gegenübersieht, wurden zur Kenntnis genomnien. Es wird Wert darauf gelegt, diese Bemühungen weiter fortzuführen und Mittel dafur auch von nichttraditionellen Geberlandern wie der EG und verschiedenen Entwicklungsbanken zu erhalten. Sollten diese Bemühungen nicht zum Erfolg führen, sollen die Pläne auf eine



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Überschuß und Defizit im weltweiten Rohwarenanfall

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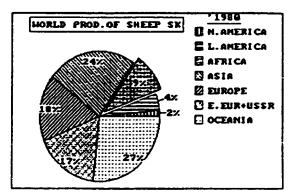
Weltanfall an Schaffellen

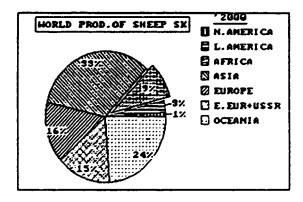
(in 1000 Tonnen)

Die Hauptanfallgebiete liegen in den asiatischen Landern, für die auch weitere Wachstumschancen prognostiziert werden. An zweiter Stelle steht Ozeanien mit Australien und Neuseeland. In den afrikanischen Ländern, die Platz fünf in der Weltrangliste einnehmen, werden bescheidene Wachstumsraten erwartet.

Prozentuale Anteile am Welt-Schaffellaufkommen

	1970	1980	1990	2000
Nordamenka	3%	2%	2%	15.
Lateinamenka	5%	4%	4%	3%
Asien	19%	24%	30%	33%
Afrika .	8%	9%	9%	9%
Europa	15%	18%	17%	16%
Rubland und				
Osteuropa	20%	17%	16%	15%
Ozeanien	30%	27%	23%	24%





Ebene zurückgeschraubt werden, die auf die verfügbaren Mittel abgestellt ist.

Market News Service

Die Wichtigkeit des Market News Service, herausgegeben vom ITC, insbesondere auch für den Handel mit Häuten, Fellen und Leder in den Entwicklungsländern, wurde anerkannt. Es ist notwendig, diesen Dienst fortzuführen und künftig nach Möglichkeit auch die Notierungen anderer Rohware als Rinder, Schafe und Ziegen in ihm aufzunehmen.

Die Bedeutung einiger auf Farmen gezüchteter Tierarten, die über die traditionell gezüchteten Arten wie Strauß, Krokodil etc. hinausreichen, wird herausgestellt. Es soll untersucht werden, ob Hilfe durch die UNIDO/ITC auch in diesem Bereich geleistet werden kann.

Die Arbeit der Lederunit der UNIDO im Bereich des Gerbens von Fischhauten, ihrer Zurichtung und der Vermarktung wurde diskutiert und empfohlen, dieses Gebiet auch weiterhin zu bearbeiten

Qualitätskontrolle

Das Panel sprach seine Anerkennung für die Untersuchungen der UNIDO über die Anwendung neuer Technologien für die Lederindustrie und die Lederverarbeitung in den Entwicklungsländern aus, auch für die Maßnahmen zu einer vollkommenen Qualitätskontrolle und für das von der UNIDO propagierte Trainingsprogramm. Die Einführung dieser Vorschläge auch für die Region Südostasien wurde angeregt. Wie bereits erwähnt, stieß das von der UNIDO als Vorschlag entwickelte Eco-Label bei den Gerbervertretern im Panel auf Skepsis. Sie befürchten, daß dies zu einem Hindernis bzw. Nachteil im Welthandel mit Ledererzeugnissen führen könnte. Die UNIDO soll vielmehr in einer kleinen Expertengruppe hierüber beraten und in einer späteren Studie darüber berichten, um danach brauchbare Kriterien und Richtlinien zu erarbeiten.

Vereinheitlichung der Trainingsmethoden

Sowohl die weitere Verbesserung der Lehrmethoden der Trainer und der internationalen UNIDO-Experten sowie eine Vereinheitlichung der Trainingsmethoden wurde zur Diskussion gestellt.





Im Foyer der Tagungsräumlichkeiten hatten Leder-, Schuh- und Lederwarenfabriken aus Kenia die Möglichkeit, die Produkte ihres Könnens und Fleißes den kritischen Augen der Kollegen aus Industrie- und Entwicklungsländem vorzustellen. Intensive Gespräche schlossen sich an, bei denen es um modische Anregungen ebenso ging wie um technische Ratschläge zur weiteren Verbesserung der Lederqualitäten und Zurichtungen. Insgesamt gibt es in Kenia sechzehn Lederfabriken, fünfzehn Schuhfabriken und neun Lederwarenhersteller unterschiedlicher Größenordnung vom handwerklichen Kleinbetrieb bis zu Großunternehmen wie den beiden Lederfabriken in Thika und Sagana und der bereits seit 1935 bestehenden Bata Shoe Co. (Kenya) Ltd. in Limuru mit 1600 Beschäftigten. Sie ist die Keimzelle für viele der danach entstandenen Schuhfabriken. Die Teilnehmer des Leather Panels waren Gäste der Bata Shoe Co. auf einem Abendempfang im repräsentativen Nairobi-Hilton.









Helle, gut dimensionierte Hallen und ein moderner Maschinenpark mit elektronischen und Computer-Steueranlagen in den Lederlabriken Leather Industries of Kenia Ltd. in Thika und der Sagana Ltd. in Sagana.

Periodische Trainingskurse wurden empfohlen, die die Fähigkeiten der Trainer und der für die UNIDO tätigen internationalen Experten auf den neuesten Stand bringen sollen. Dieser Personenkreis soll in einem ausgewählten Institut geschult werden.





Diese Kurzzusammenfassung der kommenden Ziele ist praktisch ein Extrakt der fünftägigen Beratungen. Wir werden über Einzelfragen noch gesondert berichten, sofern sie auch den Kreis und die Interessen unserer Leser berühren.

Dank und Anerkennung



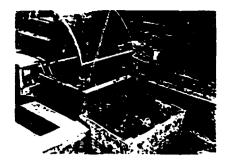
Hussein A. Awale

gilt der UNIDO und hier insbesondere Direktor Hayad Mehdi, Peter R. Skupch und Juhani Berg für die ausgezeichnete Vorbereitung dieses 11. Leather Panels in Nairobi, aber auch den anderen an der Organisation beteiligten Mitarbeitern wie Jakov Buljan, Mrs. Aurelia Calabró sowie dem örtlichen Repräsentanten der UNIDO Gerhard Felsner.

Der Präsident der Kenya Tanners Association, Hussein A. Awale, sorgte als gewählter Chairman des 11. Leather and Leather Products Industry Panel für einen zügigen Verlauf.

Die Ergebnisse dieses Panels werden richtungweisend für die kommenden Jahre der UNIDO-Arbeit in den Entwicklungsländern mit den entsprechenden Rückkoppelungseffekten auf die klassi-











Für großflächig konzipierte Kläranlagen – von den Auftangbecken bis hin zu den "sicheren" Deponien – stehen hier noch die entsprechenden Areale zur Verfügung. Bild von den Anlagen der zur Aga-Khan-Gruppe gehörenden Leather Industries of Kenya Ltd. in Thika und der Sagana Tanners Ltd. in Sagana.



schen Industrieländer und den freien Welthandel mit rohen Häuten und Fellen sowie in Leder und Ledererzeugnissen sein.

Der Weg von Innsbruck 1977 mit den Konfrontationen bis nach Nairobi 1993 mit ausgeglichenen Programmen war beschwerlich und voller Mühen. Das gute Resultat spricht für sich! -sr-

Abkürzungen

FAO
Food and Agriculture Organization
(Ernährungs- und
Landwirtschafts-Organisation)

GATT
General Agreement of Tariffs

(Aligemeines Zoll- und Handelsabkommen) 8CT International Council of Tanners

(Internationale Gerbervereinigung)

International Trac : Centre (Internationales ! andelszentrum)

Leather and Leather Industry Panel (Leder- und Leder:::dustrie-Ausschuß)

UNCTAD

Linited Nations Conference on Trade and Deve-

Ontere Nations Conference on Trade and Development (Handels- und Entwicklungskonferenz der Vereinten Nationen)

UNIDO
United Nations Industrial Development Organi-

zation (Organisation der Vereinten Nationen für Industrielle Entwicklung)

MNS

Market News Service (Marktnotierungen, herausgegeben vom ITC)

ALFIS

Africa Leather and Footwear Industry Panel (Afrika Leder- und Schuhindustrie-Ausschuß)



Der interkontinentale Gedanken- und Erfahrungsaustausch geht auch während der Kaffee/Tee-Pause weiter

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Annex 5



UNITED
NATIONS
INDUSTRIAL
DEVELOPMENT
ORGANIZATION



REGIONAL AFRICA

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME

US/RAF/88/100

OUTPUT 1

IMIPROVIED POLICY GUIDELINES AND INDUSTRIAL STRATIEGY FOR THE DEVELOPMENT OF THE LEATHER INDUSTRY

SUMMARY

Based on the work of D. Manly, Marketing Expert, and S. M. Kiruthu, Leather Consultant

Backstopping officers:

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Explanatory Notes

CAD/CAM Computer Aided Design/Computer Aided Manufacturing

CSC Cold Storage Corporation

CSCZ Cold Storage Corporation of Zambia

CTA Chief Technical Adviser

ECDC Economic Cooperation among Developing Countries

FAO Food and Agriculture Organization of the United Nations

FOREX Foreign Exchange

IDF Industrial Development Fund

ITC International Trade Centre/UNCTAD GATT

KIRDI/LDC Kenya Industrial Research and Development Institute/

Leather Development Centre

KMA Kenya Manufacturers Association

KMC Kenya Meat Commission

LIZ Leather Institute of Zimbabwe

PTA Preferential Trade Area

SADCC Southern Africa Development Co-ordination Conference

SIDO Small Industries Development Organization (Zambia)

UNIDO United Nations Industrial Development Organization

Introduction

The joint UNIDO, FAO and ITC project - US/RAF/88/100, Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme - is the largest IDF funded technical assistance programme within the hides and skins and derived industries sector. The project started operations in early 1989 and is expected to be operationally completed by end 1992.

The programme is funded through special purpose contributions by six donor countries, namely, Austria, Federal Republic of Germany, France, Italy, the Netherlands and Switzerland. The immediate objectives of the programme are:

- a) to establish a regional pilot scheme and to demonstrate, in practical terms, the process of hides and skins improvement from butchering and flaying to conservation, grading and collection;
- b) to act as catalyst to national authorities to introduce incentives for improved quality performance;
- c) to rehabilitate existing infrastructures and selected leather tanning and processing plants by increasing their efficiency and capacity utilization, upgrading technical standards, operational methods and skills, product quality and marketing performance, as well as knowledge of those attached to these industries at various levels, starting from primary producers.

According to the project document, one of the programme's expected outputs is:

Improved policy guidelines and an industrial strategy for the development of the region's hides and skins, leather and leather products industry. This output will be in the form of a regional document specifying, firstly, the regional aspects and, secondly, the individual country aspects.

The programme personnel, specifically Mr. D. Manly and Mr. S.M. Kiruthu headed by the Chief Technical Adviser Mr. G. Felsner, has prepared the first draft of the regional document and a summary is presented in this document. The document provides valuable information on policy guidelines and a development strategy for the hides and skins and derived industries sector which are applicable also to other countries than those participating in the UNIDO/FAO/ITC programme in Africa. For this reason it has been decided that this programme output would be circulated also outside the countries associated with the programme.

Owing to the political situation in the country, Somalia was not included in the analysis for this output.

During the FAO organized ECDC Workshop on Trade in Hides and Skins and their Derived Products, in Bulawayo, Zimbabwe, July 1991, it was recommended that a summary of the output would be presented as a background information paper in the Third FAO Intergovernmental Hides and Skins Sub-group meeting in April 1992.

A complete document will be made available shortly - in English only - to the participating countries. The work of the consultants engaged in the preparation of the regional strategy document was extensively used as background material for formulating Phase 2 of the programme.

PART 1

Summary of Findings

Background Information

The Scheme, comprising a regional umbrella programme, eight associated country projects (Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe), together with a Regional Tannery Rehabilitation Scheme, is the largest UNIDO IDF-funded programme to date (approx. US\$ 13.5 million). Special purpose contributions were generously provided for this Phase 1 by the Governments of Austria, France, Germany, Italy, the Netherlands and Switzerland.

The regional programme and sub-regional activities are being coordinated through the CTA based in Nairobi, assisted by a Kenyan counterpart coordinator and national experts based in the other seven countries. Additionally, a sub-confractor as well as a number of UNIDO, FAO and ITC international experts provide extensive inputs, both regionally and in the individual countries in the fields of hides, skins and leather improvement, tannery rehabilitation and footwear and leather goods production and marketing. The programme further focuses on the development of women within the industry and on increasingly important environmental issues.

Originally conceived at the recommendation of the UNIDO Third Consultation on the Leather and Leather Products Industry in 1984, the proposal for this pilot scheme for selected countries in East and West Africa was prepared for the Regional Meeting on the Leather and Leather Products Industry in Africa held in Alexandria, Egypt, in 1987.

Having identified a number of major constraints to the development of the industry and, above all, the poor quality and wastage of raw hides and skins, programmes were prepared for East and West Africa and initial research was conducted into how best selected countries could be assisted to realize their potential - initially as suppliers of semi-processed leather (wet blue and crust) to the export markets, and finished leather, footwear and leather goods to their own. The studies highlighted the generally poor collection rates and quality of hides and skins, the under-utilization of installed production capacities, low production and inadequate levels of skills within management and the workforce. However, at this stage funds were forthcoming only for the East Africa programme.

Recognizing the broad regional and country needs, UNIDO innovated an integrated programme approach, acting as the main executing agency with the UN sister agencies FAO and ITC contributing in their respective areas of competence. The programme envisages major technical assistance for the region, but in conjunction with the national development plans and sectoral policies and strategies, where these exist for each country.

In addition to individual tripartite review appraisals, a formal in-depth evaluation of the project took place. These reviewed the objectives, inputs, implementation activities and outputs to date. Additionally, factors facilitating or inhibiting the attainment of these objectives were identified and suggestions for improvement were made.

The extent of the programme's success has already been reflected in the enthusiastic and positive reactions, both from the governments and the industry, and in the demonstrable improvement already recorded in various parts of the sector as well as in national and international media coverage of its impact in the region. Everything appears to indicate the desirability of extending the as yet unfinished programme into a Phase 2, and expanding its geographical coverage to include Namibia, Uganda and possibly Botswana. The extension of the programme is subject to identifying the required funds.

Hides and Skins Improvement

As Phase 1 of the pilot scheme moves towards conclusion, at least in terms of initial funding, it is possible to establish priorities of the needs of the industry. The quality and recovery of raw hides and skins remains pivoted to the development of the region, but improvement must be viewed as a long-term, ongoing activity, preferably orchestrated by its principal beneficiaries, the tanners and leather manufacturers, through their respective interprofessional associations and leather institutes, where these exist, rather than government livestock departments, possibly with lower priorities for what is essentially a by-product of the meat industry.

The ongoing improvement programme will be substantially assisted by another innovative element of the project. This is the revolving fund established in most of the participating countries for this express purpose and administrated by a committee of directly interested parties, rather than a government department. Hopefully this fund, provided through the local currency pay-back for rehabilitation equipment purchased in hard currency by UNIDO, will be further supplemented by the industry itself and any government "cess" schemes which may be instituted. Hopefully, too, the activities in hides and skins improvement initiated by the project in individual designated target areas will be extended eventually country-wide through appropriate government extension schemes.

Policies and Strategies

Although it was the express intention of the programme to work in conjunction with the national plans for each country, these have, unfortunately, not always been sufficiently sector-specific to benefit the industry. Indeed, as a result of its heterogeneity, both of substance and activity, and the many government departments impinging upon the industry, numerous contradictions and anomalies are to be found, frequently nullifying apparently attractive incentives for the industry. These have tended to blur the opportunities of the industry to contribute substantially more to national economy in terms of value added, employment and skills generation, and potential foreign exchange earning in a non-traditional agro-industry.

The industry and its sub-sectors are seldom addressed, in national development plans, in their own right. More often recognition is only implicit in general statements concerning agriculture or livestock. Indeed, a ministry of agriculture may well be responsible for a whole range of upstream and downstream activities, seemingly extending into the industrial sector. These may include the licensing of imported tanning and finishing chemicals, the export of finished leathers, as well as the inspection of livestock or rural slaughter-slabs.

The awareness of more sector-specific policies and strategies, and of the effects of measures inhibiting growth in the industry has been increased, but still too many enterprises

continue to suffer from a range of fiscal, tariff and bureaucratic constraints impeding their development. These are in addition to the burdens of a chronic shortage of foreign exchange for essential inputs, high inflation and interest rates, low level of credit, liquidity and technical skills.

Too many measures affecting the industry and its sub-sectors are negative, with adverse effects on price, quality, productivity and competitiveness. Incentives such as the FOREX retention as export compensation do exist, but are often spoiled by tardy disbursement. Frequently, positive measures are aimed at the new investors, through new investment and export promotion codes, but without benefit to the existing tanners or manufacturers. These may face additional competition from low-priced (legal and illegal) imports, sometimes introduced through well-intentioned liberalization policies. However, with little regard for regional infant industry, which may need some at least temporary support and protection as they establish themselves, preferably through phased programming, in terms of material supply and manufacturing incentives.

Associations and Institutes

The programme was able to give valuable technical assistance and support to the various trade associations and institutes, encouraging them to play a more attractive role in negotiation with government. The inter-professional approach has begun to assist the decision-making process, and the revolving fund will provide the impetus for direct involvement in hides and skins improvement, grading and incentive schemes, to benefit the primary producer and the industry.

Assistance in terms of expertise and equipment was given to the KIRDI/LDC in Nairobi and to LIZ in Bulawayo, and UNIDO was also involved in the preparation of the proposal documents for the PTA Leather Institute in Addis Ababa. Pilot tannery, finishing and effluent treatment plants were established, even a CAD/CAM system in conjunction with the footwear industry. However, care is being taken to avoid duplication and proliferation of facilities, nevertheless ensuring at the same time that easily accessible training opportunities exist throughout the region.

Statistical Intelligence

The need for improved statistical intelligence gathering and dissemination was recognized from the outset. The decision-making process for the industry has certainly suffered from the lack of important base data. This extends from the livestock population census, through off-take, recovery of hides and skins, to semi-processed and finished leather, footwear and leather goods production, and is further complicated by the lack of standardized measurement (piece, weight, size, numbers, value, etc.) in individual countries.

The urgent necessity to address this shortcoming was identified by the programme, which undoubtedly underestimated the resources needed to overcome the problem, even within the designated project target areas. In order to improve the present deplorable situation, substantial inputs are needed from governments and the industry, and the further integrated efforts of FAO, ITC and UNIDO.

Discussions were already initiated with a view to obtaining additional funding to establish a regional information centre for the industry, to facilitate two-way collection and dissemination of information for the benefit of the industry, including producers, manufacturers and traders, and thereby providing a valuable marketing tool to those concerned.

