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

US/KEN/88/100

Terminal report\*

Prepared for the Government of Kenya  
by the United Nations Industrial Development Organization

Based on the work of  
J. M. Muriuki, regional coordinator

Backstopping Officers: Juhani Berg, Aurelia Calabro  
Agro-based Industries Branch

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\* This document has not been edited.

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## INTRODUCTION

The large-scale Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme US/RAF/88/100 is the umbrella project for eight national projects operating in Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe. Nairobi was chosen as the headquarters for the regional umbrella project.

The programme is a joint effort of the three sister agencies UNIDO, FAO and ITC, with UNIDO acting as the main executing agency.

The funding was through IDF special purpose contributions from six donor countries namely, Austria, France, Finland, Germany, Italy and Switzerland. Additional funds were contributed by Italy to assist in the rehabilitation of selected manufacturing plants. The national project US/KEN/88/100 was also funded through an Italian contribution. The government counterpart agency is the Ministry of Livestock Development in cooperation with the Ministry of Industry.

The Ministry of Livestock Development provided the government contribution in the form of personnel and their requirements as indicated in the project document. Unlike other national projects within the programme, Kenya's national project was managed by an implementation committee composed of:

- Permanent Secretary, Ministry of Livestock Development - Chairman
- Head of Project Development, Ministry of Livestock Development
- Director, External Resources, Ministry of Finance
- National Project Coordinator - Secretary
- Kenya Association of Manufacturers (KAM)
- Kenya Tanners Association

## RECOMMENDATIONS

1. The Government of Kenya should implement all the policy guidelines contained in the policy paper of output 1 and all recommendations made during the seminars and workshops in order to facilitate the development of the leather industry.
2. KIRDI management needs to implement the proposal made by the project concerning the reorganization of the LDC and engage the relevant association in order to achieve the centre's objectives.
3. More cooperation and flexibility from the Ministry of Livestock Development officials is necessary during the implementation of project activities.

4. The second phase project US/KEN/92/200 should be initiated and the additional target area of Mount Kenya Region included.
5. During the second phase all industry associations should be involved and the companies which will benefit from the international expertise ought to pay DSA to the expert while he is working for them as a sign of commitment.

## **ACTIVITIES AND OUTPUTS**

The implementation activities started with the signing of the project document by the Permanent Secretary, Ministry of Finance, in August 1989. Mr. J. Mwicigi was selected by the Ministry of Livestock Development to be the national project coordinator and secretary of the implementation committee.

The other national projects were managed by national experts, in Kenya the national project coordinator managed the hides and skins improvement component and remained under the administration of the Ministry of Livestock Development instead of UNIDO.

The implementation activities to achieve the expected objectives and outputs were similar to those of the regional project US/RAF/88/100 and the other national projects in order to obtain maximum benefit from the international inputs.

### **A. Output 1**

Improved policy guidelines and industrial strategy for the development of the country's hides and skins, leather and leather products industry.

#### **Status**

The national project coordinator collected all material from the present legislation.

Two experts, one marketing expert (from ITC) and a leather industries consultant, gathered further information from other countries for analysis in order to give better policy guidelines for implementation.

This output was achieved in the form of a document which specifies the regional and individual country aspects and recommendations. This document was presented and discussed during the meeting of the Inter-Governmental Sub-Group on Hides and Skins held at FAO Headquarters, Rome, in April 1992. The following recommendations to the Government of Kenya are included in the document:

1. The Government 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 hides and skins. Therefore, the subdivision of farms should be discouraged.
3. The Government should fully recognize the potential of the leather footwear and leather goods subsector as a future major source of foreign currency earnings and its ability to create employment. Therefore, constraints preventing the development of the sector, like 50 per cent VAT of leather goods, should be removed or reduced. The unregulated importation of newly priced products, so as to escape high VAT tariffs, will destroy the subsector and jeopardize its future development.
4. The sector has its activities regulated by the Ministry of Livestock Development including purely industrial activities. The current policy of clearing exports has led to the cancellation of many export orders due to delays caused by the processing of documents through the ministry and other authorities and departments. It is concluded that 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 country's economy.

#### **B. Output 2**

Improved, well operating national hides and skins improvement scheme with trained flayers, skinners and improvement officers, with better transport facilities, tools and chemicals for preservation.

#### **Status**

Two target areas, Nakuru and Kiambu/Nairobi were selected by the national project coordinator and the international hides and skins expert Mr. E. Machanga (Kenya).

Initially the work in the two areas started very well but later the project stopped operating in the Nakuru target area, due to administrative management problems of the government implementing officers. The senior hides and skins improvement officer in

Nakuru was transferred to another district, leaving nobody else to manage the project activities and the vehicle.

The national project coordinator was also transferred to AHITI and the regional office had to take over the entire management to ensure the continuation of the project activities in the Kiambu/Nairobi target area.

Apart from the senior hides and skins improvement officer in Kiambu and the district veterinary officer who were self-motivated and determined to work, other officers in the ministry were not very cooperative. Some of them did not seem to understand the concepts of the project and the government's obligation to the implementation of the programme. Despite the constraints, this output was achieved and the quality of hides and skins has improved in the Kiambu/Nairobi target area.

Flaying and ripping knives were given to flayers. Posters were distributed to enhance the popularity of hides and skins improvement in both English and Kiswahili.

Transport improved through the use of two 4-wheel drive Toyota pick-ups, a Suzuki and five motorbikes.

Refresher courses for all hides and skins officers working in the target areas were conducted by the international expert. The trained officers gave many demonstration of the best flaying, preservation and curing methods. Three senior officers involved in the improvement attended a special hides and skins improvement seminar which was organized by UNIDO between 19-23 November 1990 in Bulawayo, Zimbabwe.

To ensure permanent operation and financing of the scheme, a revolving fund was started to be managed by the KAM.

### **C. Output 3**

Improved statistical intelligence and periodically prepared uniform country statistical reports for forwarding to the regional office for analysis and transmission to UNIDO/FAO/ITC for monitoring and dissemination.

#### **Status**

Before he left the office the national project coordinator started collecting the information and a baseline data was compiled. The grades of hides and skins in the Kiambu target area are recorded on a daily basis.

The experience gathered during the project's implementation clearly shows the difficulties to obtain, store, analyse and disseminate such reliable data. Some of the information obtained from the government officers seems to differ from what is obtained from the tanneries.

Due to such problems additional inputs are required to complement the project work and expand the results obtained so far.

A proposal for a joint UNIDO/FAO pilot project was prepared and forwarded to the Ministry of Livestock Development. A formal government request was sent to UNIDO for possible funding.

The proposed project for the selected four countries including Kenya will test suitable methodological approaches for data collection and computation for hides, skins, leather and leather products. It is expected to provide improvements in the existing database and add some new elements such as leather products manufacture, employment, wages, input costs and added value, etc.

#### D. Output 4

Improved quality and increased quantity of raw hides and skins through incentives to primary producers and a realistic grading system based on a well operating hides and skins improvement scheme (as per output 2).