World Situation and Prospects

As highlighted by a recent article on the international meat trade situation, it must be noted that hides and skins are a demand rather than a supply-driven market. The leather industry has no control over how many hides and skins are produced. They are purely a byproduct of the slaughtering industry, and it is extremely unfortunate for the programme that the world demand for leathers changed so drastically since its conception.

Changes were due to a number of largely unrelated factors, and such dramatic falls are by no means unfamiliar as far as this highly volatile commodity is concerned. Indeed, forecasts to the year 2000 had predicted the current trough, hepefully, to be followed in the not too distant future by an expected growth.

In the last year, international hides prices fell by more than 50 per cent in many cases, and sheepskins by even more. Factors affecting prices and demand included, inter alia, global economic recession, the Gulf crisis, political and economic development in Eastern Europe and USSR, as well as in Africa itself. These factors have upset the supply and demand. In some cases, there were droughts - affecting the national bill - and elsewhere a series of mild winters affected the sales of fashion garments and even boots. Sheepskin production was further complicated by the changing supply/demand situation for wool in Australia and China.

Markets even for raw hides and skins, except those of premium quality, were reduced or even disappeared as manufacturing slowed down and inventories built up. Over-supply and liquidity problems caused bankruptcies among international traders, leather and equipment manufacturers alike.

However, the negative situation is set to change, albeit slowly, and already some traders see indications that the market has bottomed out and manufacturing may soon begin to pick up again, with signs of activity perceived in some of the major manufacturing countries.

Red meat consumption is expected to continue its decline especially in major hide producing countries thereby offering more leather production and manufacturing opportunities to the developing countries. These continue to increase their share of leather and leather products at the expense of the developed countries, exploiting comparative advantage in terms of price, labour costs and productivity, but with due concern for quality. Asia and, to a lesser extent, South America, offer examples of success to be studied and possibly imitated in the subregion, especially as they have often grown from a more disadvantaged raw material resource base.

Opportunities and prospects for Africa and the sub-region are expected to grow. Demographic growth will ensure increased domestic and regional demand for leather and footwear, always depending upon consumer purchasing power. However, the region's ability to respond to global demand will depend upon factors enumerated above, especially improved quality and collection of material and the positive attempts of governments to encourage the

industry to move according to a mutually defined programme towards increased added value but always subject to the industry's ability to market the product.

PART 2

Conclusions

The current demand situation did not encourage an environment in Fhase I in which incentives could be readily introduced, with the appropriate grading scheme. However, through the revolving fund the mechanism is being created to accelerate the process to meet anticipated developments. National inputs are expected in the areas of slaughter and preservation facilities for hides and skins, and some countries have already expressed their readiness to update the national livestock census and increase extension services.

The rehabilitation aspect of the programme was generally highly successful, with tangible improvement in terms of yield, quality, chemical and material waste control. Installed tanning capacity is probably sufficient for the region, although involving major and generally welcome changes in management structure through the privatization of previously inviable para-statal organizations.

The Phase 2 programme must look increasingly towards further improvement in finishing techniques and footwear and leather goods production, according to the stage of development within the industry in individual countries. Facilities, management, operative, entrepreneurial and marketing skills need to be improved and developed, and opportunities for joint ventures and other contracted management arrangements exploited still further.

Medium and longer-term programmes are necessary to maintain the impetus of the pilot scheme, developed by the government and industry, through its representative bodies, and aided as required by inputs from the UNIDO Phase 2 programme, especially in the hides and skins improvement areas. Liberalized trade in semi-processed and finished leathers should be encouraged within the PTA and SADCC regions, taking advantage of concessionary measures but also taking into account raw material needs of the domestic tanning and leather products manufacturing industry.

In many cases the measures needed in terms of policies and strategies and to facilitate the acquisition of essential inputs, are relatively insubstantial compared with the returns which may accrue to national economies through revenue, FOREX, employment and skill generation. The programme attempted to focus on some of the constraints inhibiting the industry. Hopefully, Phase 2 will, with increased goodwill and support from governments, provide even more tangible proof of the sector's industrial and financial potential.

Recommendations on Regional Level

General - Regional

There is still an urgent need to increase the awareness in governments of the specific economic benefits of a thriving leather industry, and of its requirements to achieve its objectives.

Because of the installed over-capacity in the tanning sector, rehabilitation and improvement efforts should concentrate on existing capacities instead of establishing new ones.

The industry itself should support a strong, integrated professional association and relevant institutions to represent its interests, and be given access to relevant government departments at the appropriate level, to assist them in the formulation and promulgation of long-term policy and strategy decisions, ensuring the continuation of a thriving, dynamic industry from animal husbandry, through slaughter and tanning, to leather products manufacturing.

Where possible the industry should, through its associations and institutions and prior to initiating a dialogue with government, specify the fiscal, tariff and other measures impeding its development. This should highlight the cumulative financial effect upon leather and leather products manufacturers' competitiveness and the consumer's ability to buy locally produced products, and hopefully lead to remedial action on the part of the government. Above all, there is a need to encourage medium-size footwear and leather goods manufacturing units which are in some cases threatened with extinction through the cost, unavailability, poor quality and small range of finished leather.

Additionally, there is the problem of the FOREX allocation for machinery, spare parts and other essential inputs, and sometimes crippling taxation on the various inputs and finished articles. This is often totally disproportionate <u>vis-à-vis</u> imported products and other goods. The footwear industry remains the biggest leather end-user in the world and offers, especially with the rate of population growth in the region, together with other leather products a continually growing market while fulfilling a variety of socio-economic needs.

Governments should consider with sympathy the needs of the industry in implementing increasingly stringent pollution control regulations, taking into account the heavy financial burden of such implementation, and attempt to mitigate the financial liability placed on the industry.

The tanners, professional associations and other institutions should be encouraged to take an increasingly active role in hides and skins improvement, through incentives, training and advice, and especially through the revolving fund established during Phase 1. Above all, it is the tanners and manufacturers who will benefit directly from the programme and are in the best position to provide the necessary financial incentives to the producers, rather than the ministry of agriculture.

To International Organizations and Funding Agencies

It has been acknowledged in many circles that the integrated approach of Phase 1 of the programme has already been highly successful in many respects and greatly appreciated by the industry.

Despite expected and unexpected obstacles and shortcomings, especially the turn of events in Somalia and elsewhere in the region, there is plenty of scope and enthusiasm for extension into a second phase, utilizing a similar integrated approach and expanding the project to include Namibia and Uganda (and possibly Botswana), which are all believed to possess the necessary commitment to develop their leather industry and to have the capacity to benefit significantly from their inclusion in the project.

In those few cases where the level of cooperation was not as high as expected, serious consideration should be given to limiting involvement in any Phase 2 activities to those departments, organizations and institutions clearly able to fulfil their contractual undertakings and to countries fully committed to the development of the industry through to leather product manufacturing, irrespective of whether it is private or state-controlled.

With the industry's, UNIDO's and FAO's assistance, relevant governmental/ ministry departments should formulate suitable incentive schemes to counter the lack of motivation and neglect in hides and skins improvement, and speedily initiate the mechanism to establish an improved statistical intelligence system. Such incentive schemes should be based on the "Guidelines for Grading Hides and Skins by Quality" prepared during Phase 1 of the programme.

In view of the poor past record of such schemes, governments should encourage the state-owned and private industrial leather sectors to be directly involved in hides and skins improvement, in conjunction with existing trading, tannery and leather associations and institutes, and utilize funds raised from levies on hides, skins and leather trades and from the revolving fund solely for such improvement schemes. Animal health, veterinary hygiene and hides and skins extension officers in the target areas should be encouraged to be involved in hides and skins improvement at country levels.

Unfortunately, the low current international demand for hides, skins and leather in 1990/91 and lack of overall incentives has hindered the programme to make the impact on hides and skins improvement as rapidly as anticipated. It must be perceived, in any case, as a long-term ongoing activity and in need of continuous support. However, an impact has been made in the target areas and it is essential to capitalize further on this. As the tanneries respond to the assistance already received, both in equipment and expertise, a wider range of quality leathers is beginning to appear. Focus must now be turned downstream, where further assistance is required in the expansion of the finishing, footwear and leather goods sub-sectors. These are labour rather than capital-intensive, but usually lack essential equipment and other inputs needed for expansion, as well as a range of technical, management and financial skills.

Even more cooperation should be sought with FAO, the funding agencies and governments in the area of hides and skins improvement, and in the upgrading of slaughter-slab and curing facilities in the less accessible areas. Some such schemes, for instance in Ethiopia, have long been under consideration, but continue to be delayed.

To UNIDO Project (Phase 2)

There is need to work even closer with the professional trade associations and institutes in the implementation of workable hides and skins improvement and grading schemes, supported by the revolving fund established for this purpose, and also to seek their recommendation in establishing priorities for the assistance projected in Phase 2, to be incorporated into an agreed medium and long-term development programme.

In conjunction with FAO and ITC, and individual governments, the programme should seek to establish a more effective system of statistical intelligence and reporting for all aspects of the industry, from the livestock census to production of hides and skins, semi-processed and finished leather, footwear and leather goods.

The functions of the national experts will be made easier if they are located away from the departments from which they were seconded and, in some cases, provided with better back-up facilities. There is also a need to clarify their status, especially where they still appear to be considered under the direction of the specific government department that seconded them to the project.

It is recommended that further aid to the Zambian project should await the outcome of current deliberations concerning the re-introduction of open licenses for the export of raw hides and skins. Such action threatens the viability of the whole industry, given its modest raw material resource base and the dominant role of the para-statal CSCZ in the supply of better quality hides.

Likewise, in the area of hides and skins improvement in Kenya, considering the current low level of cooperation (lack of progress) in the department concerned, the disinterest of the KMC, and the cominant position of the traders of raw hides and skins and wet blue, a reevaluation should be made of the benefits which may result from any further assistance to this specific area, unless industry-led.

Further marketing inputs are necessary in the context of future market expansion, information and promotion as rehabilitated enterprises come on-stream with better quality products. Hopefully, the proposed participation of selected footwear and leather goods producers in the Pirmasens fair and the meeting with potential joint venture partners will open a range of opportunities in these sub-sectors, to be further exploited within Phase 2.

Recommendations on Country Level

Recommendations to the Government of Ethiopia

- 1. Improve and increase organized slaughtering facilities by centralizing slaughtering activities in order to eliminate rampant backyard slaughtering. This will result in better quality hides and skins and will also increase collection especially of bovine hides. Centralized facilities should have sufficient provision of water for deaning green hides and skins, and should also have suitable and adequate flaying tools.
- 2. The Government should strengthen activities of hides and skins improvement by enforcing existing legislation on how the trade is conducted and also enforcing grading systems. The Ministry of Agriculture should coordinated the activities of its hides and skins improvement division with those of the National Leather and Shoe Corporation in order to involve the user agency (NLSC) in hides and skins improvement activities. Refresher courses and training of the 300 hides and skins extension officers should be done regularly.
- 3. Avoid idle capacity by strengthening existing capacities rather than increasing the number of tanning units. Recognize that in the long term the limiting factor for capacity expansion in countries with large livestock population, like Ethiopia, is their low off-take rate especially for cattle.
- 4. In order to realize long-term objectives of exporting mainly leather goods it is important that Ethiopia increases and strengthens its leather finishing capacity of both skins and bovine hides. The experience the sector has already gained in manpower development in the manufacture of leather goods and also in marketing of leather and leather products, will go a long way in assisting Ethiopia to achieve this long-term objective in a relatively short period, as proposed in Ethiopia's five-year sectoral development plan. However, because of the complexity of the technological and high fashion requirements essential at this level of development, external assistance will be crucial in the early stages of implementation.
- 5. The increased demand for better qualified manpower as the development of the sector progresses dictates that the Ethiopian Government must put more resources into training and also allocate more foreign exchange for the purposes of investing in footwear and leather goods manufacture. External assistance to the sector should come in to support government initiatives.
- 6. The future of the leather industry in Ethiopia should be safeguarded by investing more resources in effluent treatment plants at this stage when further development is foreseen, in order to prevent a possible future occurrence of a situation where tanneries will not be allowed to operate without meeting certain standards in their effluent discharge. At that time the cost of implementing such requirements might be too high and could jeopardize the whole industry.
- 7. A coordinated effort is needed for a sectoral development by pooling all resources within the hides and skins, leather and leather products sector.

Recommendations to UNIDO and other international organizations

- a) UNIDO should use the Ethiopian five-year sectoral development plan as a framework for the future assistance under the second phase of US/ETH/88/100. The assistance should concentrate on the areas of increased leather finishing and export leather goods production. In order to achieve the necessary quality requirements assistance should be directed towards expanding the crusting and finishing capacities of skins by rehabilitating equipment and machinery in footwear and leather goods factories, and towards manpower development.
- b) Other international organizations, FAO and ITC, should concentrate their efforts on continued hides and skins improvement and increased recovery of hides, as well as promotion of marketing activities.
- c) Subject to the Government's official request, the draft prepared for the programme approach project for Ethiopia for the 1992-96 cycle (Annex 1.1), should be further elaborated and financial resources identified for its implementation (see para.7 above).

Recommendations to the Government of Kenya

- 1. The Government of Kenya should specifically include hides and skins, leather and leather products in its development plan as part of the crucial areas of the industrial sector which must receive priority in development.
- 2. Development of the beef industry should be given similar attention as that given to the dairy industry, otherwise a situation will arise where the country will not only import beef but also raw materials for the tanning sector. The Government should discourage further subdivision of the sector and assist in improving livestock management methods as well as establishment of beef marketing channels.
- 3. The Government should fully recognized the potential of the leather footwear and leather goods sub-sector as a future major source of foreign currency earnings and its ability to create employment. Therefore, the Government should remove the constraints preventing the development of this sector, among them the 50 per cent value-added tax for leather goods which is a serious anomaly. Unregulated importation of extremely low priced products so as to escape high VAT tariffs will destroy this sub-sector if this trend continues and jeopardize the future development of industrial leather sector.
- 4. The sector has its activities regulated by the Ministry of Livestock Development including purely industrial activities. Current policy has led to the situation where the tanning industry is required to obtain clearance from the Ministry of Livestock Development and many export orders were cancelled due to delays caused by the processing of documents through the Ministry. Leather is not an essential commodity requiring export regulation to the extent of disrupting export trade and the more export orders are secured the better for the Kenyan economy.

Recommendations to UNIDO and other international organizations

It is recommended that in the second phase of the ongoing project US/KEN/88/100 the following issues should be addressed:

- a) direct assistance to the tanning industry to improve leather finishing;
- b) effluent treatment facilities should continue to be upgraded;
- c) assistance to the footwear industry which is in great need of rehabilitation as many factories are either closed or operating at a very low rate of capacity utilization;
- d) encouragement to the leather goods industrial development and direct assistance to leather goods factories;
- e) training in footwear and leather goods technology and design;
- f) marketing and investment promotion;
- g) continuation of hides and skins improvement activities and assistance to the Government, by FAO, in conducting a livestock census on a regular basis. The project should develop a new method for providing assistance in the hides and skins improvement. The experiences gathered during the first phase shows clearly that the end-user, the tanning industry, is most dissatisfied with the present performance of the Ministry of Livestock Development and the results in the hides and skins improvement. It is recommended that the end-users, through the KMA and the Tanners Association, become more involved in the hides and skins improvement activities and that the revolving fund created during the first phase will be utilized as the seed money for this approach.

KENYA Sectoral Development Plan Proposal 1991-1992

Year 1991 - 1992

- Strengthening footwear manufacturing capacity by reducing imports of footwear and accelerating the rehabilitation of the footwear industries currently closed down or under receivership, or by encouraging the investment in the sub-sector.
- Improvement of tannery effluent plants.
- Involvement of the private sector in the extension of hides and skins services through the Kenya Manufacturers Association and Kenya Tanners Association.
- Export compensation to be restructured and paid according to the level of processing.
- Development of fish skins as a major export item within the leather sector.
- Promotion of the establishment of leather finishing capacity in the country, especially for bovine hides.
- Abolishment of duty on exported footwear and leather goods.
- Duty exemption on importation of plant and machinery.

Year 1993 - 1994

- Increase export of leather goods.
- Ban export of raw hides and skins.
- Increase export of finished leather.

Year 1995 - 1996

- Ban export of wet-blue hides and skins.
- Increase export of leather footwear.

Recommendations to the Government of Malawi

- 1. The Government of Malawi should encourage investment in manufacturing units of footwear and leather products which will create employment opportunities and contribute towards foreign exchange savings on imported leather products. Therefore, no restriction should be placed on the importation of the necessary machinery and spare parts required by the sub-sector.
- 2. Duty exemption on chemicals imported by Liwonde Tannery should be maintained to enable the tannery to supply leather to leather products manufacturers at competitive prices.
- 3. Hides and skins activities should be strengthened by imposing existing hides and skins trade regulations which have relaxed. This measure will contribute towards maintaining hides and skins quality standards through grading.
- 4. The development of the leather goods manufacturing sub-sector should be encouraged. This sub-sector would be ideal for the local entrepreneurship development as it needs only limited starting capital. Leather goods such as small leather items (wallets, purses, billfolds, etc.), handbags, and tourist items have good local and export markets. Liwonde Tannery is able to supply suitable leather and UNIDO has provided machinery for such operations. Urgent action by the Government is needed in approving a suitable partner for starting the operations.

Recommendations to UNIDO and other international organizations

During the second phase of project US/MLW/88/100 activities should concentrate on the following:

- continue extending technical assistance to Liwonde Tannery to upgrade its capability of producing good quality finished leather for the leather products sub-sector in Malawi;
- b) rehabilitate footwear factories and leather goods units and provide technical assistance in form of training in footwear and leather products technology;
- c) incorporate marketing promotion to enable Malawi to penetrate regional markets.

MALAWI Sectoral Development Plan Proposal 1991-1996

Year 1991 - 1992

- Strengthen operations of Liwonde Tannery by improving technical and managerial capabilities
- Increase recovery of raw hides and skins especially sheepskins
- Strengthen extension services for hides and skins and improve hides and skins drying sheds
- Rehabilitate and expand footwear and leather goods factories

Year 1993 - 1994

- Facilitate importation of inputs necessary for the further development of the leather sector
- Reduce exports of wet-blue leather and raw hides and skins by introducing disincentives (export taxation)
- Reduce imports of finished leather using disincentives
- Continue strengthening hides and skins improvement services
- Intensify training in footwear and leather goods manufacture

Year 1995 - 1996

- To be largely self-sufficient in leather products

Recommendations to the Government of the Sudan

- 1. Enormous resources are required for the rehabilitation and revitalization of the tanneries and footwear factory publicly owned. In order for the private sector to undertake this task the Sudanese Government should accelerate privatization of these factories.
- 2. The Government should reduce or remove the existing high taxes on inputs for the leather industry which at present penalize tanneries for processing leather in the Sudan, who earn foreign exchange as well as create employment, while favouring raw hides and skins exporters. This situation is counter-productive and serves as disincentive to obtain capital investment in this sector.
- 3. The Sudanese Government should promote development of its leather products subsector where immense potential for development exists. Mass importation of cheep synthetic products which eclipses activities in this sub-sector and virtually stops its development should be checked with some form of government intervention through trade regulations.
- 4. Assistance extended to the private industry in the leather sector by external agencies should not be discouraged by the Government and should be viewed as assistance to the country as this type of assistance, which is direct to the industry, yields better results in a national context by increasing foreign exchange earnings and employment opportunities.