#### Status

In the Kiambu target area an improvement in quality of hides and skins was noted. Daily recordings on grades were forwarded to the regional office. The following tables show the improvement in quality according to the reports obtained from Kiambu

Table 1 - Hides and Skins Grades in Green Stage July-December 1989

	<u>Grade I</u>	<u>Grade II</u>	<u>Grade III</u>	<u>Grade IV</u>
Cattle hides	45.6%	28.2%	18.5%	7.7%
Goatskins	47.6%	28.0%	19.6%	4.8%
Sheepskins	44.3%	38.5%	12.3%	4.9%

Table 2 - Percentage Grades, January - December 1991

	<u>Grade I</u>	<u>Grade II</u>	<u>Grade III</u>	<u>Grade IV</u>
Cattle hides	47%	33%	16%	4%
Goatskins	55%	31%	10%	4%
Sheepskins	55%	30%	11%	4%



Table 3 - Percentage Grades, January - June 1992

	<u>Grade I</u>	<u>Grade II</u>	<u>Grade III</u>	<u>Grade IV</u>
Cattle hides	46%	30%	22%	2%
Goatskins	48%	29%	20%	3%
Sheepskins	45%	40%	14%	1%

Source: Ministry of Livestock Development, Kiambu.  
Table 1 shows the grades before the project activities started in the district. Tables 2 and 3 show the grades of hides and skins after the start of project operations.

For hides there is an improvement in grade IV from 7.7 per cent in 1989 to 4 per cent in 1991, and to 2 per cent in the first half of 1992. In general, there is an increase in the first three grades for hides of 5.7 per cent, goats 1.8 per cent and sheep 3.9 per cent.

However, due to poor market prices, also world-wide, the prices of hides and skins keep falling. Most of the Kenyan tanners do not pay more for higher grades, instead they pay the same price for grades I to II and a different price for a small percentage of grade IV. This kind of business does not give incentives to the primary producers which include the butchers and the flayers.

The project advocates payment of higher prices for better grades and payment of incentives to the flayers as well.

During the last round-table meeting with tanners and butchers it was agreed that the tanners must cooperate in the whole exercise otherwise the quality will remain low if they do not pay prices as proposed by the project (see Annex 3). There is a need to introduce the UNIDO uniform grading system in the whole country.

A survey by the regional office showed that the quality grading of hides and skins obtained from the Ministry of Livestock Development are about 50 per cent higher than the ones obtained from all the tanneries.

The lack of uniform grading and coordination between the government officers and tanners frustrates the primary producers. With more cooperation and flexibility especially from the Ministry of Livestock Development and the tanners, UNIDO's grading guidelines are simple to adopt.

The draft guidelines were accepted by the members of the subcommittee on hides and skins who attended the meeting in Rome in April 1992. The Kenya Tanners Association and the Butchers Association are ready to work together towards the

improvement of hides and with the introduction of the revolving fund by the KAM, this output will be achieved.

The issuance of licences and certificates to flayers by the Ministry of Livestock Development may contribute to improving the quality of hides and skins if the exercise is not only for revenue collection by the Government. If a flayer makes more cuts leading to the down-grading of the hide, he should be penalized. Continuous mistakes may lead to cancellation of his licence and renewal should be judged on his skills.

#### **E. Output 5**

**Increased collection of raw hides and skins.**

##### **Status**

The increased quantity is achieved through minimization of waste and through providing suitable incentives to the primary producers. Cases of uncollected hides and skins from Kiambu and Nairobi are uncommon as there are a good number of centralized slaughterhouses and slabs. Nevertheless, a number of people in the area slaughter goats in their homes for various occasions and celebrations and some throw the skins away because of the low price value as compared to the meat.

The hides and skins improvement officer in Kiambu initiated campaigns at local market centres with the assistance of the local chief to persuade people not to throw away the skins.

Also posters were distributed to the centres and slaughtering places. The activities of this output are very much related to those of outputs 2 and 4 and their results will be monitored through the statistical intelligence to be collected under output 3 and proposed joint UNIDO/FAO pilot project.

#### **F. Output 6**

- Rehabilitation of selected training facilities like AHITI to upgrade their training capabilities.
- Rehabilitation of selected privately-owned tanneries, shoe factories and leather goods plants to improve productivity and environmental impact and train their personnel, if possible.

1. Status

AHITI in Kabete received a skiving and a sewing machine as well as several tools to improve its training capability. Their tannery machines, which have not been in operation due to lack of proper maintenance, were repaired and some spare parts were purchased locally.

The project agreed to give assistance to AHITI after they met the condition of employing a full-time maintenance technician who ensures that the machines are kept clean and greased.

Since UNIDO has equipped the KIRDI/LDC with modern machines and testing equipment, there would be an opportunity for AHITI students to utilize such available facilities for learning and practical experience, which they need. If this is acceptable there would be no duplication of resources in the same country, but it depends entirely on willingness of the two managements.

The LDC received equipment which is capable of processing hides and skins into any stage or product. If well planned, the LDC's activities can be extended to serve not only the Kenyan leather industry but also the rest of the region. The project management has approached the Kenyan tanners through their association to recognize the potential of the LDC in the development of their industries. During various meetings they showed great interest and willingness to work closely with the LDC, but the KIRDI management has to consider making the LDC somehow autonomous. It is difficult to manage the LDC as a government department and expect a positive and effective impact on the development of the leather industry which is privately owned.

UNIDO, in cooperation with the regional office, prepared a document on the reorganization of the LDC and the requirements for its successful operation. The document was presented to the KIRDI management for consideration and, if acceptable, for implementation.

Permission to assist privately-owned industries was given through the Ministry of Industry. This output was reinforced by the Regional Tannery Rehabilitation Scheme US/RAF/88/102 whose immediate objective was completely in line with this output. The scheme aimed at rehabilitating selected processing industries and effluent treatment plants in order to increase their efficiency, capacity utilization, upgrading technical standards and product quality.

Selection of the industrial plants for rehabilitation was based on a feasibility study conducted by a UNIDO consultant. The companies benefiting from the programme are Alpharama Ltd., Sagana Tanneries Ltd., Kitale Tanners Ltd., Pachar Holdings Ltd. and Nalina Ltd.

It was agreed by all parties that the equipment purchased by UNIDO will be transferred to the KAM and remain its property until the time the beneficiary company has repaid the agreed total amount in local currency. The KAM opened an account with Barclays Bank, Market Street Branch, known as the Leather Development Fund. All companies signed a legal document prepared by a local lawyer for the KAM and started paying to the fund.

The fund, which is executed by the KAM, the Kenya Tanners Association, the Footwear Manufacturers Association and the Butchers Association, will be utilized for the continuation of the hides and skins improvement scheme.

An implementing committee will be formed from the three associations which will include the officials from the Ministries of Industry and of Livestock Development.

**(a) Alpharama Limited**

Alpharama tannery is situated in a small township on Athi River which does not have enough sewage treatment facilities. The tannery is not allowed to discharge its waste to the municipal sewage or to the nearby river. The factory expanded its capacity but the effluent treatment plant remained the same and could not handle the discharged volume of the effluent. The standards of the treated effluent as permitted by the Ministry of Water Development are high and the tannery was warned to the extent of being closed down.

In order to save the situation UNIDO agreed to rehabilitate the effluent treatment plant based on the recommendations of the consultant Mr. G. Clonfero (Italy) and Mr. P. Weru from the Ministry of Water Development.

Equipment worth US\$ 57,780 was purchased and installed by UNIDO and the company financed all the civil works. The plant is now in a position to treat all the effluent discharged to the required standards.

According to the lease agreement Alpharama will pay within a three-year period a total sum of Ksh. 1,664,064 to the Leather Development Fund as equivalent to the purchase price.

The following equipment was installed:

- self-cleaning screen
- scum baffles and over-weirs
- Thomson Helicoidal pump
- submersible pump CP 3085
- dosing units for alum, manganese and polyelectrolyte
- floating aerator VF MODVF5 1,400 rpm
- wiring for 415V
- air distribution devices with non-clog diffusers
- spare parts for at least three years.

All are in good working order after being commissioned.

**(b) Sagana Tanneries Ltd.**

The Sagana tannery is situated in Sagana town near Kenya's largest river and the standard for the effluent to be discharged into the river is high.

Although it had been warned by the Ministry of Water Development, the tannery previously lacked a modern effluent treatment plant apart from a number of ponds which were not well kept. The tannery was equipped with very old machines which had been transferred from a tannery in Europe. All processes were very inefficient and costly, and the quality of the products was low.

Despite the assistance from UNIDO the future of the Sagana tannery was uncertain. Assistance to Sagana was, therefore, given to the tanning section where equipment to the purchase value of Kshs.14,105,203.20 has to be paid back to the Leather Development Fund within a period of ten years.

The equipment purchased for the effluent treatment plant will not need to be repaid as the plant was constructed for demonstration purposes-cum-model for the region.

The Sagana tannery was chosen to be a model because of its medium size and short distance from Nairobi, and it is fully owned by Kenyans. The newly constructed plant was demonstrated during the last seminar on pollution control held in Nairobi in June 1992.

The following equipment was purchased for Sagana Tanneries Ltd.:

- Three liming drums

- Three tanning drums
- Hydraulic fleshing machine model S/2700
- Hydraulic through-feed sammying machine model PA/2400
- Band knives for splitting machine 7450 x 85 x 1.2mm
- Shaving blades 24RH and 24LH
- Grinding stones 5476 for 622 shaving machine

The total purchase price including freight charges was US\$ 491,827. After the completion of the programme the Sagana tannery will have improved the quality of its products, especially the wet blue. The full hide fleshing machine is giving better splits.

The company completed the construction and all civil works for the effluent treatment plant and the machinery supplier's technician installed the remaining equipment end-September 1992 and the plant was commissioned in October 1992.

**(c) Kitale Tanners Ltd.**

The Kitale tannery is situated in the western part of Kenya and processes about 200 hides per day up to wet blue.

Its effluent treatment plant was designed by the local engineers and operated well apart from the aeration stage which was not acceptable to the local authority. Due to that problem the tannery was taken to court and given a deadline to fit the aerators. UNIDO was formally requested for assistance and the consultant Mr. G. Clonfero recommended the use of an air diffuser mechanism for aeration. This equipment was installed and commissioned, is in very good condition and operates efficiently. The total cost of the equipment was Ksh. 176,260 which has to be repaid to the Leather Development Fund within a period of one and a half years on a quarterly basis.

**List of Equipment**

- Rotary blower
- Air distributing device consisting of 30 non-clogging air diffusers
- Electric board for blower control
- Spare parts

(d) **Pachar Holdings Ltd.**

Equipment worth US\$ 21,268.67, equivalent to Ksh. 612,537.70, was purchased for Pachar Holdings Ltd., Thika. The daily production was increased to about 100-120 pairs as compared to the original production of about 60 pairs per day. Clearly this input of the project assisted in achieving this improvement. Two technicians were sponsored to attend a course in Italy in shoe designing and production. The general manager, Mr. Kanoga, completed a course at G&D Shoes, Zimbabwe. (See Annex 1 for the list of equipment and the Managing Director's letter of appraisal on the achievement). The equipment is being repaid to the Leather Development Fund.

(e) **Nalina Ltd.**

This was a small company specializing in high quality ladies shoes and leather goods sold in the high fashion shops in Nairobi. After receiving the UNIDO assistance, the company expanded and the products improved. The equipment ordered for Nalina was installed after some renovation and reorganization work in the factory was completed. The equipment listed in Annex 2 is worth Ksh. 1,066,049.86 which will be paid back to the Leather Development Fund within a period of three years.

2. **Seminars**

- (a) **Hides and Skins Improvement Seminar:**  
**Place: Leather Institute of Zimbabwe, Bulawayo, Zimbabwe**  
**Date: 19-23 November 1990 for 5 days**

This seminar was attended by three Kenyans, the national coordinator Mr. Mwicigi, and two senior hides and skins improvement officers from the two target areas Kiambu and Nakuru.

Some of the recommendations of the seminar are being implemented and are others not. The Kenyan Government, through the Ministry of Livestock Development, has not formulated incentive schemes to counteract the lack of motivation and neglect in hides and skins improvement.

The Government, while implementing the recommendations by IMF and World Bank, stopped offering free dipping facilities for cattle and hence the growth rate of ticks is quite high. The quality of raw hides has gone down due

to the tick marks and the tanneries are not able to make good full-grain leather from them.

The Government has not used the money collected from the hides and skins levies for the purpose of improving their quality as was recommended.

The necessity to create associations where they did not exist was considered. The Kenya Tanners and Butchers Associations already existed and the formation of the Footwear Manufacturers Association was registered in 1993.

The proposal to continue the regional project US/RAF/88/100 and the national projects was one of the recommendations. The draft document for the second-phase project US/KEN/92/200, including the new, additional target area Mount Kenya Region, was prepared by UNIDO Vienna and forwarded to the Treasury through the Ministry of Industry.

- (b) **Tannery Machinery Maintenance Seminar**  
**Place: Awasi Tannery**  
**Date: 8-12 October 1990**

From Kenya three participants (from Kamiti, Sagana and Kitale) attended. The result of this seminar was very useful to the tanneries.

- (c) **Tanning and Leather Finishing Seminar**  
**Place: KIRDI/LDC**  
**Date: 8-19 April 1991**

The seminar was organized jointly by UNIDO and the LDC where the facilities of the LDC pilot tannery and laboratories were utilized for the purpose.

The seminar was divided into two parts, the tanning operations for the first week and the finishing for the second week, over a period of 12 working days. The seminar was carried out in a practical manner with lectures and live demonstrations of tanning and finishing techniques.

One of the best features was the large amount of samples prepared from various types of African raw material which were put on display. The samples made from Kenyan hides and skins are displayed at the regional office and are loaned out during local exhibitions and seminars.

The chemical formulae used in the processing of the materials were presented to the participants and the final report was distributed to the tanneries.