Recommendations to UNIDO and other international organizations

UNIDO's assistance during the second phase of US/SUD/88/100 should be concentrated on the following areas:

- a) leather crusting and finishing and the rehabilitation of leather goods units; suitable objects of rehabilitation should be identified during the first six months of the project;
- b) technical assistance to the tanning sector currently under the public sector as well as any suitable tannery to accelerate rehabilitation of these investments;
- c) technical assistance in leather finishing in order to upgrade the quality of leather which will be used by leather products units;
- d) manpower development in technical skills through sponsorship and other forms of training should be given priority.

SUDAN Sectoral Development Plan Proposal 1991-1996

Year 1991 - 1992

- Increase recovery of raw hides and skins by improving extension services
- Rehabilitate public tanneries and slaughterhouses/slabs
- Complete privatization of the tanneries in public sector
- Adopt policies which will ease travel and improve communication and other infrastructural problems in order to encourage investors
- Duty exemption on importation of equipment, machinery, spare parts and other essential inputs to encourage rapid rehabilitation of the industry
- Training of technologists, managers and key personnel for the sector should be intensified

Year 1993 - 1994

- Rehabilitate footwear manufacturing industry
- Increase production of wet blue and consider possible ban or disincentives for raw material exports
- Dissuade continuance of barter trade in hides and skins
- Introduce export compensation based on level of processing
- Concentrate training in footwear and leather goods technology

Year 1995 - 1996

- Enter finished leather export trade
- Arrange joint venture agreements for manufacture of shoe uppers and leather goods for export

Recommendations to the Government of Tanzania

- 1. It is recommended that the Government should accelerate privatization of the leather sector by providing the necessary supportive environment. This exercise will be expedited if Tanzania writes off accumulated debts by the state-owned factories and does not impose conditions such as compulsory re-hiring of personnel in idle plants. If such environment is not created because of the stated government position on social responsibilities, then the sector will neither have the ability to sustain the employees nor the capacity to maintain and renew machinery and equipment.
- 2. The Government should stimulate revitalization of the sector and increased investments by introducing incentives to the industry. Incentives such as duty remission on imported plant and equipment, including effluent treatment plants. Export compensation should be introduced and be paid according to the level of processing.
- 3. In order to increase the quality and quantity of raw hides and skins available to the tanning sector the Government should strengthen hides and skins activities. The role of the tanning sector should be complementary through the revolving fund which is being introduced.
- 4. Government intervention measures should be adopted in order to limit imports of leather footwear and leather goods so as to create room for the development of this sub-sector which has dropped back to infancy stage.

Recommendations to UNIDO and other international organizations

In the second phase of US/URT/88/100 UNIDO inputs should be provided for:

- a) assistance in the privatization process by extending technical and management assistance to the prospective investor during the second phase;
- b) continued assistance to the private sector, by helping in the establishment of a finishing unit in a medium-sized tannery, and to Morogoro Leather Goods factory;
- c) rehabilitation of one footwear factory.

TANZANIA Sectoral Development Plan Proposal 1991-1996

Year 1991 - 1992

- Increase recovery of raw hides and skins
- Rehabilitate slaughterhouses
- Complete privatization of the tanning sector
- Duty exemption on importation of plant and machinery in order to accelerate rehabilitation

Year 1993 - 1994

- Re-evaluate ban on exports of raw hides and skins
- Rehabilitate footwear manufacturing industry

- Introduce facilities for customs duty draw-back on exports of footwear and finished leather
- Introduce export compensation based on level of processing, i.e. crust leather, attracting higher export compensation than wet-blue leather

Year 1995 - 1996

- Increase capacity for leather finishing
- Ban exports of raw hides and skins
- Strengthen footwear and leather goods production

Recommendations to the Government of Zambia

- 1. The Zambian Government should recall existing licenses and urgently discontinue issuing new ones to exporters of raw hides and skins as raw material exports could cause a serious shortage for tanners. Tanning capacity in Zambia exceeds supply of raw hides and skins. If the Government fails to take action on this matter there is danger that the tanneries will close down resulting in idle capacity and loss of jobs. One should note investment in these sectors is fairly recent and government intervention is required before the sector collapses.
- 2. Government intervention is also required in shielding the leather products sub-sector from unfair trade practices such as mass importation of cheap footwear and leather goods.
- 3. Privatization of abattoirs and review of state participation in the SIDO tannery should be considered. At the moment state ownership in these institutions has resulted in certain disparities based on Government bias towards these facilities and which could slow down the development of the sector in the future.
- 4. Duties should be reduced on chemical inputs, machinery and spare parts for the leather industry. This would increase the price competitiveness of the leather products and lead to growth of this sector.

Recommendations to UNIDO and other international organizations

- a) Technical assistance should be extended to other tanneries in Zambia than Bata to create and increase leather finishing capacity.
- b) The footwear and leather goods sector should receive further assistance.
- c) FAO should assist the Zambian Government to reinforce the hides and skins improvement extension services.

ZAMBIA Sectoral Development Plan Proposal 1991-1996

Year 1991 - 1992

- Maintain ban on raw hides export
- Increase recovery of raw hides and skins
- Reduce duties on imported chemical inputs, equipments and spare parts
- Strengthen veterinary activity in hides and skins improvement extension services
- Increase capacity of finishing leather by 50 per cent of the present capacity at Kembe and Asaria tanneries
- Accelerate training in leather finishing, accessories, footwear technology as well as leather goods production

Year 1993 - 1994

- Increase capacity of finishing leather for the rest of the bovine hide production
- Continue to strengthen hides and skins improvement services
- Strengthen footwear and leather goods factories by facilitating importation of accessories
- Adopt an incentive package for the leather sector by introducing duty draw-back on imported inputs for the sector

Year 1995 - 1996

- To be self-sufficient in footwear and leather products

Recommendations to the Government of Zimbabwe

- 1. The Government should seek to control the licensing of private slaughterhouses to prevent large-scale departure from centralized slaughtering, but not at the expense of competitiveness through protection of inefficiency.
- 2. Hides and skins extension services within the Veterinary Department should be strengthened in order to work hand-in-hand with LIZ.
- 3. Facilitate the allocation of FOREX for the importation of spare parts, equipment and other inputs for the industry, thereby generating further FOREX.
- 4. Tariffs should be removed for all chemical inputs used in leather and leather products, especially those manufactured for export.
- 5. Permit importation of raw hides and skins as well as wet-blue leather, to encourage increased utilization of manufacturing capacity.

Recommendations to UNIDO and other international organizations

a) The activities in hides and skins improvement should be expanded beyond the current target area of Masvingo to another province.

- b) In the next phase of the ongoing project US/ZIM/88/100 assist footwear and leather goods manufacturers in expanding and optimizing capacity utilization in their factories.
- c) Leather products manufacturers should receive assistance in marketing their products.
- d) Training of leather, footwear and leather goods technicians should also be included in the second phase.

ZIMBABWE Sectoral Development Plan Proposal 1991-1996

Year 1991 - 1992

- Expand hides and skins extension activities from Masvingo Province to another province; increase the participation of the government and private sectors in extension services
- Increase collection of raw materials especially goatskins
- Duty exemption on machinery and spare parts for footwear and leather goods factories
- Create more capacity for leather products manufacture

Year 1993 - 1994

- Ban export of 25 per cent ex-CSC wet-blue hides and convert them into finished leather
- Allow free importation of raw hides and skins and wet-blue leathers
- Intensify training in footwear and leather products design and manufacture

Year 1995 - 1996

- Increase exports of leather products through higher marketing activity.
- Provide increased incentives to the sector through duty exemption, loans or grants at concessionary rates, and the introduction of export credit guarantee schemes.

ANNEX 1

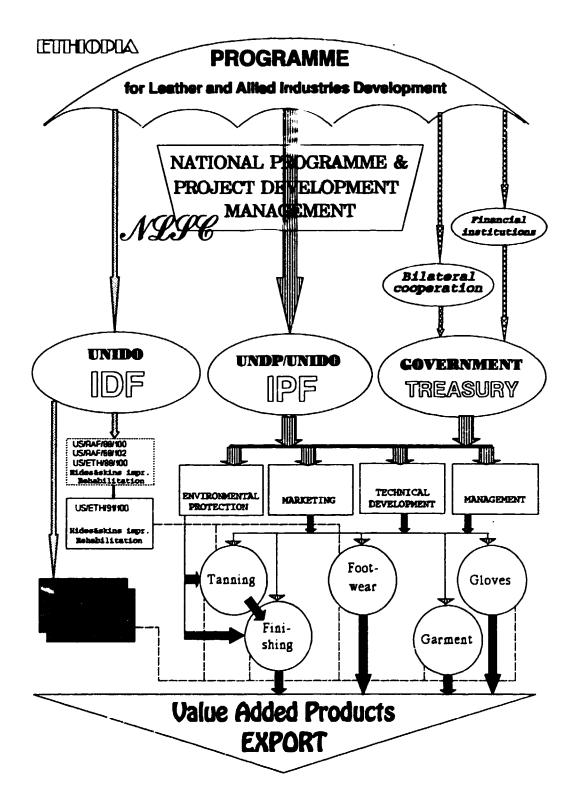
Graphic Illustrations

US/RAF/88/100

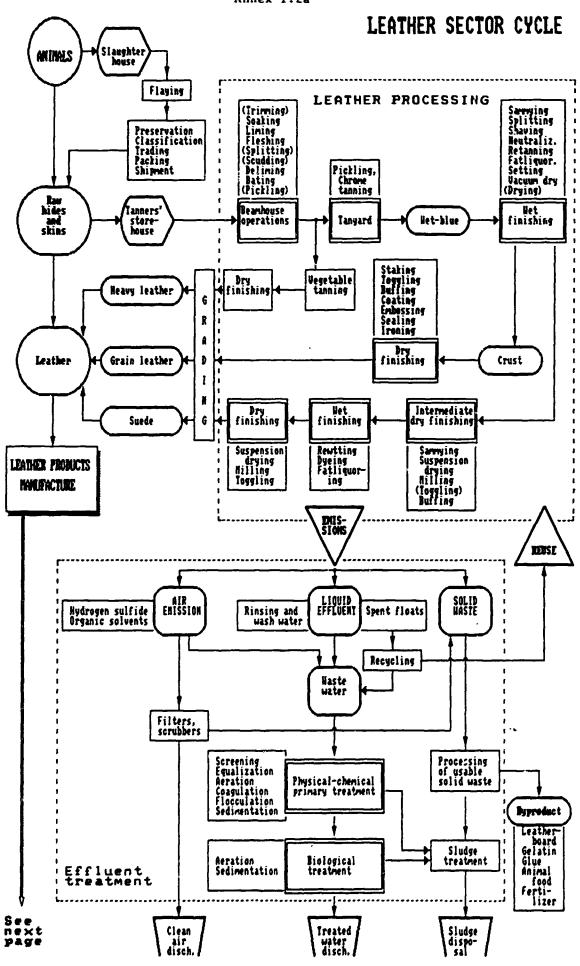
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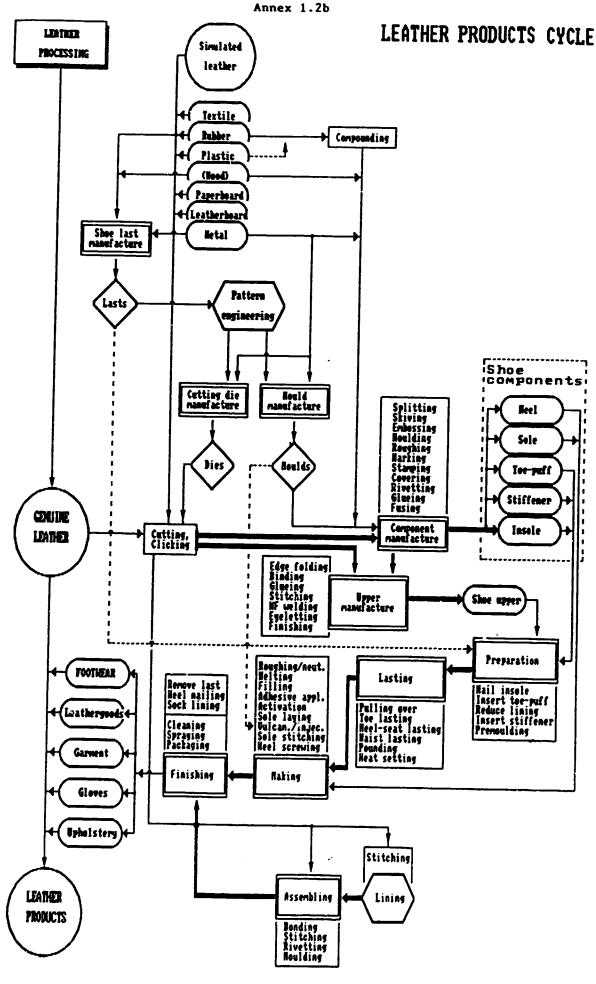
Summary

- 1. Ethiopia Leather Sector Development Plan (1992-96) Source UNIDO
- 2. Leather Sector Cycle Leather Products Cycle Source UNIDO
- 3. End-Use Demand for Leather Source Landell Mills Commodities Studies Ltd.
- 4. Forecast of Bovine Hide Production Source Landell Mills Commodities Studies Ltd.
- World Supply/Demand Balance Leather Source Landell Mills Commodities Studies Ltd.
- 6. Map of the Region with Animal Population & Graphic Illustrations Source UNIDO/FAO



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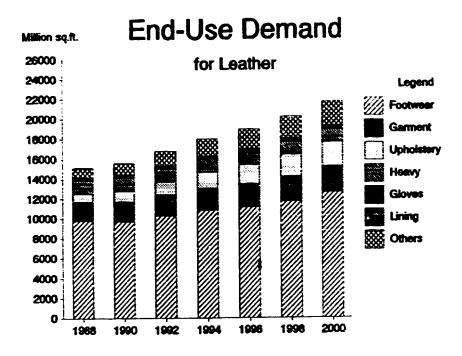




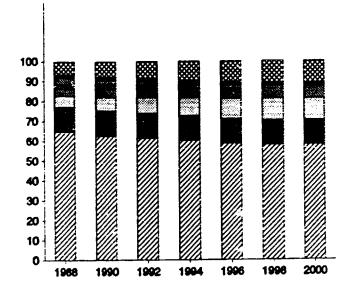
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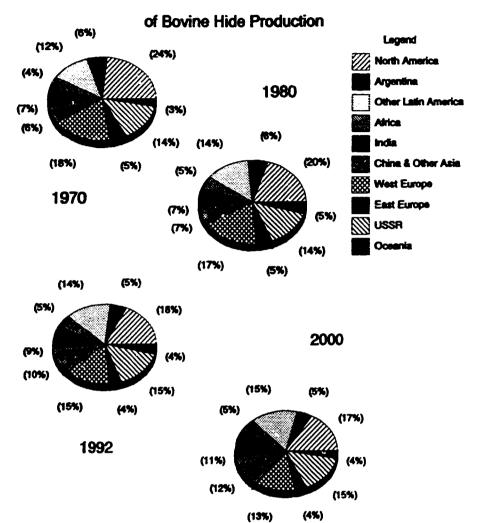
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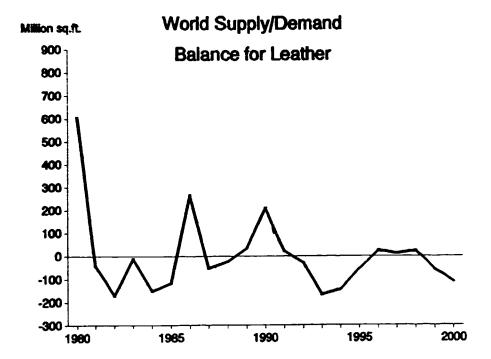




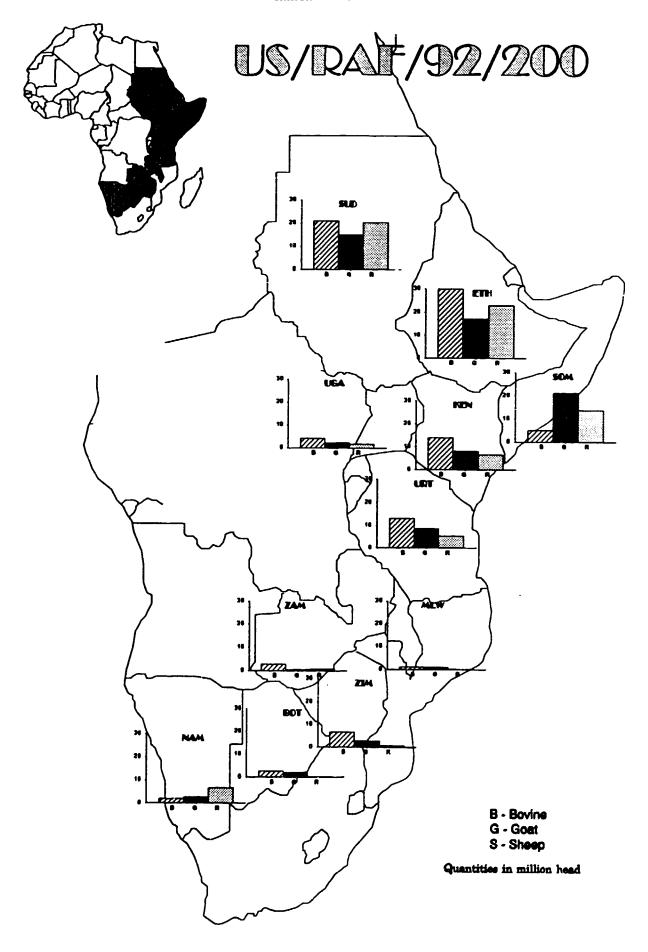
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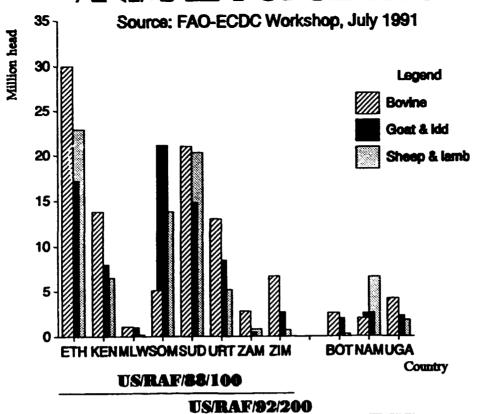
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Annex 1.6a



ANIMAL POPULATION



	BOVINE	GOAT	SHEEP	TOTAL
ETH	30.0	17.2	22.90	70.10
KEN	13.8	8.0	6.50	28.30
MLW	1.1	1.0	0.22	2.32
SOM	5.1	21.1	13.80	40.00
SUD	21.0	14.8	20.30	56.10
URT	13.0	8.5	5.20	26.7 0
ZAM	2.8	0.5	0.85	4.15
ZIM	6.7	2.7	0.72	10.12
Total Phase I	93.5	73.8	70.49	237.79
BOT	2.6	2.0	0.30	4.90
NAM	2.0	2.6	6.60	11.20
UGA	4.2	2.3	1.80	8.30
Total new	8.8	6.9	8.7	24.40
TOTAL PHASE II	102.3	80.7	79,19	262.11
Percentage of Africa	55.6	49.5	40.90	
Percentage of World	7.2	16.0	6.90	
TOTAL AFRICA	183.9	162.9	193.50	540.30
TOTAL WORLD	1,415.5	503.8	1,142.40	3,061.70

Bulawayo, Zimbabwe, 29 July - 2 August 1991

Statistical compendium for raw hides and skins leather and leather footwear in Africa

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Annex 7



UNITED
NATIONS
INDUSTRIAL

DEVELOPMENTORGANIZATION



REGIONAL AFRICA

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME

1

US/RAF/88/100

OUTPUT 4

GUIDELINES FOR GRADING OF HIDES AND SKINS BY QUALITY*

Based on the work of Mr. Alfred Lesuisse, Senior Leather Industry Consultant

Backstopping officers:

Juhani Berg, Aurelia Calabro

UNIDO, AGRO-BASED INDUSTRIES BRANCH

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UNIDO UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION, Vienna, Austria

FAO FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, Rome, Italy

UNCTAD/

ITC UNITED NATIONS COMMITTEE FOR TRADE AND DEVELOPMENT/INTERNATIONAL

TRADE CENTRE, Geneva, Switzerland

IDF UNIDO Industrial Development Fund

ICT INTERNATIONAL COUNCIL OF TANNERS

ICHSALTA INTERNATIONAL COUNCIL OF HIDES AND SKINS & LEATHER TRADERS

ASSOCIATIONS

IHATIS INTERNATIONAL HIDES & ALLIED TRADE IMPROVEMENT SOCIETY

ISO INTERNATIONAL STANDARDIZATION ORGANIZATION

AFNOR ASSOCIATION FRANÇAISE DE NORMALISATION

BSI BRITISH STANDARD INSTITUTION

USCS The United States Commercial Standard

I. FOREWORD

The studies prepared and research conducted for the UNIDO global leather sector consultations (Innsbruck, Austria, April 1984) and the deliberations of the ninth UNIDO Leather Panel (Pécs, Hungary, October 1988), the Sectoral Meeting on the Leather and Leather Industry in Africa (Alexandria, Egypt, January 1987), the FAO Inter-governmental Sub-Group Meeting on Hides and Skins (Rome, Italy, January 1987) have clearly proven that there is an enormous waste of raw hides and skins in Africa, brought about by inadequate slaughtering and flaying techniques, defective tanning, poor capacity utilization, low productivity and lack of training.