- (d) **Leather Goods Technology Seminar**  
**Place: Morogoro, Tanzania**  
**Date: 16 March - 8 April 1992**

The seminar, conducted by Mr. Philip Sinturel, leather goods expert, covered the following topics:

- Designing/ pattern making
- Costing
- Quality control
- Factory organization and
- Machine maintenance

Two Kenyans participated in the seminar - Mr. J. Muriuki and Ms. P. Gichine from Nalina and Eastern Leather Works, respectively.

- (e) **Regional Seminar on Pollution Control in the Leather Industry**  
**Place: Windsor Hotel, Nairobi**  
**Date: 8-11 June 1992**

The seminar was jointly organized by UNIDO and the KIRDI/LDC and due to the lack of conference facilities and inconvenience to the participants, the venue was changed from the LDC to the Windsor Hotel.

It was very practical and the following general topics were dealt with:

- Promotion and transfer of low waste and efficient technologies in order to prevent and minimize pollution
- Review of various tannery waste treatment methods and design of plants suitable for African tanneries
- Promotion of institutional structures, policies, legislation and monitoring facilities which can contribute to the minimization of pollution.

Visits were made to the LDC pilot effluent treatment plant behind the pilot tannery, the newly constructed effluent treatment plant at Sagana serving as a model of a simply designed plant for the region. Also the modern effluent plant of Leather Industries of Kenya and the rehabilitated effluent plant of Alpharama Tannery at Athi River were inspected.

Some of the recommendations were: for governments to consider waiving duties on the imported equipment for waste treatment; and all tanneries should

install effluent treatment plants to mitigate the environmental pollution by the leather industries.

Three Kenyans, Messrs. P. Weru, G. Murungi and J. Muriuki, completed a study tour on effluent treatment and waste disposal in Zimbabwe.

### **G. Field Missions**

#### **1. Footwear expert (11-08) Mr. J.L. Baradat**

The expert was mainly assigned to Joy Shoes factory in Nairobi. His main duties were to assess the mechanical condition of machinery and equipment and to prepare a list of spare parts. He also prepared a list of new machines and equipment required to modernize the overall production facilities in line with forecast future market requirements, including a new factory layout plan.

He assisted the factory in the improvement of quality and productivity through training and change in work-flow but unfortunately due to non-commitment of the company shareholders the factory could not afford to buy the raw materials.

#### **2. Hides and skins improvement expert (11-02) Mr. E.N. Machanga**

During his missions the expert was involved in mapping out the present target areas together with the national project coordinator. He initiated project activities aimed at achieving the immediate project objectives.

During his first mission, the expert had a chance to visit slaughterhouses and premises outside the target areas with a view to assessing the status of the hides and skins improvement programme nationwide. He learned that the officers in the target areas required financial incentives and motivation for the extra project work they performed, but according to the project document the Government was to provide incentives and other allowances required by these officers while on duty.

Efforts were made to convince the Ministry of Livestock Development to meet this particular government obligation or, alternatively, apply through Treasury for assistance from the project fund, but all in vain.

The expert's second mission was extended because he could not proceed with his other missions in the Sudan and Somalia. He compiled data from the target areas covering May to November 1990 as well as wrote reports on hides and skins

improvement. Due to further lack of cooperation from the senior officers in Nakuru and the national office, the expert was not able to travel to the Nakuru target area where the project operations were stopped.

However, the expert made several field visits to the Kiambu target area where hides and skins improvement was going on very well due to the dedication of the district senior hides and improvement officer and district veterinary officer with the assistance of the CTA and the regional project coordinator. He observed greater improvement in flaying and butchers' cut and highly recommended that this target areas be given further support and to stop operation of the project in the Nakuru target area until the implementing government personnel solve their internal problems, especially the right use of the project vehicle in accordance with UNDP rules. He further suggested that private organizations (farmers, butchers, tanners association, etc.) be given responsibility of the national hides and skins improvement programme since they are the main beneficiaries of good quality hides and skins.

3. Leather goods expert (11-07), Mr. David Tracy

The largest part of his mission was spent within the LDC at KIRDI, working with the leather goods staff. Together with the LDC staff he prepared fish skin leather articles which were later sold to prominent local shops. His advice on work planning and costing, as well as the patterns he made, are of much value to the LDC staff.

During the expert's second and third missions, he was attached to Leather Masters Ltd. and Nalina Ltd. which are privately-owned leather goods factories. With Leather Masters he observed that although the product quality was generally good, the working methods used during the manufacturing processes were in many instances unconventional and in all cases inefficient due to lack of industrial experience at all levels.

The expert was able to advise on carefully selected areas of work. A number of new products were developed but the greater portion of the time was spent in reorganizing working methods and demonstrating alternatives at all levels. In addition, he introduced several improvements in respect of quality, efficiency and productivity (reference his mission report) among them the following:

- (a) Improved edge folding methods by use of bone folder
- (b) Proper use of adhesives

- (c) Replacement of the metal foundation by a wooden mould for making built-up/moulded work.

4. Effluent treatment consultant (11-55) Mr. G. Clonfero

Initially the consultant came under the previous LDC project US/KEN/84/163 and later as a consultant for the regional project.

Together with Mr. J. Muriuki, at the time a senior officer of the KIRDI/LDC, he visited most of the tanneries in the country to study the status of their effluent treatment operations. Separate recommendations for each tannery are included in his mission report which serves as a good basis for future UNIDO assistance to individual tanneries. During his later mission in January 1991 Mr. Clonfero submitted his final project design of the Sagana effluent treatment plant (ETP), prepared in Italy, to the regional office, the Sagana management and the Kenyan water authorities.

After study by the Ministry of Water Development and after its official presentation during a meeting held in the department, the project design was officially approved and accepted. Mr. Murungi, the local engineer, was selected as works manager and was always in direct contact with the consultant.

The rehabilitation project for the Alpharama effluent treatment plant was similarly submitted and approved by the Ministry of Water Development and the construction work was completed.

Bulleys Tannery at Thika had asked UNIDO for possible assistance and the consultant made visits to Thika and studied the condition of the effluent treatment plant. While in Italy he also prepared a detailed feasibility study on the rehabilitation and sent the report to UNIDO and the Bulleys management for consideration. Mr. Clonfero also evaluated the modification of the small effluent treatment plant at KIRDI and some recommended minor alterations were completed.

5. Senior industrial/rehabilitation expert (10-10) Mr. A. Lesuisse

The expert visited several tanneries, leather goods and shoe factories giving consultancy services. His mission reports provide an overview of the present situation of the individual industries. He recommended the rehabilitation of the Sagana tannery processing unit, Kitale and Alpharama effluent treatment plants, Pachar shoe factory in Thika and Nalina Ltd.

6. Maintenance expert (11-06) Mr. A. Rongved

During his first mission he visited several tanneries in the country studying the status and condition of their equipment. He worked with Sagana, Kitale and Lake Tanners where he recommended various measures to be undertaken to improve efficiency and productivity. Based on his recommendation the Sagana wet-blue section was rehabilitated. The expert was attached to the KIRDI/LDC for his last mission where he prepared a new machinery layout for the pilot tannery.

7. Tannery machinery maintenance consultant (11-60) Mr. G.H. Shilkin

All machines for the LDC were delivered and some located in the positions proposed by Mr. Rongved. Apart from the buffing machines all other machines were properly installed by the KIRDI personnel but not connected to required services. The consultant supervised the connections and later commissioned all the machines. He designed and made locally the steam drier and dedusting unit before his mission ended.

The remaining work was later completed by the KIRDI personnel and a local contractor. Among Mr. Shilkin's recommendations to both UNIDO and KIRDI (reference his mission report) were:

- (a) a person with practical experience in tannery operations should be recruited to oversee daily operations of the pilot plant;
- (b) all equipment should be accompanied by the correct manual, spare parts, and wiring diagram in specified language;
- (c) rehabilitation work should be carried on equipment installed at AHITI.

8. Tannery machinery preventive maintenance consultant (11-66) Mr. M.H. Imam

The consultant was attached the KIRDI/LDC to observe and inspect the installed equipment for proper operation and function, especially during the tanning/finishing seminar. The machines were thoroughly checked and defects rectified accordingly. Together with the KIRDI personnel inventories were made of vital items and spare parts of all the machines. Mr. Imam gave several recommendations to ensure proper operation and maintenance of the machines (reference his mission report) among them the following:

- (a) the spares should be tagged according to the inventory list;

(b) overhaul was not required soon as the machines were mostly new and a few were reconditioned; overhaul would commence after 6000 hours of utilization of the machine. Until then the machines needed thorough cleaning, lubricating and inspection;

(c) operating manuals in English for the vacuum dryer, Flamar buffing machine and dedusting machine were missing and should be ordered.

For a time Mr. Imam was also attached to Leather Industries of Kenya where he introduced the principles of preventive maintenance. The company management liked the principles and implemented them.

#### 9. Finishing expert (11-05) Mr. H. Eckert

During his two short missions in Kenya the expert paid visits to the tanneries equipped with finishing facilities.

Among the tanneries visited were Bata Limuru, Leather Industries of Kenya in Thika, Alpharama in Athi River and the Sagana tannery. The expert noted that the quality of raw material in Kenya has become inferior by about 30 per cent during the last few years, despite the fact that various agencies have tried to assist in the improvement of hides and skins. According to information given to the expert, the good hides were exported as wet blues, the grade 4 and rejects were finished for local markets although the selling price for finished leather in the local market seemed to be attractive compared to semi-finished leather which was exported. During the expert's one-week visit to Alpharama he advised on technical improvements which showed promising results.

Leather Industries of Kenya, a modern tannery finishing 50 per cent of its production, was visited and various finishing formulae tried. The finished leather amounts to about 5-6 million sq.ft. a year, which is mainly block-buffed upper leather with tight grain and attractive.

The expert also visited Bulleys Tannery Ltd. in Thika, which is a very old tannery, and demonstrated the use of PU binders on upholstery leathers in full grain and buffed grain. It indicated that proper application of PU binders permits better technical results than the exclusive use of acrylic and butadiene binders.

At the Bata Shoe Company's tannery, which produces finished upper leathers for the sister shoe factory, the expert observed that leather finished in the tannery was of

inferior quality as the finishes were so heavily applied that the leathers looked like plastic. They were advised to reduce the amount of finish by about one third, either by less application or by working with less concentrated finishing solutions. The expert performed various trials with different formulae and gave more suggestions on the finishing operation to improve performance and reduce costs, i.e.

- produce more full grain leather or less buffed leathers
- use of pigment solutions with adequate amount, which hide grain defects and thus improve leather appearance and grade
- select laquer emulsions for the top coat which give to the leathers a natural appearance and feel, etc.

10. Fish skin tanning consultant (11-61), Mr. Stephen Roberts

Since the KIRDI/LDC produced fish skin leathers on a small scale and of less finishing quality than those made at Neptune Leather of Australia, the consultant's home company, his main duties were the following:

- (a) to introduce and demonstrate up-to-date methodologies and technologies employed in the commercial leather processing of Nile perch skins.
- (b) to make recommendations to assist the establishment of the ongoing commercial processing of Nile perch skins within the LDC tannery.

Mr. Roberts was able to carry out several trials of processing Nile perch ("mbuta") skins from raw to finished. In finishing he worked very closely with the KIRDI finishing technician, Mr. S. Kiriko, who gained enough knowledge to be able to finish leather of good quality.

The consultant's cost evaluation of the production phases together with all formulae and other production details, findings and recommendations are included in his mission report. One of the recommendations is for the LDC to continue processing fish leathers, possibly 200 skins per week, and to submit weekly technical reports to the director of KIRDI and the UNIDO CTA. This was communicated to relevant authorities of KIRDI and the LDC plant manager authorized his technicians to implement the recommendation.

Another recommendation was the elaboration of an organized marketing system, possibly with the help of UNIDO marketing expertise.

11. Footwear consultant (11-64) Mr. Walter Foran

During his one-month mission the consultant was mainly expected to:

- (a) give direct assistance to the Pachar shoe factory
- (b) assess the possibilities of starting up leather unit sole manufacture
- (c) prepare plans for shoe technology training and the establishment of a central footwear designing unit in conjunction with the LDC/Jua Kali and Pachar.

Direct assistance to Pachar was very useful because Mr. Foran helped the management to improve the productivity and efficiency. Following his suggestion and reorganization, the factory was able to produce about 20 more pairs of shoes using the same facilities and number of people while maintaining good quality.

It was realized that more footwear and manufacturing companies existed than the project had information on. Thus within the very short period of one week the consultant and the regional coordinator visited nine other companies and "Jua Kali" sheds around Nairobi.

The purpose of each company visit was to introduce UNIDO to the footwear industry and to discuss their individual achievements and constraints. It was stressed that UNIDO will operate through associations in the implementation of improvement programmes.

At a meeting with footwear industry people on 12 June 1992 and the follow-up meeting on 16 July 1992 at the regional office (see Annex 4), the formation of a footwear manufacturer's association was discussed and the association was ultimately registered in 1993.

During his mission and besides giving consultancy services to the visited factories, Mr. Foran prepared two feasibility studies for discussion at this meeting which took place in his absence. The studies were on the establishment of a Nairobi training centre and a leather sole unit. The consultant felt that if funds are available, UNIDO assistance should be extended to Simjon, Count and Gakwa Shoes as they manufacture shoes similar to the type manufactured by Pachar although their premises are smaller.

On the "Jua Kali", the consultant thought that they have shown initiative, courage and persistence in their endeavours. They would need training and this would be feasible if they would form an association and possibly a small cooperative where independent units join together.



12. Marketing expert/ITC (11-09), Mr. David Manly

The expert's first mission was to study the marketing situation, legislation policies, hides and skins production and collection and the status of the leather industry in general.

While he was based in Nairobi the expert was able to meet a wide range of representatives from the local industry, government departments and other official organizations. The organizations included the Federation of Kenya Employers, the KAM, the Kenya National Chamber of Commerce and Industry, the Investment Promotion Centre, leather industries and ministry officials.