It was, therefore, recommended that an improvement in this sector could be achieved through the implementation of a major technical assistance programme.

Following this general recommendation, in cooperation with FAO and ITC, UNIDO's Leather Unit developed the large-scale Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme, US/RAF/88/100, which comprises several new elements in the so-called "programme approach".

UNIDO is the main executing agency and provides the total funding through the IDF special purpose contributions from six donor countries namely, Austria, France, Federal Republic of Germany, Italy, the Netherlands and Switzerland and is well under way in eight countries of East Africa namely, Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe.

The main objectives of this large scale project are the following:

- to establish a regional pilot scheme and to demonstrate, in practical terms, the process of hides and skins improvement from butchering and flaying to conservation, grading and collection;
- b) to act as a catalyst to national authorities to introduce incentives for improved quality performance;
- c) to rehabilitate existing infrastructures and selected leather tanning and processing plants by increasing their efficiency and capacity utilization, upgrading technical standards, operational methods and skills, product quality, as well as the knowledge of those attached to these industries at various levels, starting from primary producers.

According to Output 4 of the Project Document, "Improved quality of raw hides and skins through incentives to primary producers, and a realistic quality grading system, based on a well-operating hides and skins improvement scheme (as per output 2). The quality monitoring is closely connected with improved statistical intelligence and the results of this output will be judged on the basis of the statistical data on pricing and grading to be collected under output 3".

Several national projects and FAO experts have been pursuing this same goal and it was, therefore, thought that the *Hides and Skins Improvement Seminar*, held in Bulawayo, Zimbabwe, from 19 - 23 November 1990, could be an excellent opportunity to get more information and compare experience.

During this Seminar, a draft compendium for grading of trimmed skins was prepared and distributed to the participants in order to show how it should be visualized as a suitable

guideline to be used by the project target areas personnel and also later as an internationally accepted standard.

This compendium was based on a grading system developed by A.H. Robinet, Docteur Vétérinaire, INSTITUT D'ELEVAGE ET DE MÉDICINE VÉTÉRINAIRE DES PAYS TROPICAUX, and consisted of a set of pictograms showing various defects acceptable in trimmed, raw sheep and/or goat from grade 1 to 4. These pictograms were shown during the Seminar in order to be further developed and to improve the system.

A set of empty prints of the skins was also distributed to the participants to be filled with their own ideas on how the various grades should be illustrated.

As the Seminar was attended by several participants from nine African countries (Uganda was also included), who work in this area daily and also by several top international experts, the results of this exercise have provided UNIDO's LEATHER UNIT with valuable material and have once again proven the necessity of elaborating a compendium to be submitted to such bodies as the ICT, ICSHALTA, IHATIS and FAO for their comments and recommendations and, finally, presented as a recommended grading norm for the participating countries.

A further effort in this direction was made through the presentation of the same draft compendium for grading of trimmed skins during the ECDC Workshop on Trade in Hides and Skins and their Derived Products organized by FAO from 29 July to 2 August 1991.

This Workshop, attended by more than 40 participants representing 13 English-speaking African countries, with additional participants from UNIDO, ITC and the International Council of Tanners, recommended that:

"The Draft Guidelines for the grading of sheep and goat skins prepared by UNIDO and presented to the present Workshop should be further elaborated and expanded to include the grading of cattle hides." These guidelines should then be presented for the consideration of the Sub-Group on Hides and Skins."

The purpose of this paper is, therefore, to elaborate a quality standard for hides and skins grading by quality to be applied in all interested countries.

However, before going into technical details, it is useful to give some clarifications on the terms used.

According to the Oxford dictionary the main definitions for standard are: a) weight or measure to which others conform or by which the accuracy or quality of others are judged; b) thing serving as basis of comparison; c) document specifying (inter)nationally agreed properties for manufactured goods i.e. the British Standard, etc.; while grading is described as: a) degree in rank, proficiency, quality, value, etc., class of persons or things alike in these; b) variety of cattle produced by crossing native stock with superior breed; c) group of animals at similar level of development; d) arrange in grade, class, sort; etc.; and, finally, quality is defined as: a) degree of excellence, relative nature or kind or character; b) faculty, skill, accomplishment, characteristic trait, mental or moral attribute; c) possessing high degree of excellence; concerned with maintenance of high quality, etc.

It is easily seen that there is a large variety of possible ways to interpreter the three words, grading, quality and standard; however, instead of confusing the issue, when it comes to the Hides and Skins Sector, by Standards for Grading by Quality, it is usually meant:

Criteria specifying (inter)nationally agreed methods of classification of hides and skins according to their properties and usefulness.

(Inter)national institutions such as the INTERNATIONAL STANDARDIZATION ORGANIZATION the BRITISH STANDARD INSTITUTION, L'ASSOCIATION FRANÇAISE DE NORMALISATION and the UNITED STATES COMMERCIAL STANDARD have prepared different standards for grading by quality of hides and skins. In addition to this, valuable work has been carried out by various other organizations and individual experts. Annex 1 presents references to the classifications of A. Skins and B. Hides and other reference material published on the subject matter.

National (draft) standards have been prepared in some of the African countries and copies of presentations of such standards from Ethiopia, Tanzania and Sudan are enclosed as Annex 2. It is of importance that when individual quality grading standards - based on this draft - are prepared, that the work already carried out by the various international and national standard organizations, are referred to.

Generally speaking, the structure of this paper follows the pattern for the *Presentation of International Norms and Technical Report* prepared by the INTERNATIONAL STANDARDIZATION ORGANIZATION (ISO, Annex 1, reference hides: 8).

Referring to the substantive part, the two standards, which are hereby proposed, originate from the existing documents; however, their main feature is that part of the assessment has been reproduced in pictograms visualizing the grading of hides and skins step by step.

It is widely realized that improvement of hides and skins quality can be achieved only if quality grading norms are applied. The primary producer, as well as the whole chain of related services, including flaying, curing, handling and storing, should be rewarded by better prices for improved quality. The main purpose of this draft is therefore to provide a basis for such a quality grading.

It must be realized that countries cannot successfully enter the export trade of value-added leather products without having first solved the raw material problems.

It is, therefore, anticipated that this paper will be considered as a contribution to create more understanding at all levels of the important role of hides and skins grading and that the various African countries concerned will use these guidelines to prepare, up-date and enforce the individual grading standards.

The paper will be presented to the Committee on commodity Problems, Intergovernmental Group on Meat, Sub-Group on Hides and Skins, at its third meeting in Rome, 21-24 April 1992, in order to benefit from the Intergovernmental Groups' guidance and recommendations on the following issues:

- 1. Is the quality grading system, presented in the paper, also applicable to countries other than the seven African countries participating in the joint UNIDO/FAO/ITC Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme? If so, what measures should be taken to assure the widest possible distribution and implementation of the system?
- 2. Should UNIDO/FAO/ITC launch a special project to implement the system and what role could the NGO's, such as the International Council of Tanners (ICT), the International Council of Hides, Skins & Leather Traders Association

GUIDELINES for grading skins

		Defects					
G R S D E		Health, diseases, tumors, etc.	Marks, brands, paint, etc.	Insects, para- sites, cockle, ticks, etc.	Wounds, holes, cuts, scrat- ches, etc.	Putrefact ion, hair slip, read heat, etc.	Dirt, dung, urine, seeds, sand, etc.
1st	Location Concent. Depth Surface	1-2 1 1 1	1-2 1 1 1	1-2 1 1 1	1 1 1 1-2	0 0 0 -	0 0 0
2nd	Location	3	3	3	2-3	1-2	1-2
	Concent.	1	1	1	1	1	1
	Depth	1	1	1	1	1	-
	Surface	1	1	1	1-2	1	1
3rd	Location	3-4	3-4	3-4	3-4	3	3-4
	Concent.	2	1	2	2	2	1
	Depth	2	2	2	2	2	-
	Surface	1	1	1	1-2	1	1
4th	Location	3-4	3-4	3-4	3-4	3-4	3-4
	Concent.	2	2	2	2	2	2
	Depth	2	2	2	2	2	2-
	Surface	1-2	1	1-2	1-2	1-2	1-2

LEGEND - code

	0	1	2	3	4
Location		periphery	legs, tail, cheeks	shoulder, belly	central part
Concentration	none	low	medium	high	
Depth		superficial	through		
Surface		grain	flesh		

6.2. For the purposes of this standard, the tables 2, 3, 4 and 5 are showing the graphic representation of the 1st, 2nd, 3rd and 4th grade.

- d. open or cicatrized wounds
- traces of putrefaction and
- some dirt are accepted except in the best part of the skin (butt).

Please note that all defects mentioned should not cover more than 25% of the total area of the skin!

5.3.4 Fourth grade

The fourth grade shall be done according to the following requirements:

In addition to the defects mentioned for the third grade, defects are accepted in low/medium concentration on the skin if they do not cover more than 40% of the total skin area!

5.3.5 Rejects

All skins presenting more defects than those accepted for the fourth grade and skins of which more than 50% of the area cannot be transformed into leather are classified as rejects.

In addition, the following skins shall be included in the rejects:

- Fallen skins
- Untrimmed or poorly trimmed skins
- Ground and ball dried skins
- Smoked skins

6. Graphic representation of the classification

6.1 The following table summarizes the coding for the grades in relation to the defects, their location and concentration as well as their depth and surface.

First Grade

Wounds Holes Cuts etc.

Putrefaction Read heat Hair slip etc.

Dirt Dung Urine Seeds Sand etc.

Health diseases Tumors etc.

Marks Brands Paints etc.

Insects Parasites etc.

Second Grade

Health diseases Tumors etc.

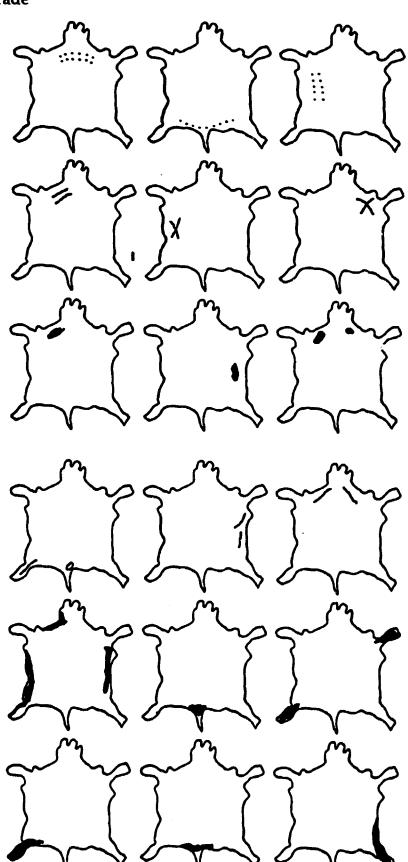
Marks Brands Paints etc.

Insects Parasites etc.

Wounds Holes Cuts etc.

Putrefaction Red heat Hair slip etc.

Dirt Dung Urine Seeds Sand etc.



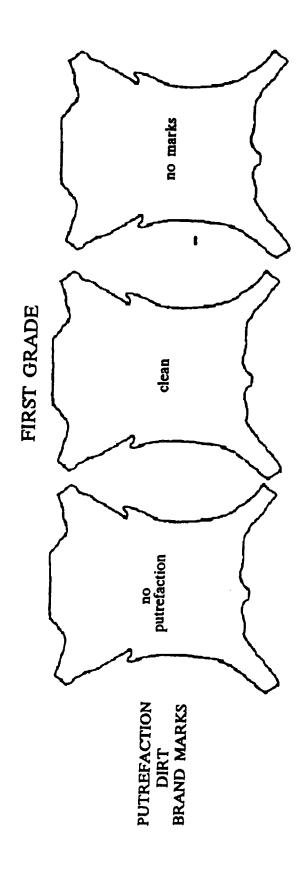
GUIDELINES for grading hides

		Defects					
G R A D E		Natural defects, diseases, parasites, ringworm, anthrax, etc.	Mechani- cally caused defects, brands, wound, etc.	Dirt, dung, urine, sand, seeds, etc.	Flaying defects, cuts, holes, scores, cracks, etc.	Putrefaction, hair slip, red heat, salt, stations, etc.	
1st	Location	1-2	1-2	0	1	0	
	Concent.	1	1	0	1	0	
	Depth	1	1	0	1	0	
	Surface	ī	1	1	1-2	-	
2nd	Location	3-4	3-4	3-4	2-3	1-2	
	Concent.	1	1	1	1	1	
	Depth	1	1	1	1	1	
	Surface	1	1	1	1-2	1	
3rd	Location	3-4	3-4	3-4	3-4	3	
	Concent.	2	2	2	2	2	
	Depth	2	2	2	2	2	
	Surface	1	1	1	1-2	1	
4th	Location	3-4	3-4	3-4	3-4	3-4	
	Concent.	2	3	2	3	. 3	
	Depth	2	2	2	2	. 2	
	Surface	1-2	1	1-2	1-2	1-2	

LEGEND - code

	0	1	2	3	4
Location		periphery	legs, tail	shoulder, belly	butt
Concentration	none	low	medium	high	
Depth		superficial	through		
Surface		grain	flesh		

6.2. For the purposes of this standard, table 1/H, pictograms 2/H - 12/H, show the graphic representation of the 1st, 2nd, 3rd and 4th grade.





Annex 8 UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION



REGIONAL AFRICA

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME

US/RAF/88/100/11-51

TECHNICAL REPORT (*)
on a mission to
ETHIOPIA, KENYA, TANZANIA, ZAMBIA and ZIMBABWE

February/March 1991

Based on the work of

Alfred Lesuisse, Senior Leather Consultant

Backstopping officers: Juhani Berg, Aurelia Calabro Agro-Based Industries Branch

^{*} This report has been reproduced without formal editing

INTRODUCTION

The purpose of the mission was:

- to provide a status report on US/RAF/88/102 including evaluation of results so far and to prepare a form for self evaluation of results by the factories assisted.
- 2. Recommend the machineries to be purchased for the 1991 portion of the project.
- 3. Recommend and draft an extension of the project.

In two assisted countries the purchased equipment was delivered, installed and operational, a separate report on the evaluation of the rehabilitation programme was submitted for Ethiopia and Zimbabwe. The assisted factories were requested to give information on the benefits obtained from the rehabilitation assistance on:

- increase in productivity
- increase in production output
- increase in area yield
- quality improvement
- new products and product development
- higher added value
- energy savings
- chemical savings and improved chemical process
- labour savings and better labour conditions
- environment protection

The recommended machineries to be purchased for the 1991 portion of the project and the recommendations for extension are in each of the countries reports (Ethiopia, Kenya, Tanzania, Zambia and Zimbabwe).



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Mr. Juhani Berg, SIDO Agro-Based Industries Branch Leather Unit, UNIDO P.O.Box 300

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Date

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ETHIOPIA

Addis Ababa

13 NOV 1952

Dear Mr. Berg,

A-1400 Vienna, Austria

REGISTRY

The leather and leather products sector of Ethiopia benefited from phase I of the project entitled National Hides and Skins, Leather and Leather Products Inprovement Scheme US/ETH/88/100, which is also associated with the Regional Project US/RAF/88/100 covering eight African countries. We are certain phase II of the project will continue. Although the project covers raw hides and skins, and leather and leather products, it could be said Awash Tannery was rather the main beneficiary.

As you well know, Awash is not only one of the largest tanneries, but also one with relatively better experience in the production of crust and finished leather olbeit a small portion of its daily soaking capacity. The magninery and equipment supplied coupled by the expert advice delivered under this project up-graded our capability of producing crust and finished leather and enabled us to emprove quality.

BALLE 1845 MM HEFETT FE TELES SMOTHER SIET STATE TANNED SINDER NATIONAL LEATHER AND SHOP CORPORATION

Our skins tannery which was limited to pickle, on the main, before implementation of Phase I of the project, produces crust and finished leather both for export and as a raw material input for export oriented leather products plants now.

In view of the benefits to the sector in general and Awash in particular, we are making every endeavour so as to process all our daily soaking of over 10,000 skins and 1000 hides into crust and finished leather. Based on our past experience and given the continuation of UNIDO assistance such a plan is indeed feasible.

During the preparation and implementation of Phase I, the National Leather and Shoe Corporation was the main national counter part organization. The Corporation is now winding up-its activities as the plants have become autonomous enterprises by proclamation. Our tannery has been strengthened not only by machinery and equipment but also by additional qualified manpower.

The full benefits of the investment are rather realizable in the medium and long term. But already realised benefits by quality improvements, production of crust and finished leather from skins, production of split leather and chemical saving in the hides tannery are significant.

We are grateful for the past assistance and we are confident such cooperation and assistance will continue.

Please Mr.Berg accept our thanks and through you to UNIDO

and the donor countries.



Best Regards,

LUEL BERTANE GENERAL MANAGER

CC.

Seyoum Hailu-National Expert

Addis Ababa

- .Technical Manager
- .Production Manager
- .Planning Unit

Awash Tannery

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DIRE TANNERY

IMPORT & EXPORT

P. Q. Box 2482 Addio Abobe, - Ethiopia

Telefax 261 - 1 - 763455 Tolog 21613 DTSKIN ET Cable BACH.

our ref : DT/INIDO 92.136bur ref :

47 19th October, 1992.

EXPORTERS

OP

WET BLUE

Mr. Juhani Berg, SIDO Agre - Based Industries Branch, Leather Unit, MIDO P.O.Box 300 A-1400 Vienna, Apstria.

GOAT AND

Dear Sir.

GHEEP SKINS

First and foremost we would like to put on record our despest appreciation and gratitude to MIDO for the generous donation of one fleshing machine and snother drum.

MOKLED

SHEEP SKIND

WIT GLUE

HIDES

This gesture of assistance has been so far the only one of its kind and has gone a long way to increasing our production both in quality and quantity. The increment in quantity has exceeded 10%. Starting its tennery with modest implements, Dire Tannery has now reached a point of earning more than Birr 10.0 . million in foreign exchange.

It appears appropriate to indicate that most of the machines have now become old and their replacement is long overdue. We have found it very difficult to replace them because of the government's in ability to allocate forex for this purpose. Besides, the expansion of our tannery, coupled with the extension of residential houses around the tannery has created problem of effluents. This situation necessitates the erection of water treatment plant, which we have so far been unable to accomplish on account of forex shrortages.

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DIRE TANNERY

IMPORT & EXPORT

P. O. Box 2492 Addis Ababa, - Ethiopis

Office 791232

Tolofax 251 - 1 - 762458 21613 DTSKIN ET Telex

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OUR REF IDT/UNIDO 92.137YOUR PEF I

Date 19th October, 1992.

EXPORTERS

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OF

WET BLUE

GOAT AND

SHEEP SKINS

PICKLED

SHEEF SKINS

WET SLUE

HIDES

We are quite aware that your erganization would very much like to avoid pollution and is involved in environmental protection. We are also interested to do the same and at the same time expand our business activities. Hence, UNIDO'S technical and material assistance in this respect would definitely go a long way to enable us not only to eliminate and avoid pollution but also to increase as well as upgrade our tannery production, thereby augment our forex earnings. Hay we take, therefore, this opportunity to bring to the kind attention of your esteemed organization the effluent problems, which, we feel, must be addressed in good time.

In conclusion, while we love to express once again our profound thanks for your kind assistance and co-operation, we would also like to bring to the attention of the concerned ministries by a copy of this letter the contribution of your esteemed organization for the development of the tanneries.

Very many thanks and kind regarderes

You's Vincerely.

Bedade Chali 1 Manager.

00 : - Ministry of Trade - Ministry of Industry



KITALE TANNERIES LIMITED

Manufacturers and Exporters of Wet Blue Hides & Skins.

P. O. Sex 1649, Tel. 2652 KITALE Kenya. Telex No. 38024 KITAN. 31053

OUR REF: C/UNIDG/II/92

YOUR REF:____

DATE 23rd November, 1992.

Mr. G. Felsner, Chief Technical Adviser, UNIDO Regional Leather Project., P.G. Box 30218, Nairobi.

Dear Sir.

RE: US/RAF/88/100

RECEIVED
NAIROBI
26 NOV 1992
UNIDO
US/PAF/88/100

we acknowledge receipt of your letter dated November 2nd, 1992 in which you required us to write and inform the impact of the above project had on our company's product development and pollution control.

Since the inception of the above project, its impact on our company's product development and pollution control is as follows:

- I) On our product development, we have had several visits of tanners and engineers with specific assignments of improving quality of our wetblue hides and skins and perfomance of our Tannery machines. As a result of this assistance the quality of our wetblue improved tremendously and we received repeat orders from our customers up to now. Further to this visits, we also received assistance of staff trainings organized through this project by way of seminars in maintenance and processing.
- 2) Through this project, we also had several visits on effluent improvement. This visits were basically consultation in nature and they were to evaluate and advise on various ways of improving our effluent treatment. This also involved laboratory tests to determine levels of B.C.D. and C.O.D. in the effluent as well as

CONT'D.

checking of chrome exhaustion and its up take in our wetblues. Through this visits it was discovered that no aeration was taking place in our Sulphur Oxidation Basin hence the need to address this problem. After several visits it was established that the project will assist us achieve this goal. Therefore, we benefited with the provision of a blower to aerate the effluent discharged into the Sulphur Oxidation Basin. This was loaned to us through the project and we are to pay back without any interest.

To date, the blower is performing very well machenically and all the scum that used to block it is no more. We have now sent effluent samples to the K.I.R.D.I. laboratory for oxidation efficiency and is yet to receive the results.

We hope the above information satisfies your request regarding the impact of the above project to our product development and pollution control. We remain,

Yours faithfully, For Kitale Tanneries Ltd.

O. Jama Director. US/ZAM/88/100

Unido Rehabilitation Programme for Kafue Tannery

The above programme for Zambia Bata Kafue Tannery has been completed. This report outlines the benefits of the rehabilitation project. Please refer to Annex 8 of the original proposal for Kafue Tannery to compare the projected benefits.

1. Production

- 1.1 As a direct result of the installation of the two new tan drums, tannery capacity has risen from 500 to 700 hides per day. This is the 40% increase projected.
- 1.2. We are satisfied that the improved mechanical procedures have given an increase in area yield but it is not possible to quantify this because of the effects of this year's drought in Zambia. Lack of feed due to the drought has resulted in many animals being slaughtered early and this high proportion of small hides has then made comparison with previous years impossible. However, a clearly quantifiable increase in area of 10% has been achieved as a result of an unprojected benefit of the new machines. See 3.3 below.
- 1.3. The capability to produce whole hides for wet blue export has been made possible with the whole hide through feed sammying machine. However owing to prevailing world economic conditions we have temporarily suspended the export of wet blue hides.
- 1.4 Cost benefit not projected: the new tan drums allow the use of short float tanning systems estimated saving 1992:
 - b. Chrome powder down 1% from 8% to 7% US \$38,000 (24tonnes) in standard production
 - » Salt down 3% from 8% to 5% US \$11,000 (70 tonnes)

This also gives a significant reduction of poliutants in the effluent.

2. Quality

- 2.1 Projected increase in grading was from 360 to 310. This has been far exceeded and we are currently achieving 280 (an 80 point improvement), corresponding to an increase in value of US \$250,000.
- 2.2 Sales of leather to customers other than Bata are over 30% of total production for 1992. This compares to figures of less than 10% of total production for 1989 (the reference year for the original report).

3. Working Conditions and Environment

3.1 The old tan drums are being rebuilt under the guidance of Mr. A. Zink (UNIDO Tannery Machinery Expert) and when complete will be used in place of the outmoded soaking pits, eliminating some difficult and unpleasant working conditions.

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Working conditions and Environment cont'd

- 3.2 As originally proposed all of the chrome producing operations—have been isolated in one area so that all chrome contaminated waste can be collected separately for proper treatment. In January 1993 Mr. Clonfeso, (UNIDO Effluent Consultant) will be visiting the tannery to advise on the best waste disposal system for chrome and other effluent.
- 3.3 A further benefit of the new machinery that was not projected is its role in the new 'green' leather technologies. We have just completed a bulk trial (250 hides) using the latest 'Wet White' process in conjunction with Schill-Seilacher Chemicals Gmbh. This process requires a low float procedure which could not have been considered without the new tan drums and high accuracy splitting and shaving capacity, again not possible without the new sammying and shaving machines. The advantages are:
 - Instead of over 100 tonnes/annum hazardous chrome trimmings and shavings requiring regulated disposal, shaving and splitting in the wet white provides 100 tonnes/annum of fertiliser.
 - » low float reduces amount of salt used in production and salt in effluent.
 - there is a 10% increase in area yield compared to our normal, current production.

General

- » All the equipment received by the tannery was very badly needed and is now being fully utilised.
- » More finished leather is being made available to other Zambian leather users.
- Money being repaid by Zambia Bata to the revolving fund is helping to further the efforts of the Zambian leather industry as a whole.

Zambia Bata extend their thanks to all of those at Unido and to the donor countries who made the project possible. Special thanks are due to Mr. A. Zink whose knowledge, experience and sensitivity to local problems ensured success.

We believe that we at Zambia Bata have played our part too and hope we may look forward to being involved in phase II.

P.A.Folschweiler

Managing Director

1st December 1992



Asaria Leather Industries Ltd.

TANNERS AND LEATHER GOODS MANUFACTURERS

P. O. BOX 36050 LUSAKA ZAMBIA TELEPHONE: 211519 TELEX: ZA 40006

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NAIROSI
013EC 1992
UNIDO
US/RAF/88/100

20. 11. 92.

For the kind attention of the Donor Community

Dear Sirs,

We are indeed quiet privileged to make the following comments and observations. Our Company was one amongst others which was assisted by Unido. The assistance given was by way of supply, installation and commissioning of Effluent Treatment Equipment. This plant has now turned out to be a model treatment plant for effluent in Zambia. Installation and commissioning of the equipment took place early this year. Since then the plant is fully operational. The C. & F. value of Equipment supplied was U.S. Dollars 38900.00.

Obviously Unido was able to come up with such kind of assistance due to strong financial support from various Donor Countries. We therefore appeal to both the Donor Countries and Unido to continue giving assistance of this kind to the Leather Sector in Zambia. Whatever assistance that is given in future will be put to good use and will be very much appreciated.

Thanking you.

Yours faithfully,

K.R. MEHTA (MR.)

for/ASARIA LEATHER INDUSTRIES LTD.

cc: Unido./UNDP.
P.O. Box 31766.
Lusaka.



PACHAR HOLDINGS LIMITED

MANUFACTURERS OF HIGH QUALITY FOOTWEAR & LEATHER GOODS

KENYATTA HIGHWAY POBOX 3672 MADARAKA • THIKA TFLEPHONE 22633 FAX 31195

POBOX 78175

2nd December, 1992"

The Chief Technical Advisor UNIDO P.o Box 30218, NAIROBI.

Dear Sir,

RE: US/RAF/89/100.

The above mentioned programme which has been very successfully implemented by UNIDO has had a tremendous positive impact on the leather Industry and the leather products such as shoes. We in the shoe industry have witnessed a steady improvement of the finished leather that we get from the local tanneries both in texture of the grain and high quality finishes. Undoubtedly this has in return enhanced the overall quality of the shoes that we manufacture.

The Pachar shoe factory has benefited greatly from the project in the undermentioned areas:-

TRAINING

Two employees of our Company were sent to PISIE - Italy for a pattern cutting and designing course, as a result we now have better designs and above all the current patterns interlock very well thereby giving us a substantial saving in leather. A further positive result is the good fitting of uppers on shoe lasts which has eased and streamlined the lasting operations. We have had THREE expertriates in our factory, one of whom was assigned to ON THE JOB training of hand cutters and sewing machines operators resulting to higher outputs in both departments, better material saving by the cutters and a remarkable improvement in the quality of sewn uppers. The other TWO expertriates from UNIDO helped us on improved factory lay-out, better lasting methods and a new designing approach using pre-sketched models.

REHABILITATION

Under rehabilitation programme Pachar has received several new machines among them sewing, stamping, eyeletting and finishing machine. In addition we acquired hand tools including hammers, lasting pincers, lasts and designing tools. The immediate result has been gradual increase in both productivity and production as we continue to utilize the equipment. While the machinery & equipment has to be paid for, UNIDO has introduced an excellent re-payment

programme



PACHAR HOLDINGS LIMITED

MANUFACTURERS OF HIGH QUALITY FOOTWEAR & LEATHER GOODS

KENYATTA HIGHWAY POBOX 3672 MADARAKA • THIKA TELEPHONE 22633 FAX 31195

POBOX 78175 NAIROBI

-2-

"REVOLVING FUND" which will have immediate benefits as the monev is interest free and long term benefits in as far as the fund can assist members to acquire more machinery in future. The particular programme also fully ensures that UNIDO funds go to right companies which will fully utilize the facilities to the maximum benefit of the leather & shoe industries in Kenya. The programme further reassures the DONAR countries that the funds donated by them are put into the right use.

LABORATORY TESTS FACILITIES

The regional office in Nairobi has made sure that the leather & shoe industry has modern laboratory facilities in KIRDI where important tests such as lastometer, adhension and flexing tests are carried out. A further benefits is the frequent leather seminars where we are invited to see the latest developments in leather Industry.

EXPORT PROMOTION AND JOINT VENTURE MEETING.

UNIDO invited Pachar shoe Company to participate in Pirmassens leather fair recently and we benefited through useful contacts and exposure. The idea of exhibiting our goods in such an important fair in Germany was a big innovation by UNIDO and a milestone in introducing selected African Companies to the European market and the industries at large. Among the high-lights of the fair was the individual company presentation, shoe fashion show and the successful visits to factories.

Pachar has enumerated the specific areas of benfits but would like to emphasize that increased production, better products for our market through improved designs and overall quality have come about due to the UNIDO programme. Our Company has planned to mechanize the lasting operations during the phase II of the project with a priority on seat lasting, Upper pre-forming and toe-lasting. It is envisaged that the mechanization will boost our production greatly.

GENERAL

In our view the UNIDO programme has in particular assisted the small and medium scale shoe factories in Kenya which could have found it extremely difficult to survive without such assistance of tools and equipment and also proper advise and guidance from the dedicated UNIDO expertriates and local personnel. It is worth noting that majority of the small and medium scale shoe factories are managed by the owners many of whom have meagre financial resources but are able to re-pay through the REVOLVING Fund.



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-3-

While we admit that there might have been a few logistic problems with the government in the implementation of the programme, such problems have not hindered the success that we have witnessed and the tangeable benefits derived from the programme by the relevant industries. With the new political era of multi-parties in Kenya to-day which calls for more accountability and transparency, the country stands to benefit even more and we in Pachar shoe factory in particular look forward with great hope and confidence to the phase II of the UNIDO programme which we believe will be continuation of the assistance that we have began to receive and even be a greater success in concluding that has already been set in motion.

We would like to thank all donors for having agreed to give funds for the programme. In particular, we would like to single out the ITALIAN GOVERNMENT for having led the way in showing their understanding through their generous donations to the UNIDO programme and which have gone a long way in giving infant industries the hope of survival in a very competitive business world. We assure the Italian government through UNIDO that the donations have been of immense benefit to the Kenvan leather and shoe industry and will continue to be in the phase II of the project.

Finally our appreciation goes to C.T.A Nairobi Regional Office and his team for their personal involvement in our activities and their advise to us in various subjects.

The UNIDO Vienna Office has played a key role in negotiating with the donor countries, co-ordinating and monitoring the various activities within the African region, and we commend them for a job well done.

Yours Faithfully,

Charles M.Ng'ethe MANAGING DIRECTOR

Covering a Paylane Highethe - Chemes riginitie - Warn story

IMPONENTE TANNING (PRIVATE) LIMITED REHABILITATION/EXPANSION PROJECT

INTERIM PROGRESS REPORT

UNIDO PROJECT US/RAF/88/102 (US/ZIM/88/100)

5. CHANGES TO PRODUCTION

The work flow in the tannery has been improved tremendously with the installation of the new equipment and the modifications that have been made to the layout. This improved workflow is especially noticeable in the beamhouse where hides now follow a logical path as opposed to the previous system where hides were moved backwards and forwards due to the location of the old drums.

The congestion in the finishing department has also been eased following the increase in the work area of this department.

Diagram 1 shows the layout of the beamhouse before the rehabilitation program --- soaking/tanning/fleshing were performed in a number of locations due to the location of the respective drums and machines.

Diagram 2 shows the layout of the beamhouse after the rehabilitation program --- work flow is now far more logical and efficient.

6. BENEFITS OBTAINED

The benefits which have been derived as a result of the installation of all the new equipment have been substantial and have been immediately noticeable. The benefits derived from each machine received under the UNIDO project can be quantified as follows:

<u>VALUE</u>
(annual estimate)

SOAKING/LIMING/TANNING DRUMS

_	energy saving of 25%	\$ 4	350
	(191 Giga-Joules per annum)		
-	water saving of 30%.	\$ 11	250
-	reduction of effluent discharge proportional to water saving (too		
	early to assess a percentage)		

FLESHING MACHINE

- substantial increase in the quality of the fleshing of hides.
- a 45% increase in the off-take of subcutaneous tissue, flesh and fat, resulting in a savings of 13,7% in chrome tanning salts.

\$ 206 448

VACUUM DRYER

- output and quality at the re-tannage stage has been increased substantially
- the area yield will increase by \$ 150 000 approximately 3%.
- the hot water tank and water recycling \$ 10 040 system will save 67 500 litres of water per day using the 3 vacuum dryers

SHAVING MACHINE

- more uniform substance of hides which are processed into crust.
- increase in quality
- increase in throughput

SPRAYING MACHINE

- an immediate saving of 30% on \$ 66 000 finishing products and pigments
- an increase in throughput of 37%

6.1 INCREASED PRODUCTIVITY

- Prior to the installation of this equipment, productivity stood at 103 sq.ft. per man per day.
- Present productivity stands at 136 sq.ft. per man per day.
- When all installations/renovations are complete productivity is expected to climb to 169 sq.ft. per man per day.

(Refer to Graph 5.)

6.2 INCREASED PRODUCTION OUTPUT

- Prior to installation the total output of leather at the finished stage was 13,500 sq.ft. per day.
- Present output stands at 18,000 sq.ft. per day.
- Output will rise to 23,000 sq.ft. per day.

(Refer to Graph 5.)

6.3 NEW PRODUCTS AND PRODUCT DEVELOPMENT

The Superior Footwear Group of Companies, which incorporates Imponente Tanning has undertaken a major expansion program as evidenced by their significant Capital Expenditure program -- refer to Graph 1.

This expansion program will affect both the tanning and the footwear manufacture operations and the emphasis will be on the production of goods for export.

On the tanning side extensive market research has been carried out into the feasibility of producing full-hide upholstery leather. The results of these investigations were encouraging and new machinery has been acquired which will enable the tannery to handle sides as well as whole hides. Schedule 2 shows the machinery which has been acquired for this purpose under cover of Ministry of Industry and Trade approved project reference ZG/5/280/499.

The shoe manufacturing side is also due to expand considerably within the next 12 months. A new factory is in the process of being built and the acquisition of over ZW\$ 2 million worth of machinery will be conducted over the next 3 years under a project which was recently approved by the Zimbabwe Investment Centre under reference D/3/252.