He noted that in order to assist the development of the sector, it requires cooperation between the Government and those involved in the trade as well as transparency. Some of the existing policies and restrictions have to be changed and all the associations have to become effective in representing their interests. For example, the export of a leather product requires the clearance of several ministries and departments, causing delay and sometimes the cancellation of the export order. Some of the expert's recommendations were:

- (a) There is a need for government department decision makers to consider their role and that of the industry collectively from production to manufacture and export and in cooperation with its representatives. They should consider measures to encourage investment in industry, increased added value, manufacturing and export.
- (b) The whole range of tariffs, national and local taxes and other dues affecting the industry's activities need to be enumerated and the negative impact evaluated.

During his second mission he compiled a report on improved policy guidelines together with the leather industry consultant Mr. S. Kiruthu. The report is output 1 of the project which is improved policy guidelines and industrial strategy for the development of the leather industry. The expert's reports are good references for those involved in the leather industries, especially for government officials.

13. Leather industry consultant (11-54, 11-58, 11-63, 11-71), Mr. S. Kiruthu

The consultant carried out various short assignments and very actively contributed to the programme as a whole.

In the course of one of his missions in Kenya he studied the requirements for the establishment of the revolving fund now in operation under the KAM. He elaborated the specific role of the KAM regarding administration and management in conjunction with the Kenya Tanners Association and other interested parties. It was also proposed by him that the equipment purchased for the rehabilitation programme will be transferred by UNIDO to the KAM and will ultimately be transferred to the companies after total repayment of the agreed amount to the Leather Development Fund. The money from this fund will be used in the improvement of hides and skins. The consultant had discussions with various organizations and government officials during this mission.

Mr. Kiruthu assisted the regional office in the organization of the seminar on tanning and finishing held in April 1991 at the LDC. In a later assignment in Nairobi, he also assisted in the preparation of the regional seminar on pollution control in the leather industry and acted as moderator during the seminar proceedings.

A feasibility study for the rehabilitation of the Sagana tannery was also prepared by Mr. Kiruthu. Since his home base is Nairobi, the Kenya project benefited from his consultancy services even when he was not under contract.

14. Tannery machinery consultant (11-65), Mr. A. Zink

The main purpose of the consultant's mission to Kenya was to assist in the installation of the equipment supplied to Sagana tannery under the rehabilitation programme, and carry out maintenance service on the existing machines utilizing spares supplied by the project. Therefore, he installed the new throughfeed sammying machine and the fleshing machine. He repaired several old machines which had not been operating and faulty ones which included an ironing machine, a sammying machine (Turner) and a splitting machine. Further, he designed the hoist for loading the new drums and assembled and installed them. He organized the purchase of equipment for the Sagana tannery which included the electrical control boards, water pumps, pipes, and water meters.

In the LDC Mr. Zink repaired the measuring machine and installed the leather drying chamber. A local old tannery was also assisted by him through repairing an old fleshing machine which had not been in operation for a long time.

15. Tannery expert (11-04), Mr. Carlos Marzo

The expert's first mission was to act as a resident tanner for the Sagana tannery which was selected for rehabilitation. He participated actively in the implementation of the programme and also coordinated the inputs of UNIDO, Sagana management and the contractor.

Together with the UNIDO engineer and Sagana staff Mr. Marzo prepared the machinery layout and he provided technical information on the formulation and costing for the feasibility study for the rehabilitation of Sagana. Several experiments were carried out by him on the processing of sole leather with a view to implementing the same in the region.

Other experiments and trials conducted by the expert were the processing of glove leather, garment leather, nubuk and linings. He assisted in the organization of the tanning and finishing seminar held in April 1991 in Nairobi and also conducted a local seminar together with the LDC.

He gave many consultancy services, like to a small rural tannery in Murang'a which processes vegetable tanned leather where he designed several pits and gave the owner some technical guidance.

16. Senior leather industry consultant (11-59), Mr. Otto Kloetzer

Mr. Kloetzer's consultancy services were of much benefit to the whole regional programme, but especially in the implementation of project US/RAF/91/194, Export and Promotion Meeting for Selected African Leather and Leather Products Manufacturers, Pirmasens, Germany, 2-6/11/1992. This project constituted output 8 of the regional project and the consultant provided advice and assistance in formulating the project activities related to this output by identifying suitable technical marketing and/or joint venture partners.

His assistance to two Kenyan companies, namely, Pachar Holdings Ltd. and Nalina Ltd., to prepare for their exhibition at the fair in Pirmasens was very valuable and much appreciated. At the fair he participated in the meetings with potential partners.

He presented his findings and recommendations to the governments in a technical report, including, inter alia, the following recommendations on the solicitation of foreign investment:

- (a) formulate and implement a lasting policy to guide the development of the leather and leather products industry;
- (b) intensify hides and skins improvement schemes;
- (c) conduct a census of cattle, goats and sheep without delay;
- (d) drastically reduce, if not eradicate, all import duties on machinery, spare parts and chemicals needed for the manufacture of leather and leather products;
- (e) allow exporters a full foreign exchange retention.

A few of his recommendations are being partly implemented<sup>d</sup> and their full implementation should be considered by the Government.

17. Footwear engineer (11-53), Mr. Stefan Linz

The main purpose of the consultant's mission was to carry out a pre-feasibility study for the proposed shoe upper factory of the Leather Industries of Kenya in Thika. He worked together with a team of local experts from the factory and provided the technical inputs for the study, utilizing computer software for costing and pre-feasibility study calculations developed by the UNIDO Leather Unit. During the study, the expert considered several issues which included:

- Investment
- Project engineering
- Labour requirement and training needs
- Marketing and product development
- Equipment, machinery, tooling needs and plant layout.

The completed study was forwarded to UNIDO and the company management.

18. Women in development expert (11-11), Ms. Hope Chigudu

The expert's mission in Kenya was of short duration but visits were made to several industries near Nairobi, i.e. the Pachar shoe factory in Thika, Kamiti Tanners, Kariakor Market, Galax Commercial Outfits and Leather Works Factory in Thika. In all the factories visited, the number of women employed was less than that of men.

The management of these companies agreed that women are good workers and in some areas even better than men. However, women will need training and experience to be able to compete with men.

There is no gender discrimination in Kenya and more participation of women in the industry is expected in future. The expert would need to spend more time in Kenya.

19. Computer consultant (11-52), Mr. B. Barothy

Mr. Barothy came on a short mission to Kenya in 1990 to install and demonstrate some software at the regional office.

20. Others who have contributed towards the Kenya project on short missions are:

- Messrs. Abou El Khair and W. Foran participated in the in-depth evaluation mission in July 1991. All their findings and recommendations are contained in a report and most of their recommendations are fully or partly implemented.

- Mr. R. Sykes participated as a resource person in the Regional Seminar on Pollution Control in the Leather Industry held in Nairobi from 8-11 June 1992. Other resources persons were Messrs. M. Kumar, P.K. Weru, G. Murungi.

21. Economist (11-68), Mr. Marco Beci

Mr. Beci was attached to the regional office and his main duty was in the financial and general administration for the whole programme. He assisted also in the economic analysis of a feasibility study for starting up a fish skin tannery and finishing factory.