6.4 HIGHER ADDED VALUE

The development of new products and export markets as mentioned above requires the processing of more wet-blue hides into finished leather and into footwear. The value-added which is generated will be seen not only in the turnover figures at the end of the financial year, but also in the foreign currency earnings that will be generated.

6.5 LABOUR SAVINGS AND IMPROVED LABOUR CONDITIONS

Output per man has been increased by 32%. However the increased amount of hides which will be converted into higher value added finished leather will actually result in an increase in the labour force from the present 130 to 140 employees.

The improved loading and off-loading conditions of the new drums and of the fleshing machine will also provide a substantial benefit to those employees working in this area.

The loading and off-loading of drums will now be mechanised and the transportation of the hides to the fleshing machine will also be automated. These operations were all manual with the previous setup.

6.6 ENVIRONMENT

Energy savings of 25% and water savings of 30% in the beamhouse have been achieved. This in itself provides environmental relief. However, this is made all the more important by the fact that most the water is discharged as effluent and is, therefore, toxic -- any reductions in water usage results in reductions of effluent discharge.

Imponente Tanning has recently constructed an effluent treatment plant which has resulted in the treatment of all toxic water before it is discharged into the municipal sewer system. It is hoped that the efficiency and effectiveness of this plant can be increased in the future, but this will require external assistance.

7. MANPOWER DEVELOPMENT AND ASSISTANCE

To ensure the success of this project there is a need to complement the improvement in plant and machinery with the training and development of human resources.

In this regard the assistance provided by UNIDO in seconding for short periods the services of various experts, as well as the organising of seminars, has been invaluable. This assistance was in the form of:

7.1 The services of a machinery maintenance expert (Mr. A. Rongved) in March 1990. The availability of mechanics familiar with tanning machinery is limited in Zimbabwe. Mr Rongved assisted by giving advice and assistance to Imponente's own maintenance workshop.

The Maintenance Workshop Manager, Mr. F. Mendes, also attended a UNIDO organised seminar in Ethiopia in October, 1990.

7.2 The services of а leather finishing expert (Mr. A. Eckert) who conducted trials at Imponente Mr Eckert assisted in developing in May 1990. more natural type of leathers through the use of new finishes which improved the quality and feel of the finished product. It has often been felt that one of the barriers to the development of exports for finished leather product is due to the artificial (plastic) feel of some local leathers resulting from pigmented finishes. The result of these trials proved that aniline finishes, to standards required by overseas markets, could be produced in Zimbabwe.

Annex 9

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

25 October 1990

NATIONAL LEATHER & SHOE CORPORATION AMBESSA SHOE FACTORY

US/RAF/88/100

People's Democratic Republic of Ethiopia

Technical Report*

Prepared for the Government of the People's Democratic Republic of Ethiopia by the United Nations Industrial Development Organization

Based on the work of Stefan Linz, Footwear Engineer

Backstopping Officer: Juhani Berg, IO/T/ACRO

^{*} This document has been reproduced without formal editing.

Production

PRODUCTION DEVELOPMENT

The new implementation of the advanced machinery and production flow resulted in a substantial increase in productivity as shown in ANNEX no. 1.1-1.3

The major achievement could be seen after the new machinery and equipment had been installed and upon completing the training of workers, foremen, shift leaders, and supervisors. The daily production output increased almost 100%. As a result of this increase, management was able to work with one 8 hour shift daily and retain the desired production level.

The rehabilitation plan was designed for a production capacity of 2,500 pairs of shoes per day in a single 8 hour shift. Upon completion of the 2 month installation and test running period, production has exceeded 2,000 pairs for several days (see Annex 1.1-1.3 Daily Production Output) which is 80% capacity utilization. On the best production day so far, 2,142 pairs or about 86% of the capacity was reached. There is no doubt that the full capacity of 2,500 pairs per day can be easily accomplished if the recommendations of this report are followed-up and if the raw material flow is not interrupted. Full capacity is planned to be reached in about 4 months.

It is essential that the Shoe Technologist carry out a short, follow-up mission in February 1991 to check on the situation and provide additional advice.

MACHINERY LAYOUT

AMBESSA SHOE FACTORY:

The machinery layout is designed in accordance with two major production methods.

Production of gents, ladies, children shoes and sandals to be manufactured on

- 1 cement lasting operations (two conveyors)
- 2 stitched down operation (one conveyor).

The daily capacity for one 8 hour shift totals 2,500 pairs.

The machinery and equipment is arranged for a three line conveyor system, and for better utilization of manpower and machinery. The implementation of a realistic planning system is expected to enable the production utilization of the designed capacity of 2,500 pairs per 8 hour shift in a short time.

ANNEX 1.1

DAILY PRODUCTION OUTPUT

The daily production output of Ambessa has been established from 1.06.1990 to 30.9.1990 according to the finished products transfer voucher.

1.6.1990	two shift	production	1449 pairs
2.6.1990	two shift	production	1464 pairs
4.6.1990	two shift	production	1237 pairs
5.6.1990	two shift	production	1270 pairs
6.6.1990	two shift	production	1118 pairs
7.6.1990	two shift	production	1293 pairs
8.6.1990	two shift	production	1345 pairs
9.6.1990	two shift	production	1409 pairs
10.6.1990	two shift	production	1297 pairs
11.6.1990	two shift	production	1251 pairs
12.6.1990	two shift	production	1116 pairs
13.6.1990	two shift	production	1417 pairs
14.6.1990	two shift	production	1516 pairs
15.6.1990	two shift	production	1330 pairs
16.6.1990	two shift	production	1489 pairs
17.6.1990	two shift	production	1131 pairs
18.6.1990	two shift	production	1238 pairs
19.6.1990	two shift	production	1223 pairs
20.6.1990	two shift	production	1352 pairs
21.6.1990	two shift	production	1139 pairs
22.6.1990	two shift	production	919 pairs
23.6.1990	two shift	production	794 pairs
25.6.1990	two shift	production	742 pairs
26.6.1990	two shift	production	885 pairs
27.6.1990	two shift	production	433 pairs
28.6.1990	two shift	production	433 pairs
29.6.1990	two shift	production	434 pairs

ANNEX 1.2

PRODUCTION

911.7.1990	one shift	production	1931 pairs
12.7.1990	one shift	production	818 pairs
13.7.1990	one shift	production	583 pairs
14.7.1990	one shift	production	605 pairs
16.7.1990	one shift	production	654 pairs
17.7.1990	one shift	production	626 pairs
18.7.1990	one shift	production	616 pairs
19.7.1990	one shift	production	582 pairs
20.7.1990	one shift	production	597 pairs
21.7.1990	one shift	production	662 pairs
23.7.1990	one shift	production	807 pairs
24.7.1990	one shift	production	762 pairs
25.7.1990	one shift	production	806 pairs
26.7.1990	one shift	production	637 pairs
27.7.1990	one shift	production	956 pairs
28.7.1990	one shift	production	748 pairs
30.7.1990	one shift	production	731 pairs
31.7.1990	one shift	production	912 pairs
		-	
1.8.1990	one shift	production	649 pairs
2.8.1990	one shift	production	757 pairs
3.8.1990	one shift	production	452 pairs
4.8.1990	one shift	production	828 pairs
6.8.1990	one shift	production	725 pairs
7.8.1990	one shift	production	691 pairs
8.8.1990	one shift	production	812 pairs
9.8.1990	one shift	production	714 pairs
10.8.1990	one shift	production	705 pairs
11.8.1990	one shift	production	749 pairs
13.8.1990	one shift	production	838 pairs
14.8.1990	one shift	production	808 pairs
15.8.1990	one shift	production	728 pairs
16.8.1990	one shift	production	666 pairs
17.8.1990	one shift	production	528 pairs
18.8.1990	one shift	production	620 pairs
20.8.1990	one shift	production	669 pairs
21.8.1990	one shift	production	699 pairs
22.8.1990	one shift	production	633 pairs
23.8.1990	one shift	production	566 pairs
24.8.1990	one shift	production	812 pairs
25.8.1990	one shift	production	728 pairs
27.8.1990	one shift	production	455 pairs
28-29.8.1990	one shift	production	1420 pairs
30.8.1990	one shift	production	535 pairs

ANNEX 1.3

PRODUCTION

After implementation of the conveyor belt system and the new production concept.

1-3-49.1990	one shift	production	1739	pairs
5.9.1990	one shift	production	473	pairs
6.9.1990	one shift	production	1055	pairs
7.9.1990	one shift	production	721	pairs
8.9.1990	one shift	production		pairs
13.9.1990	one shift	production	1457	pairs
14.9.1990	one shift	production	1464	pairs
15.9.1990	one shift	production	1442	pairs
17.9.1990	one shift	production	1499	pairs
18.9.1990	one shift	production	1719	pairs
19.9.1990	one shift	production	2111	pairs
20.9.1990	one shift	production	1550	pairs
21.9.1990	one shift	production	2050	pairs
22.9.1990	one shift	production	1866	pairs
24.9.1990	one shift	production	1751	pairs
26.9.1990	one shift	production	1918	pairs
28.9.1990	one shift	production	1622	pairs
29.9.1990	one shift	production	1541	pairs
		-		_
2.10.1990	one shift	production	1795	pairs
3.10.1990	one shift	production	2142	pairs
4.10.1990	one shift	production	1882	pairs
5.10.1990	one shift	production	2074	pairs
6.10.1990	one shift	production	2048	pairs
		-		
8.10.1990	one shift	production	1950	pairs
9.10.1990	one shift	production	2000	pairs
10.10.1990	one shift	production		pairs
11.10.1990	one shift	production		pairs
12.10.1990	one shift	production		pairs*
13.10.1990	one shift	production		pairs*
15.10.1990	one shift	production		pairs
		-		-

^{*} Power cuts



National Leather & Shoe Corporation

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ANBESSA SHOE FACTORY

nAh) 75 16 05, 13 02 72, 13 70 64

ア、ツ、个、) P. O. Box) 1641 Tekx) 21428 Cable : ANBESSA CHAMA

10/0//2/////5 Ref. No. 2 6 OCT 1992 47 Date Mr. Juhani Berg. SIDO ACTION Leather Unit, Januari 1992 Agro-based Industries Branch UNIDO BERG P.O.Box 300 A-1400, Vienna 92 101 2 Austria Central Maria Dear Sir. REGISTRY 2. 921717 j US 1 ETH 28 160

Subject: Rehabilitation Programme of our Factory
Under Project nos.US/ETH/88/100 and
US/RAF/88/102.

We would like to express our thanks to you for the new and Modern Machineries granted by UNIDO. In the rehabilitation programme, the two lasting and finishing lines were replaced by efficient conveyors along with different Machineries.

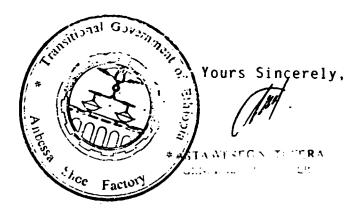
After the introduction of the new Machineries, the work efficiency has increased dramatically. Before the rehabilitation programme came into effect, our daily out-put was 1200-1500 pairs of shoes in two 8 hours shifts. But now in one 8 hours shift we can produce 2000-2400 pairs.

Redarding quality, quite a big change has been made. All these improvements are the results of your Machineries, therefore, on behalf of the factory I would like to foreward my appreciation to UNIDO and the Governments of Switzerland and Italy and say that your coming Project will enable us to go into export market and be one of the foreign currency earner industries in the country. Under the new economic policy we believe our factory will be the leading shoe Manufacturing concern in the nation.

Thank you again for your kind consideration of our

.. 2 ..

factory in Phase I and hoping that Phase II will also be of an assistance in our future endevours as well.



cc: Ato Seyoum Hailu
 National Expert
 NLSC.

/at

Annex 10

TRANSCRIPT

THE IMPACT THAT THE PROJECT HAVE MADE IN OUR COMPANY PRODUCT DEVELOPMENT AND POLLUTION CONTROL

In our modern industrial society, there is virtually no branch of industry which can evade responsibilities for active protection of the environment. The leather making industry is no exception.

Tanning and its associated operations can be a source of considerable environmental impact. Air and water pollution, widespread odours, poisoning from toxic gases, and unsafe disposal of waste are among industry. The increased use of chemicals in various processes leads to additional problems such as occupational safety, creation of hazardous waste, and difficulties with disposal of treatment sludges. Many of these impacts are on the health and safety of individual workers. As well, the deterioration of natural resources resulting from pollution can have a negative effect on the long term growth potential of a country, even if immediate economic benefits may be gained by individual enteprises.

Sagana Tanneries Limited, through the advice and some technical back up from U.N.I.D.O made a decision concerning the future strategy for effluent treatment. The main aim was to find a clear and realistic answer to the question of how much certain waste water parameters can be reduced.

The major measures to be onsidered were:

- Physico-chemical methods of waste water treatment <u>e.g.</u> precipitation/flocculation;
- 2. Biological purification, and;
- Later use of environment friendly chemicals auxiliaries and processes.

..../2

In the leather manufacture in Sagana Tanneries Limited odour and pollution is regarded here as an inevitable consequence of our tannery. The potential environmental impact of our tannery to the waters of Tana River, the immediate air and soil pollution is widely acknowledged.

The remedies to environmental problem are complex and expensive but Sagana Tanneries has risen to the occasion with a very high help from United Nations Industrial and Development Organization (U.N.I.D.O)

The company chose certain parameters to work on which were the main and biggest problems. The impact on the environment of our effluent treatment plant should be valued using the following criteria: water, soil and air.

- Waterpollution from uncontrolled storm drainage;
- Water pollution from effluent and waste water;
- Water pollution from spills and accidents;
- groundwater pollution from ponds, pits, lagoons, holding tanks;
- groundwater pollution from effluent disposal to land;
- groundwater pollution from waste dumps;
- soil pollution from effluents and waste waters;
- soil pollution from sludges and residues;
- contermination of land from spills;
- odours and nuisance from decomposing wastes and chemicals;
- toxic gas emissions from chemicals, waste and effluents;
- industrial hazards from chemical contact, and fumes;
- hazards from treated hides (handling, effluent)
- public hazards of waste dumps, chemical wastes and containers;
- noise, smoke, dust;
- water consumption;
- storage safety of chemicals

....../3

transport of chemicals, wastes and general materials.

These form the monitoring programme of Sagana Tanneries Ltd. It should lead to a regular periodic review of the environmental performance of the effluent plant.

To reach these parameters the company, with big help from U.N.I.D.O, decided to start an effluent treatment plant in two stages:

- physio-chemical treatment of waster water treatment (e.g precipitation/flocculation.
- biological purification through a series of ponds to allow earobic process to take place before eventual discharge to Tana River.
- 3. a secondary treatment plant is envisaged.

It is niece to note that the first two of these have been duly completed through funding from:

	KSH.
U.N.I.D.O	15.000.000
K.I.E.	3.500.000
Equity from Directors	4.500.000
	23.000.000

Our effluent treatment plant is now operational and the company have tested some parameters using K.I.R.D.I laboratories.

In designing construction, and operating the effluent treatment plant the Government policy on pollution and pollution control was adhered to. The GK parameters are:

. /4

- PH - 6-9
- BOD, - 80mg/L
- COD - 100mg/L
- Oil & Grease - Nil
- Phenols - 5mg/L
- Chromium total - 1mg/L
- Suspended Solids - 100mg/L

The quantified requirements will go a long way in ensuring that the various impacts on environment (ante) are adhered to.

The plant has operated for a short period of time and the following results have been tested and confirmed by KIRDI laboratories.

7.46 PH not tasted yet BOD, 909mg/L COD-unfiltered 708mg/L filtered Nil Oil and Grease trace Phenols 3.2mg/LSulphide 110.6mg/L Chloride 4mg/L Suspended solids

These realised results give an indication of the efficiency of the operational plant so far.

The pollution effects associated with odours and nuisance from decomposing wastes and chemicals; toxic gas emission from chemicals, waste and effluent; groundwater pollution from effluent disposal. waste solids-savings and trimmings are areas which have not been adequately addressed to by the company.

. /5

Good environmental control means more than merely installing a treatment plant. Sagana Tanneries requires a systematic approach and especially on planning, assessing, maintenance and operational care to the new plant and waste avoidance, because to avoid waste is more efficient than waste treatment.

SOCIO-ECONOMIC IMPACT

The company was also given funds to rehabilitate the wetblue section. The machines supplied were:

- Three Limming Drums;
- Three Chrome Wetbluing Drums
- A Fleshing machine
- A Sammying Machine
- Spares for some of old machines

The capacity of the tannery was thus increased from 200 hides to 800 hides daily input. To hides dealers a ready market of about 600 hides was created next door instead of the long journey to Nairobi in search of buyers of hides there. It is important to note that the sourcing of these hides is mainly the small butchers in the small and medium large towns surrounding Sagana Tanneries. It is here estimated that an extra 100 - 300 small butchers have found a ready market for their hides. At a dependency of four persons per butcher this is about 400 - 1200 persons who are directly related, financially, to the expansion programme. The total money paid to the new hide dealers approaches Ksh 3.000.000 monthly.

.....6

The company employs as follows:

- Permanent Staff - 60

- Casual Employees - <u>40</u>

100

These employee depend on their main livelihood on Sagana Tanneries Ltd. Again using the four persons dependency ratio this brings another 400 persons. By the rehabilitation and effluent plant construction the jobs of these employees and their dependants have been secured for a long time to come. The total salary and benefits paid is Ksh. 250.000 monthly.

There are other people who have been benefited directly because of these programmes:

- Chemical dealers - extra purchases

- The banks - overdraft and loans interest

- The government - taxes and custom exercise duties.

It is difficult to quantify these areas but we shall endeavour to calculate after a years operation.

To end, Sagana Tanneries Ltd. has demonstrated that growth in industry of its nature can be done taking into consideration to the following: respect to the environment; not to pollute, litter, waste or destroy the environment; our very existence as humanbeing is an inseparable part of environmental creation.

. /7

Signed: M.G. Wanjohi

24.11.92

The death of environment caused knowingly or unknowingly by any of us is the death of us all. A small corporate unit in rural Kenya has championed the protection of its environment.

Signed: M.G. Wanjohi

24.11.92

General Manager

Sagana Tanneries Ltd.



Annex 11

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

US/RAF/88/100

TANNERY MACHINERY MAINTENANCE SEMINAR

ADDIS ABABA, ETHIOPIA

9-12 OCTOBER 1990

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME; ETHIOPIA, KENYA, MALAWI, SOMALIA, SUDAN, TANZANIA, ZAMBIA AND ZIMBABWE



United
Nations
Industrial
Development
Organization

HODES & SINDES, LIEATHEER AND LIEATHEER DEPODUCTS

IMPROVEMENT SCHEME

HIDES & SKINS
IMPROVEMENT
SEMINAR

Bulawayo, Zimbabwe 19-23 November 1990



UNITED
NATIONS
INDUSTRIAL
DEVELOPMENT
ORGANIZATION

HIDES & SKINS, LEATHER & LEATHER PRODUCTS IMPROVEMENT SCHEME

US/RAF/88/100



Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia, Zimbabwe



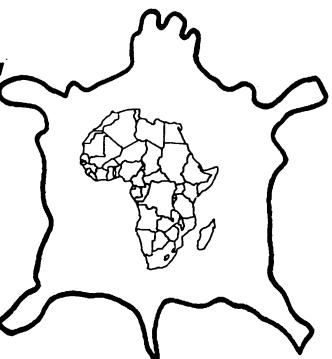
UNITED
NATIONS
INDUSTRIAL
DEVELOODMENT
ORGANIZATION

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME US/RAF/88/100

REGIONAL SEMINAR

on

Pollution Control in the



LEATHER INDUSTRY

Nairobi,Kenya 8-11 June 1992

ETHIOPIA, KENYA, MALAWI, SUDAN, TANZANIA ZAMBIA, ZIMBABWE Annex 12



United
Nations
Industrial
Development
Organization

15 November 1992

US/RAIF/91/194

FINAL REPORT *

AND
JOINT VENTURE
MEETING
FOR SELECTED
AFRICAN

LEATHER AND



Firmasens, Germany 2-6 November 1992

PIRMASENSER LEDERWOCHE INTERNATIONAL

EGYPT. ETHOOPIA. KENYA.

MODOCCO, TANZANIA, ZIMBABWE

^{*}This document has been reproduced without formal editing

1. Abstract

The project document of the subject project stated inter alia:

"The project has been prepared in cooperation with UNIDO Industrial Promotion Service in Cologne, Germany, and it has been designed to promote the leather and leather products of selected African manufacturers through a combined export promotion exhibition and meeting for identifying suitable European technical, marketing and joint-venture partners. Such an exhibition and meeting will be organized in connection with the Pirmasens Leather Fair in Germany in Spring/Autumn 1992."

The project was approved in the UNIDO Project Review Committee meeting of 5 September 1991 after the Government of Germany had committed itself to support the new sectoral approach of IPS Cologne and provided the necessary funds in the amount of US\$ 149,500. The Project Allotment Document was issued on 16 December 1992.

The field operations started with the mission of the senior management consultant to the pre-selected countries to visit prospective companies. This travel took place during February-April 1992 to Egypt, Ethiopia, Kenya, Tanzania, and Zimbabwe. The technical report of Mr. O. Klötzer refers.

Arrangements with the Pirmasenser Lederwoche International were made during a joint mission of Mr. Bauer of IPS Cologne, Ms. Calabrò of IO/T/AGRO Leather Unit and Mr. Klötzer to Pirmasens from 28-30 April 1992. It was agreed that the Pirmasens fair would provide a suitable forum for this type of meeting, realizing though that the integrated approach of including finished leather, footwear, leather goods and leather garments, would give some problems as all the sub-sectors do have their own separate sales shows in Germany. However, the management of the Pirmasenser Lederwoche International was fully in agreement with this approach and UNIDO was able to display, canvass orders and present a complete product range from finished leather to footwear, leather goods and garments.

The selection and assistance for preparing leather goods samples took place 1 - 25 June in Ethiopia, Kenya and Tanzania, and the technical report of Mr. P. Sinturel, leather goods consultant, gives further details.

The assistance to select and prepare the footwear samples was carried out by the footwear consultant Mr. R. Mezeray during August-September 1992. His technical report of 19 October 1992 refers.

The planning and the decoration of the exhibition stand was done by the UNIDO Leather Unit; the layout of the stand is presented in Annex 3.1.

The exhibition took place as planned and the programme of the "Export Fx = x + y and Joint Venture Meeting" is shown in Annex 6.

It is important to note that all the African participants paid their own international travel to the fair. The local travel arrangement and logistics for accommodation and fair programme were organized by the IPS Cologne and in spite of the difficult location and long transport ways everything functioned very well.

Generally it can be stated that the meeting was appreciated by the participants and that the organization ran very smoothly in every respect. The samples presented created much

interest by the fair visitors and some orders were booked for both footwear and leather goods. The success of the fair from our participants' point of view is illustrated by the fact that some of the other exhibitors were irritated that orders for leather goods were placed during the fair (see newspaper report Annex 7.1)

The cooperation between the two UNIDO offices, the Leather Unit and the IPS in Cologne functioned very smoothly and was useful for the execution of the project. There will be intensive follow-up by the companies, the Leather Unit and IPS Cologne.

2. Findings

2.1 Preparations

Beginning of 1991 the IPS Cologne, as the extended arm of the Industrial Investment Division at UNIDO in Vienna and in the context of its new sectoral approach, proposed to the IO/T/AGRO Leather Unit to organize jointly a special export promotion and joint venture effort for selected African leather and leather products manufacturers.

After detailed discussions in this matter between the Leather Unit staff, IPS Cologne and two technical consultants, it was agreed that a joint effort between UNIDO Leather Unit and UNIDO IPS Cologne should be undertaken to organize a combined export promotion exhibition and meeting for identifying suitable technical, marketing and/or joint venture partners. It was thought that such an exhibition and meeting could possibly be organized in connection with the Pirmasens Leather Fair in Spring/Autumn 1992 in Germany or another suitable occasion. The meeting with the potential partners was planned to be organized either immediately prior to or after the fair.

During the various meetings held in Vienna with the IPS Cologne representative, Mr. M. Bauer, it was decided that the project will sponsor one or two companies from five/six countries (including two companies from the Maghreb Region, namely, from Egypt and Morocco) which have a better sectoral development level and will serve as an example for the other African countries. It was considered that the joint efforts of IPS Cologne and the Leather Unit under this project would enhance the possibilities of the countries involved to promote export trade and make initial contacts with potential joint venture partners.

The project document was prepared by the UNIDO Leather Unit in cooperation with IPS Cologne and after UNIDO appraisal approved in the UNIDO Project Review Committee meeting of 5 September 1991 for negotiation with a suitable donor country. The Government of Germany provided the necessary funds - US\$ 149,500 - and the Project Allotment Document was issued on 16 December 1991.

The field operations started with the mission of the senior management consultant to choose suitable manufacturers in the pre-selected countries. This travel took place during February-April 1992 to Egypt, Ethiopia, Kenya, Tanzania and Zimbabwe. The technical report of Mr. O. Klötzer refers.

Arrangements with the Pirmasens Lederwoche International were made during a joint mission of Mr. Bauer of IPS Cologne, Ms. Calabro, IO/T/ACRO Leather Unit and Mr. Klötzer to Pirmasens from 28-30 April 1992. It was agreed that the Pirmasens fair would be a suitable forum for this type of meeting, nevertheless realizing that the integrated approach of including finished leather, footwear, leather goods and leather garments, would give some problems as all these subsectors do have their own separate sales shows in Germany. However, the management of the Pirmasenser Lederwoche International was fully in agreement with UNIDO's



Export Promotion for Selected African Footwear Manufacturers



FINAL REPORT



76 G.D.S., Düsseldorf, 17-20 September 1993 HALL 3, STAND 3D27

Abbouda Co, Hafez & Ouda, Egypt - Sana Shoes, Kenya - G & D Shoes, R.K Footwear, Superior Shoes, Zimbabwe

1. Introduction

As a follow-up to the participation of selected footwear and leather goods companies in the "Pirmasenser Lederwoche International", Pirmasens, Germany, 2 - 6 November 1992, six footwear companies were selected to take part in the 76th GDS International Shoe Fair held in Düsseldorf from 17 to 20 September 1993.

The German authorities agreed to utilize the unspent funds of the project US/RAF/91/194, "Export Promotion and Joint Venture Meeting for Selected African Leather and Leather Products Manufacturers", for the above purpose.

The field operations started with the mission of the UNIDO/ITC Marketing Expert to prepare the six selected African shoe companies for showing their shoe lines at the 76th GDS International Shoe Fair, to assess the capability of the individual companies to export to target markets (mostly in Europe) and suggest ways the companies could be helped. This travel took place during May-June 1993 to Egypt, Kenya and Zimbabwe. The technical report of Mr. T. McCallin refers.

Arrangements with the "Messe Düsseldorf" management (such as stand location and design) were discussed during a mission of Mr. J. Berg, SIRA, on 14 July 1993, while Ms. Calabrò, AIDO IO/T/AGRO looked after all financial and administrative arrangements.

The planning and the decoration of the exhibition stand was done by the Leather Unit and the layout of the stand is presented in Annex 1.

It is important to note that all the six African participants paid also this time their own international travel to the fair. The local accommodation for the participants and for Messrs. Berg, McCallin and Ms. Calabrò was orga .ized by the UNIDO/IPS Cologne in an hotel located in Bonn and in spite of the location and long transport ways everything functioned very well.

Generally speaking, the organization ran very smoothly in every respect and the exhibition took place as planned. Some of the samples presented created a certain interest by the fair visitors and some trial orders were booked.

All the companies expressed their wish to continue this exercise in the coming years as a real evaluation of the results of such an activity can be done in the long run.

2. Findings

2.1 The 76th GDS International Shoe Fair

Generally speaking, the 76th GDS International Fair, despite the world general economic situation, seemed to be still considered an important meeting point for the international footwear industry.

When looking at the "fashion trends" the inspiration for spring/summer 1994 season is taken from remote cultures, reflecting a typical sign of our multi-cultural society. International shoe patterns makers, last manufacturers and designers have followed this trend towards more "naturalness". Material, structures, clear, simple shapes and base shades are more important than colour (copy of an illustration reflecting this new trend "Out of Africa" is enclosed as Annex 3.1).

Annex 13

Distr.

RESTRICTED

IO/R.298

22 October 1993

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

REGIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME

US/RAF/88/100

REGIONAL AFRICA

Integration of women in the leather, footwear and leather products industries in the African region

Final report

Based on the work of Hope Chigudu, Women-in-Development expert

Introduction

The Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme (US/RAF/88/100), a UNIDO project some portions of which are being executed by the Food and Agriculture Organization of the United Nations (FAO) and the International Trade Centre (UNCTAD/GATT), started in 1989. It is the largest technical assistance programme funded by the Industrial Development Fund of UNIDO, through special-purpose contributions from six donor countries. A special contribution for the Women-in-Development expert was made in 1990 by the Government of Germany.

The project was conceived in 1984, when the deteriorating condition of the African leather industry and its unexploited potential were recognized by the Third Consultation on the Leather and Leather Products Industry, held at Innsbruck, Austria, which recommended that UNIDO, in collaboration with the appropriate agencies and bodies, should adopt an integrated programme approach to solving the sector's problem.

The project's immediate objectives were set forth in the project proposal as follows:

- (a) To establish a regional pilot scheme and to demonstrate, in practical terms, the process of hides and skins improvement, from butchering and flaying to conservation, grading and collection;
- (b) To act as catalyst to national authorities to introduce incentives for improved quality performance;
- (c) To rehabilitate existing infrastructures and selected leather tanning and processing plants by increasing their efficiency and capacity utilization, upgrading technical standards, operational methods and skills, product quality and marketing performance, as well as knowledge of those attached to these industries at various levels, starting from primary producers.

According to the project proposal, the development of women in this sector was also taken into consideration in the project activities.

The project comprised a regional umbrella programme and eight associated country projects, in Ethiopia, Kenya, Malawi, Somalia, Sudan, the United Republic of Tanzania, Zambia and Zimbabwe. The project in Somalia was terminated prematurely owing to the political situation in that country. The activities of the regional programme and the subregional programmes are coordinated by the Chief Technical Adviser, at Nairobi, assisted by a Kenyan counterpart and national experts based in the six remaining countries. In addition, international experts provide extensive regional and national inputs in hides, skins and leather improvement; tannery rehabilitation; and the production and marketing of footwear and leather goods.

The enhancement of the status of women in the sector is very important. In the project proposal it was stated that female labour in the industry was usually concentrated in the sewing and confectionery departments and that special efforts would be made to train machinists in modern methods. It was expected that in the footwear and leather products factories to be rehabilitated, female instructors would be trained. The leather project is one of the few projects that attempt to address gender and employment issues in both the private and public sectors. This is significant in so far as the role of women in industrialization in the private sector has been a little-explored area. Considering that women carry a heavy load in the production and reproduction spheres of society but do not enjoy

the same rights as men in respect of access to resources and decision-making, the importance of a project like this one cannot be exaggerated. G. Sen and C. Grown make the following point [1]:

"It is now widely accepted that projects meant to benefit communities tend to ignore women by not addressing their concerns specifically. Thus to the extent that development projects do not specifically take women into consideration, chances are that the development impact of the project may be reduced, limited, or even have an adverse or negative impact on women and eventually the whole community. Yet if the goals of development include improved standards of living, removal of poverty, dignified employment, reduction in societal inequality, then development should naturally start with women. Women comprise the majority of the poor, underemployed and economically disadvantaged in most societies. Furthermore, women suffer from additional burdens imposed by gender based hierarchies and subordination."

It is necessary to develop the capabilities of both men and women as inseparable and integral parts of the human resource base of the industry. In line with the strategies set forth in the UNIDO medium-term plan for 1994-1999 to promote the consideration of women in the technical cooperation activities of the organization, a Women in Development component was added in May 1991.

The information in this report comes from leather enterprises in all seven countries. The enterprises that were selected were those that had received assistance from the UNIDO leather project. The data reported in the text were collected in the course of visits by the Women-in-Development expert to factories and face-to-face interviews and discussions with men and women at different hierarchical levels. The data in the tables came from information submitted to the national experts by some, but not all, of the leather factories.

Because it was assumed that management processes were influenced by socially internalized individual views, it was deemed necessary to collect the personal views of individual women and men. The views of managers were elicited on the following issues:

- (a) Differences, similarities and disparities between men and women employees, with particular reference to career advancement in the leather industry and benefits and structures supportive of different sex roles;
- (b) Organizational barriers to the integration and participation of women employees, with special focus on opportunities for training and career development.

Some important questions were asked:

- (a) How do you account for the absence of women at the managerial level in the leather industry?
- (b) How does the leather industry environment support or constrain women's career development?
- (c) What do you see as the main differences in management style between women and men? How do you account for the differences?
- (d) What changes do you suggest should be made in different leather subsectors to allow women to participate fully in the sector as a whole?
 - (e) What makes it possible for men to progress faster in the leather sector?

Women employees and entrepreneurs in the sector were also asked to identify constraints they had encountered in their careers. The discussions and interviews were seen as a way of making people examine their sex stereotypes and perceptions.

Having identified a number of constraints to the enhancement of the position of women in the leather industry, some steps were then taken to help women to realize their potential. From May 1991 to May 1993, the following activities were carried out:

- (a) A campaign was started to promote gender sensitivity in the leather industry;
- (b) Employment patterns for women and the gender ideology in the leather industry were analysed, as a basis for taking action;
 - (c) Training needs were assessed:
 - (d) A training course in leather goods was set up specifically for women.

In addition, a number of recommendations aimed at enhancing the status of women in the sector were made; most of the recommendations addressed to the project itself will be implemented in the second phase.

The main body of the report covers sex issues in the leather industry, based on selected leather enterprises in the seven countries.

PROJECT ALLOTMENT DOCUMENT

Project Number.	/Amendment	Status	Country	Pad Date Printed	Programme Element	P.C.A. Name
US/RAF/88/100	J	0	AFRICA REGION AFRICA	93-04-28	J 13104	MS. BULL
Project Title	AND SKINS IF	ATHER AND I	LEATHER PRODUCTS	Backstopping Officer Nan	ne: MS. CALABRO	
	HEME (UMBRELL	A PROJECT F	REFERS TO DONOR PROJS.	Multi-Fund Projects:		
Authority PROJECT REVISIO	ON REQUEST 30	/3/1993		Remarks UMBRELLA PROJECT US/PROJECTS US/RAF/88/A	RAF/88/100 REFERS TO 10/810/C10/D10/E10/F	RESPECTIVE DONOR
IDF: I	L.B:	Туре:	IGO Code:	TSS-AOS:	Donor: UND	COB Date:
SIGNED	ORIGINAL II	N DA/FS/I	FMTC PROJECT FILE	Medium Term Plan:		

Hudget Line	Functional Title		Total	prior to 1992	1992	1993	1994	1995	Subseq.
11-01	CTA, LEATHER INDUSTRY EX	S. WM.	532,455 55.3	353,016 37.3	113,684 12.0	65,755 6 .0			
11-02	HIDES & SKINS IMPR. EXP.	S. WM.	166,117 18.0	166,074	43	16.0			
11-03	HIDES & SKINS IMPR. EXP.	S.	218,482 29 .7	176,024 17.7	42,458 12.0				
11-04	TANNERY EXPERT	S. WM	208,382 29 .5	113,104 13.5	65,765 12.0	29,513 4.0			
11-05	LEATHER FINISHING EXPERT	S. WM	103,422 10.4	100,188 10.4	3,234				
11-06	MAINTENANCE EXPERT	S. WM	283,985 33 .1	157,146 1 5 .7	87,612 11.4	39,227 6.0			
11-07	LEATHER GOODS EXPERT	S. WM.	136,260 17.9	116,883 15.0	19,350 2.9	27			
11-08	FOOTWEAR EXPERT	S. WM	161,389 16.0	161,389 16.0					
11-09	MARKETING EXPERT (ITC)	S. WM.	117,078 11.0	107,635 11.0	9,444	1-) XIV	
11-10	EFFLUENT TREATMENT EXPER	S. WM.	116,809 10 .1	72,092 7.1	14,717	30,000			
11-11	WOMEN DEVELOPMENT EXPERT	S. WM.	154,780 27.9	44,437 7.9	61,810 12.0	48,533 8.0			

Project Number/Amendment:	US/RAF/88/100 J	Pad Date printed: 93-04-28	Page Number:	2
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Budget Line	Functional Title		Total	Prior to 1992	1992	1993	1994	1995	Subseq.
11-50	SHORT-TERM CONSULTANTS	S. WM.	925,479 95 .7	604,934 64.6	187,568 18 .1	132,977 1 3 .0			
11-XX	SUB-TOTAL	S. WM	3,124,638 354 . 6	2,172,922 216.2	605,685 81.4	346,031 57.0			
13-00	ADMINISTRATIVE SUPPORT P	\$.	203,889	141,448	41,05C	21,391			
14-01	UN VOLUNTEER	\$.	30,000			30,000			
15-00	PROJECT TRAVEL	\$.	254,990	141,309	55,290	58,391			
16-00	OTHER PERSONNEL COSTS	\$.	59,470	39,288	10,288	9,894			
17-01	REGIONAL CO-ORDINATOR	S. WM.	53,003 42.0	20,418 18.0	11,484 12.0	21,101 12.0			
17-50	NATIONAL CONSULTANTS	S. WM.	3-		3-				
18-00	SURRENDER PY OBLIGS	\$.	113,405-	55,330-	57,681-	394-			
1X-XX	SUB-TOTAL	S. WM.	3,612,582 396.6	2,460,055 234.2	666,113 93 .4	486,414 69.0			
21~00	SUBCONTRACTS	\$.	554, 194	449,579	35,000	69,615			
28-00	SURRENDER PY OBLIGS	\$.	120,579-	11,579-	30,000-	79,000-			
2X-XX	SUB-TOTAL	\$.	433,615	438,000	5,000	9,385-			
32-00	STUDY-TOURS/UNDP GROUP T	\$.	69,192	40,599	451-	29,044			
33-00	IN-SERVICE TRAINING	\$.	2,417	1,298	1,119	}			
35-00	NON-UNDP MEETINGS	\$.	218,434	121,187	26,434	70,783			
38-00	SURRENDER PY OBLIGS	\$.	30,803-	8,415-	22,388-				
3x-xx	SUB-TOTAL	\$.	259,240	154,669	4,744	99,827			
41-00	EXPENDABLE EQUIPMENT	\$.	33,182	24,505	8,495	182			
42-00	NON-EXPENDABLE EQUIPMENT	\$.	398,023	282,171	27,088	88,764			