22. Chief Technical Adviser (11-01), Mr. G. Felsner

As the Chief Technical Adviser of the whole regional programme he is stationed at the regional headquarters in Nairobi and coordinates all the activities and missions of the international experts and the assistance needed by various industries in the participating countries.

In Kenya Mr. Felsner worked very closely with all the industries and offered them consultancy services on technical and management issues. He made all efforts necessary for the successful operation of the LDC and for the completion of the rehabilitation programme at the Sagana tannery.

23. Mr. J. Berg - Backstopping Officer

Mr. Berg paid a number of visits to Kenya where he became acquainted with most of leather and leather products companies and participated in many meetings with the industrialists, official organizations and associations, as well as several government officials.

He conducted the organization of the Tanning and Finishing Seminar held in Nairobi in April 1991 and presented a technical paper on production of hides and skins, leather and leather products.

In the capacity as consultant (11-76) he prepared a pre-investment study for the establishment of a "model shoe factory in Kenya".

24. Ms. A. Calabro - Backstopping Officer

During her missions in Kenya Ms. Calabro liaised with the local counterparts and took care of the administrative organization of the tanning and finishing seminar and the regional seminar on pollution control in June 1992. She also participated in the footwear manufacturer's meeting and the national experts meeting, etc.

## ACHIEVEMENT OF OBJECTIVES

1. The development objective as indicated in the project document is to contribute to the country's economy, create new employment opportunities, improve export performance, increase the income of the primary producers and provide the international market with additional semi-processed and finished products.

2. The immediate objectives:

(a) To establish a national 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 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 industries at various levels, starting from primary producers.

The Kiambu target area is an example of a well established pilot scheme where the planned activities were implemented and improvement in quality of hides and skins was obtained.

The project provided better flaying knives, transport and training which were the basis for the success achieved.

The uniform grading system already prepared is being implemented and it is hoped that there will no more conflicting information in the grades or quality.

Difficulties were encountered with the government implementing officers and the national coordinator due to lack of motivation, caused to a large extent by financial and transport problems. The Government, through the Ministry of Livestock Development, did not meet its obligation of paying allowances to the officers in the field. More success will be achieved when the Kenya Tanners Association will work out a suitable financial incentive system with the help of the Leather Development Fund.

The rehabilitation programme was successful and improvement was reported by all the companies involved. Also training was carried out on all levels.

The project has laid the basis for the achievement of the development objective to contribute to the employment, improvement of export performance and product quality. The rehabilitation programme was a major contributor in this respect, as exemplified by the Sagana tannery.

## CONCLUSIONS

The programme pilot approach proved to be successful and can be extended to other regions. Assistance to the private sector was very constructive and should be continued.

The Kenya project experienced management problems because the Ministry of Livestock Development decided not to have a national expert but instead a national coordinator. The proposed project steering committee never met and was not effective. The ministry initially did not seem to appreciate the concepts and operation of the project for which UNIDO was the executing agency. This resulted in the administrative problems in the hides and skins improvement. Meetings were held to discuss the issue of reflecting the total project finances in the ministry's annual budget and that according to the project document the ministry was involved in some of the activities and outputs.

The establishment of the Leather Development Fund was acceptable to all parties and will play an important role in the improvement of hides and skins.

The Kenya Tanners Association should engage in the endeavours of the improvement programme to complement the activities of the Ministry of Livestock Development.

The LDC can be more successful if the Kenya Tanners Association is involved in its management and programming. This would be possible if the Government allows the centre to operate more or less like a private institution with more flexibility in decision making and operation.



## ANNEX 1

EQUIPMENT PURCHASED FOR PACAR HOLDINGS LTD UNDER UNIDO  
REHABILITATION/REVOLVING FUND SCHEME OF  
US/REN/98/100 AND US/RAF/88/102

P.O. NO.	DESCRIPTION	QTY	Value\Remarks US\$
15-1-0298V	<b>Shoe Lasts</b>		
	Women upper height plated	3 pairs	300.97
	Women unplated	3 pairs	178.83
	Men unplated	3 pairs	182.97
	Children unplated	3 pairs	171.00
	Transport	-	123.00
	Pattern papers	3 bundles	135.77
	Cutting Board	1	40.32
	Model charges	1	300.00
	15-1-0299	<b>Tools</b>	
Scissors		4	53.20
Pincers		6	62.76
Nipper		4	25.32
Hammers - 400 gm		3	57.85
- 450 gm		3	51.00
Sheath		10	49.80
Blades		10	5.40
Rasps		4	14.04
Sharpening stones		2	4.76
Mail pullers		4	11.04
Awl		4	5.20
<b>Sub-total = US\$1,684.23</b>			
15-1-0875V	1. Machine code 23.08.23		
	Punching and eyeletting machine complete with bench and one raceway	1	
	Light projector	1	
	Extra raceway	1	
	Set of punch/matrix die for round eyelets	1	for 2 items
			total cost
			US\$6352.06
	2. Machine code 22.07.15		
	stamping machine	1	
	stamping die	1	
3. Gold foil for trade			

- spare parts US\$1632.74  
278.03  
198.13

Transport and other charges

Sub-Total US\$2,108.90

15-1-1124V

- |    |   |   |
|----|---|---|
| 1. | K204 990005 UK<br>5772206<br>20-102<br>2 NDL Lockstich machine<br>Bottom feed ST.L10 mm | 1 |
| 2  | K204 E00129 5935709<br>sewing equipment for<br>CL.204 NDL size 160-180                  | 1 |
| 3  | K104 004684 5820707 Foot  | 1 |
| 4  | Motor stand CPL   | 1 |
| 5  | MG482 5044553<br>Cast iron stand set for 266<br>and 204 (2-NDL), one pedal              | 1 |
| 6  | Motor set for 1135,554.1<br>1x220V 50HZ, 800 SPM<br>K990 254166 parts<br>FIR 1135.554.1 |   |
| 7  | K999 201749 5346320<br>Halogen lamp (Waldmann)  |   |

F o r 8  
i t e m s  
T o t a l  
US\$5,590  
P r o d u c t s  
o f A D L K R  
A G

- |   |   |                                 |
|---|---|---------------------------------|
| 8 | K999 201916 5344670<br>Table clamp (Waldmann) |                                 |
|   |   | <b>Grand Total US\$21268.67</b> |

Kshs.601,898.90

To pay within 3 years

work stamping length  
122m x 35 mm 30 rolls

4. Brown pastel colour  
Foil for lining  
stamping 122m x 10 mm 30 rolls (for 3+4  
US\$194.00  
as per  
amendment  
of 9/9/91  
SIDECC

15-1-1123

1. DSC :- 245 Single needle  
cylinderbed sewing  
machine with unison feed  
Plus - table and stand  
- clutch motor 370  
- assortment of  
needles US\$2627.98

2. PLH-982 Twin needle  
postbed sewing machine  
2 mm needle gauge, drop  
feed and free roller foot

Plus - table and stand US\$2334.52  
- clutch motor 370w  
- assortment of  
needles US\$376.98

Transport and other charges Fshs.10,970.10

15-1-0299V

Combined finishing machine  
Code 32.30.08 with double dust  
suction system and without  
dust collector. Two speed  
motor (1450/2900 rpm)  
complete with: 1

- 1 heel scouring wheel
- 1 sole scouring wheel
- 1 cloth wheel
- 1 hair brush
- 1 trimmer sharpening wheel
- 1 steel sole trimmer
- 1 trimmer guide
- 1 complete inflatable  
buffing tool complete with  
motors

# PACHAR HOLDINGS LTD.

Manufacturers of quality shoes and leather goods.