Project Number/Amendment: US/RAF/88/100 J Pad Date printed: 93-04-28 Page Number: 3

Rudget Line	Functional Title		Total	Prior to 1992	1992	1993	1994	1995	Subseq.
48-00	SURRENDER PY OBLIGS	\$.	15,705-	10,296-	126-	5,283-			
4X-XX	SUB-TOTAL	\$.	415,500	296,380	35,457	83,663			
5100	SUNDRIES	\$.	110,898	68,320	31,340	11,238			
55-00	HOSPITALITY, NON-UNDP PR	\$.	3,000	1,426	1,439	135			
58-00	SURRENDER PY OBLIGS	\$.	2,600-	2,600-					
SX-XX	SUB-TOTAL	\$.	111,298	67,146	32,779	11,373			
67-00	EXPENDITURE RECOVERIES	S. WM.		3,416,251-	3,416,251				
77-90	EXPENDITURE RECOVERIES	\$.	4,832,236-		4,160,347-	671,889-			
99-99	PROJECT TOTAL	S. WM.	1- 396.6	234.2	3- 93.4	3 69.0			

REGIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME (UMBRELLA PROJECT REFERS TO DONOR PROJS US/RAF/88/A10/B10/C10/D10/E10/F10)

PROJECT NUMBER: US/RAF/88/100

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STATUS D - ONGOING
PGM-ELEMENT CODE JI3104
FIRST ISSUED 89-02-D8 LAST UPDATED 93-09-17
DONOR UND
ASSOC AGENCY UNMOGIP/L

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11-01	55 3	532,455	6 0	65.755	49 3	466701	6	81524	0 0	0	0	15 769-	15 770	1.00
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11-07 11-08 11-09 11-10	17 9 16 0 11 0	136 260 161 389 117 078 116 809	0 0 G 0 O 0 2 0	27 0 1- 30 000	17 9 16 0 11 0 8 1	136232 161389 117078 86809	0 0 1	ō 0	0 0	0	0 0 0	2- 0 1- 15 819	15,819	50 :
11-10	27 9	154.780	8 0	48.533	19 9	106247	8	0 43464	0 0	0	a	5 069	5 069	100
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RUN-DATE 1993-11-03 UNIDO - UMAPOZ/B

- PROJECT TITLE

DETAIL REPORT ON PROJECTS AS AT 1993-10-31 BY PROGRAM ELEMENT AND COUNTRY

REGIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME (UMBRELLA PROJECT REFERS TO DONOR PROJS US/RAF/88/A10/B10/C10/D10/E10/F10)

PROJECT NUMBER: US/RAF/88/100

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STATUS O - ONGOING
PGM-ELEMENT CODE JI3104
FIRST ISSUED 89-D2-D8 LAST UPDATED 93-09-17
DONOR UND
ASSOC AGENCY UNMOGIP/L

PAGE 2208

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-	BUDGET	DESCRIPT	TOTAL	ALLOTMENT	CURR	R PHASING		YEAR EXP		YR DISB	BAL CURE		COMMITTED	BALANCE CURR YR	UNCOMMITTED BALANCE	YTO IMPL
		ocson	M/M (1)	DOLLARS (2)	M/M (3)	DOLLARS (4)	M/M (5)	DOLLARS (6)	M/M (7)	DOLLARS (8)	M/M (9)	DOLLARS (10)	YEARS		2-6-8-10-111	PHASING (14)
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	11-99	INTEXPERTS	354 6	3,124,638	57 0	346,031	297 6	2778606	55	2 320476	0 3	30881	0	5.326-	5 325-	9 7 %MM
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	13-99	ADMIN SUPP	0 0	203.889	0 0	21,391	0 0	182499	0	0 7357	0 0	7755	0	6.279	6.278	⁷⁰ %\$
	14-01		0 0	30.000	0 0	30,000	0 0	0	0	0 14170	0 0	829	o	15.001	15.001	49 %\$
	14-99	VOLUNTEER	0 0	30,000	0 0	30,000	0 0	0	0	0 14170	0 0	829	0	15.001	15,001	49 %\$
-	15-00 15-01		0 0	254 990 0	0 0	58.391 0	0 0	196598	0	0 31497	0 0	2652 4	0	58 39 1 58 021 -	254 990 254 619-	
		TRAVEL	0 0	254.990	0 0	58.391	0 0	196598	0	0 31497	0 0	26524	0	370	371	99
	16-00 16-12		0 0	59.470 0	0 0	9.894 C	0 0	49577	0	0 7031	0 0	1662	0	9 894 8 693	59.470 58.270-	
-	16-99	OTHER PERS	0 0	59,470	0 0	9.894	0 0	49577	٥	0 7031	0 0	1662	0	1.201	1.200	87 %\$
	17-01		42 0	53 003	12 0	21,101	30 O	31902	10	0 5686	2 0	4733	0	10.682	10.682	4 9 % 5
	17-50		0 0	3-	0 0	0	0 0	0 3 -	0	0 0		0	0	0	3.	
	17-99	NATIONALS	42 0	53,000	12 0	21,101	30 0	31899	10	0 5686	2 0	4733	0	10.682	10 682	4 9 % 8
	18-00 18-01		0 0	113.405-	0 0	394- 0	0 0	93569-	0	0 0 0 8241	- 00	0	0	394 8,241	113.405"	

DETAIL REPORT ON PROJECTS AS AT 1983-10-31 BY PROGRAM ELEMENT AND COUNTRY

PROJECT NUMBER: US/RAF/88/100

PAGE 2209

PROJECT TITLE

REGIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME (UMBRELLA PROJECT REFERS TO DONOR PROJECT/RAF/88/A10/B10/C10/D10/E10/F10)

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STATUS O - ONGOING
PGM-ELEMENT CODE J13104
FIRST ISSUED 89-02-08 LAST UPDATED 93-09-17
OONOR UND
ASSOC AGENCY UNMOGIP/L

-										0.14.0.3.1	· •			
BUDGET LINE DESCRIPT	TOTA	LACLOTMENT	CURR	YR PHASING	PRIOR	TEAR EXP	CURR	YR DISB	BAL CUR	R YR OBL	COMMITTED FULURE	BALANCE CUPR YR	UNCOMMITTED	TTO THEL
	M/M (1)	DOLLARS (2)	M/M (3)	DOLLARS	M/M (5)	DOLLARS (6)	M/M (7)	DOLLARS	M/M (9)	DOLLARS	YEARS	(12)	BALANCE (13)	VERSUS PHASING
18-03 18-05 18-99 SUR PY OBI	0 0	0	0 0 0 0	0	0 0 0 0	6129- 13312-	0 0	9 9	0 0	0	0	(4-8-10) 0 0	(2-6-8-10-11)	
10 33 30R FT 00	0.0	113,405-	0.0	394-	0.0	113010-	0.0	8241	- 0.0	0	0	7,847	7,846	
19-99 PERSONNEL	396 6	3 612 582	69 0	486,414	327 6	3126169	65 2	377976	2 3	72384	0	36,054	36 053	9? %\$
21-00 21-01 21-99 SUBCONTRO	0 0	554 19 4 0	0 0	69 615 0	0 0 0 0	484579	0 0	42592	0 0	26994	0	69 615 69 586	554 194 - 554 165-	
	0 0	554 194	0 0	69.615	0 0	484579	0 0	42592	0 0	26994	0	29	29	99
28-00 28-01 28-99 SUR Pt OB	0 0	120 579- 0	0 0	79.000- 0	0 0	0 41579-	0 0	79000	- 00	0	0	79.000 79.000	- 120 579- 120 579	-
	0.0	120.579-	0 0	79.000-	0.0	41579-	0.0	79000	- 0.0	0	0	0	0	
29-99 CONTRACTS	0.0	433,815	0.0	9,385-	0.0	443000	0.0	36408	- 0.0	26994	0	29	29	
32-00 32-01 32-02 32-03 32-04 32-05 32-06 32-07 32-09 32-09 32-10 32-11 32-12 32-13 32-99 STUDYTOURS	000000000000000000000000000000000000000	69 192 00 00 00 00 00 00 00 00 00 00 00 00 00	000000000000000000000000000000000000000	29 044 00 00 00 00 00 00 00 00 00 00 00 00 00		29526 2260 1510 1216 3106 1360 1110 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	- 00 00 00 00 00 00 00 00 00 00 00 00 00	000000000000000000000000000000000000000	29 0444 00 00 00 00 00 00 4 787 8 424 3 908 8 217 3 917 199	69 192 29 526 - 2 280 - 1 510 - 1 276 - 1 360 - 1 360 - 4 787 - 8 424 - 3 217 - 3 908 - 8 217 - 1 199 -	101
33-00	0 0	2 417	0 0	0	0.0	•								\\\\\ \$
33-01 33-99 INSERVICE	8 8	í	8 8	0	8 8	24.7	0 0	0	0 0	0	0	0	2 417 2 417-	

RUN-DATE 1993-11-03 UNIDO - UMAPOZ/B

PROJECT TITLE

DETAIL REPORT ON PROJECTS AS AT 1993-10-31 BY PROGRAM ELEMENT AND COUNTRY

REGIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME (UMBRELLA PROJECT REFERS TO DONOR PROJEUS/RAF/88/A10/810/C10/D10/E10/F10)

PROJECT NUMBER: US/RAF/88/100

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STA'US D - ONGOING
PGM-ELEMENT CODE JI3104
FIRST ISSUED 89-02-08 LAST UPDATED 93-09-17
DONOR UND
ASSOC AGENCY UNMOGIP/L

PAGE 2210

								*3300	AGENCI	UNMUUTE?				
ET DESCRIPT	TOTAL		CURR		PRIOR						FUTURE	BALANCE CUAR YR	UNCOMMITTED BALANCE	YTC IMPL
	M/M (1)	DOLLARS (2)	M/M (3)	DOLLARS (4)	M/M (5)	DOLLARS	M/M (7)	DOLLARS	M/M (9)	DOLLARS	YEARS	(12)	(13)	PHASING
	0.6	2,417	0.0	3	0.0	2417	0.0	0	0.0	0	0	(4-8-10)	2-8-8-10-111	
0	0 0 0 0 0 0 0 0 0 0	218 434 0 0 0 0	0 0 0 0 0 0 0 0	70 783 0 0 0 0	0 0 0	141336 3718 2500 98	0 0	34-	0 0 0 0 0 0 0 0	0000	0000	70 783 34 0 0 0	218 434 141 302- 3 718- 2 500- 00	
A MEELINGS	0 · C	218,434	0.0	70,783	0 0	147652	0.0	34-	- 0.0	0	0	70,017	70,810	
0 ? 5	0 0	30 803- 0 0	0 0 0 0 0 0	0 0 0	0 0 0 0	1180- 29622-	0 0	0	0 0 0 0	0	0	0	30 803- 1 180 29 622	
9 20M P. OBC	0 0	30,803-	0.0	0	0.0	30802-	0.0	0	0.0	o	0	0	1 -	
9 TRAINING	0 0	259.240	0 0	99.827	0 0	159415	0 0	27515	o o	1903	0	70.409	70 407	2 9 % \$
0 0 1 2 3	00000	33 182 0 0 0	0000	182 0 0 0	0000	20456 8432 3609 503	0 0	2810 0 394	00000	0000	00000	182 2 610- 0 394-	33 182 23 066- 8 432- 4 003- 503-	
9 EXPENDABL	0 0	33 182	0 0	182	0 0	33000	0 0	3004	0 0	0	o	2 822	2 822-	1650 %\$
0	0 0	398.023	0 0	88.764 0	0 0	309255	0 0	53198	0 0	30045	0	88 764 83 ,243	398 023 392 502-	***
3 HONEXPEND	0 0	398 023	0 0	88.764	0 0	309259	0 0	53198	0 0	30045	0	5 521	5 521	93
0	0 0	0	0 0	٥	0 0	0	o c	0	0 0	- 1250	o	1 250	1 250-	•
3 -ucm:252	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1250	0	1,250	1,250-	
0 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0	15 705- 0 0	0 0	5 283- 0 0	0 0	4946- 5475-	0 0	33.		0	0 0 0	5 283 33 5 250	15 705° 4 979 10 725	
3 304 27 086	0.0	15,705-	0 · 0	5,283-	0 0	10421-	0.0	5283-	- 00	0	0	0	1-	
	DESCRIPT DESCRI	DESCRIPT	DESCRIPT M/M DOLLARS 12 12 12 12 12 12 12 1	DESCRIPT M/M DOLLARS M/M 131	DESCRIPT M/M DOLLARS M/M DOLLARS (41)	DESCRIPT M/M	DESCRIPT M/M DOLLARS M/	DESCRIPT	DESCRIPT	ET DESCRIPT TOTAL ALLOTMENT CURR YR PHASING PRIOR YEAR EXP CURR YR DISB BAL CURR WITH DOLLARS WI	ET DESCRIPT TOTAL ALLOTMENT CURR YR PHASING PRIOR YEAR EXP CURR YR DISB BAL CURR YR CBL	TOTAL ALLOTMENT CURR YR PHASING PRIOR YEAR EXP CURR YR DISS BAL CURR YR CBL COMMITTED WITH DOLLARS WITH DOLLA	TOTAL ALLOWERT CURR YR PHASING PRIOR YEAR EXP CURR YR OISB BAL CURR YR CSL COMMITTED CURR YR COLLARS WITH DOLLARS WITH DOL	TOTAL ALLOTWENT CUMP YR PHASING PILOR YEAR EXP CUMP YR DISB BALL CUMP YR DISB CUMP Y DI

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PROJECT NUMBER: US/RAF/88/100

PROJECT TITLE

REGIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME LUMBRELLA PROJECT REFERS TO DONOR PROJE US/RAF/88/A10/810/C10/D10/E10/F10)

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STATUS O - ONGOING
PGM-ELEMENT CODE JI3104
FIRST ISSUED 89-07-08 LAST UPDATED 91 09-17
DONOR UND
ASSOC AGENCY UNMOGIP/1

											0.411.001.	. •			
_	BUDGET LINE DESCRIPT		ALLOTMENT		TR PHASING		YEAR EAP		A DISB	BAL CURE	· - • - · · · ·	COMMITTED FUTURE	BALANCE CURR TR	UNCOMMITTED BALANCE	VERTUS
		M/M (1)	DOLLARS	M/M (3)	DOLLARS (4)	M M	DOLLARS (6)	M/M D	OULLARS (B)	M/M (9)	DOLLARS (10)	YEARS	(12) (4-8-10) ((13) 2-6-8-10-11,	PHASING
	49-99 EQUIPMENT	0 0	415 500	0 0	83 663	0 0	331838	0 0	50919	0 0	31295	0	1 449	1 448	9& % \$
_	51-00 51-10 51-12 51-21 51-22 51-30 51-40 51-41 51-42 51-43 51-45 51-99 SUNDRIES	00000000000	110 898 00 00 00 00 00 00	000000000000000000000000000000000000000	11 238 0 0 0 0 0 0	000000000000000000000000000000000000000	15116 409 1548 57105 1959 3485 1243	00000000000	0 1480 0 121 0 7324 0 420 0		2771 0 0 0 0 3000 0 0 0	000000000000000000000000000000000000000	11 238 4 251- 0 121- 0 10 324- 0 42- 0	110 898 19 387 16 330- 1 548- 0 67 479- 2 959- 3 527- 1 243- 1 959-	,
-	21.43 20MD#162	0 0	110 898	0 0	11 238	0 0	99662	0 0	8967	0 υ	5771	o	3 500-	3 502	13 T
_	55-00 55-01 55-99 HSPTLIN	0 0 0 0	3 000 0 3,000	0 0 0 0	135 0 1 35	0 0 0 0	0 2865 2865	0 0 0 0	0 0	0 0	0 1)	G	135 0 135	3 000 2 865 1 35	
-	58-00 58-01 58-05	0 0	5 eoo-	0 0	0 0	0 0	0001	0 0 0 0 0 0	0 0	0 0	0	0	0 0	2 600 1 600 1 000	
	58-99 SUR PY OBL	0 0	2,600-	0 0	0	0 0	2600-	0 0	0	0 0	_	0	0	0	
-	59-99 MISC COST	0 0	111 298	0 0	11 373	0 0	99927	0 0	8967	0 0	5771	O	3 365-	3 367	1;9 %\$
=	\$7-00 67-01 67-02 67-99 EXP RECOV	0 0 0 0 0 0	0 0 0	0 0 0 0 0 0	0 0 0	0 0 0 0 0 0	0 0	0 0 0 0 0 0	0 0	0 0	0 0	0	0 0	0 0 0	
	69-99 TSS-?	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	
-	77-00	0 0	4 832 236-	0 0	671 889-	0 0	o	0 0	0	0 0	٥	0	671 889-	4 832 236-	

RUN-DATE 1993-11-03 UNIDO - UMAPOZ/8

PROJECT TITLE

DETAIL REPORT ON PROJECTS AS AT 1993-10-31 BY PROGRAM ELEMENT AND COUNTRY

REGIONAL MIDES AND SKINS LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME (UMBRELLA PROJECT REFERS TO DONOR PROJS US/RAF/88/A10/810/C10/D10/E10/F10)

PROJECT NUMBER: US/RAF/88/100

BACK STOPPING OFFICER MS CALABRO
PROJECT REVISION J
PROJECT STATUS O - ONGOING
PGM-ELEMENT CODE J13104
FIRST ISSUED 89-02-08 LAST UPDATED 93-09-17
DONOR UND
ASSOC AGENCY UNMOGIP/L

PAGE 2212

BUDGET LINE DES	SCRIPT		DOLLARS	CURF M/M (3)	DOLLARS	PRIOR M/M (5)	UOLLARS		OLLARS		DOLLARS	COMMITTED FUTURE YEARS (!!)	BALANCE CURR YR (12) (4-8-10)	UNCOMMITTED BALANCE (13) (2:6:8:10-11)	VERSUS PHASING (14)
77-01 77-02 77-99 EXI	P RECOV	0 U 0 0	0 0 4,832,236-	0 0 0 0	0 0 671,889~	0 0 0 0	727856- 3432891- 4180347-	0 0 0 0	0 0	0 0	a	0 0	671,881	727 656	
79-99 RE	COVICONT	9 0	4,632,236-	0.0	671,869-	0.0	4160347-	0 - 0	0	0.0	•	• •	671,889	671,889-	
- 99-99 PR	101 LO	396 6	1 -	69 0	3	327 6	2	65 2	428969	2 3	138347	0	567 313	567 319-	910533