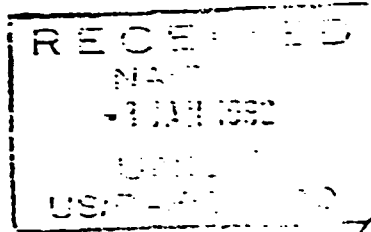
Kenyatta Highway  
P. O. Box 3672  
Madaraka - Thika  
Tel: 22633 (Factory)

or

P. O. Box 78175  
Nairobi-Kenya

Cur Ref:

Your Ref:



Date: 6.1.1992

The Chief Technical Advisor  
UNIDO  
P O Box 30218  
NAIROBI.

Dear Mr Felsner

As we start the new year - 1992, we feel that it is very important to appraise what our Company has achieved during 1991 with the assistance of UNIDO through your office in Nairobi.

## Training.

During the year under review i.e 1991, UNIDO took TWO of our employees to ITALY where they underwent a condensed short-term training in shoe designing. Although the training was short, the results have been very beneficial to our company because at the end of the year, we were able to introduce FIVE new unique designs of mens shoes that did wonders to improve our image in the TOP class boutiques and shoes stores of Nairobi's high streets. Our design of the YEAR which was marketed in the TOP class boutiques at ex-factory price of KShs.1000.00 (one thousand shillings) and retailed for 1500.00 and over climaxed to 100 pairs of shoes sold in just two weeks.

The overall results of the "New look" shoes put in the market boosted our company's sales by an impressive 27.5% increase in turn-over against last year i.e 1990. We are convinced that this big achievement has a direct bearing on the training and exposure given to our TWO employees in Italy; the Company's image has been greatly enhanced by both Quality and Style of its products.

At this juncture we wish to thank you so much for the training opportunity and further ask you to please look into our request for long term training in which our company would be willing to provide a return ticket of the trainee and continue paying his wages (say 80%) while he is away on training-our commitment to this and is absolute.

## Machinery & Equipment.

All the equipment received during the year i.e lasts, hammers, lasting pliers etc, have been fully utilized in the factory and this has helped to improve our production especially at the peak months of October, November and December, when we had to work overtime to couple with the high demand for our products. The latest addition to our machinery is the combined Finishing machine code 32.30.08 which we are confident will go a long way in improving and up-grading our shoe range. We are in the process of installing the machine during our work flow re-organisation on the factory floor which will involve among other things the re-allocation of the stores, breaking of the wall that currently sub-divides the factory thereby utilizing a bigger area of our factory space. The re-organisation will also cater for the new machinery which UNIDO is providing and which we are expecting in the factory any time now. On completion of the whole exercise,

.....2/

a better work flow, improved productivity and an improved working atmosphere will be achieved.

It is worth noting that the highest daily production attained with 3hrs. overtime by the 22 employees was 140 pairs as a result of which several employees received cash bonuses based on quality, quantity (productivity) punctuality etc, being same of the merits taken into account for qualification of the CASH bonuses.

In general 1991 has been a year of success for our Company and as we start 1992, we have set EXPORT of our shoes as one of our goals and to facilitate communication we have installed a fax machine. We owe our success to the great interest and co-operation that we have received from the Chief Technical Advisor and his team from the head office in addition to their regular follow-up visits to our factory. We are confident that 1992 will be even a better year.

Wishing you and your team a very happy New year.

Yours faithfully  
PACHAR HOLDINGS LIMITED



CHARLES M. NGETHE  
MANAGING DIRECTOR.

## ANNEX 2

EQUIPMENT PURCHASED FOR NALINA HOLDINGS LTD UNDER UNIDO  
REHABILITATION/REVOLVING FUND SCHEME OF  
US/KEN/88/100 AND US/RAF/88/102

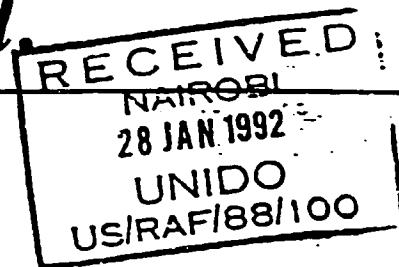
P.O. NO.	DESCRIPTION	QTY	Value\	Remarks
			US\$	
13-1-0875 from SIDECC	1. Machine code 22.04.10 skiving machine with scrap suction and collector	1		
	- skiving foot 35mm	1		
	- skiving foot 25mm	1		
	- work lamp	1		
	2. Machine code 32.30.14 combined finishing machine with dust suction and collector	1		
3. Machine code 22.01.29 Bandknife splitting and equalizing machine 400mm working width	1			
4. Machine code 22.07.33 stamping machine - stamping die	1			
5. Machine code 26.01.22 Guillotine	1			
Total for 5 items			US\$23,629.00	
15-1-1123V	1. PLW-1244BC Single-Needle Postbed sewing machine with bottom wheel feed and driven rollerfoot	1	2,560.71	
	<u>Plus:</u> - table and stand - clutch motor 370W - Assortment of needles			
2. DSC-245 single needle cylinderbed sewing machine with unison feed	1			
<u>Plus:</u> - table and stand - clutch motor 370W	1			

	- assortment of needles	1	2,627.98
3.	DSC-245 same as no.2 with alternative presser feet and drop feed		2,627.98
	Transport		753.96
15-1-0874	Oil dynamic clicking press Atom S108, 8 ton with 600x300 mm cutting table and 300mm arm	1	4,044
15-1-0298	<b>Shoe Lasts</b>		
	- women upper height plated	8	178.64
	- women unplated	8	158.96
	- men unplated	3	182.97
	- children unplated	3	95.00
	- model charges	4	300.00
	Cutting board	1	40.32
	Transport		123.00
	<b>Sub-Total for lasts</b>	<b>=</b>	<b>1,078.89</b>
	<b>Grand total</b>	<b>=</b>	<b>37,015.62</b>
	<b>Equivalent</b>	<b>Kshs.</b>	<b>1,064,420.60</b>

# Nalina Limited.

*For Exclusive Leather Goods*

## PRELIMINARY REPORT



Nalina Ltd has yet to receive all the machines, i.e. none of the stitching machines have been received. However, the lasts were received last year and have been put in full use with the following direct benefits (please note, it is not possible to obtain quality lasts in sufficient variety in Kenya):-

1. Ladies unplated lasts with pointed toes enabled immediate production of ladies fashion shoes which we were unable to do earlier.
2. We were also not able to obtain lasts for high-heeled ladies shoes locally and it has now been possible to go into production of these shoes.
3. Although, Nalina Ltd had been producing low-heeled ladies shoes the production was limited because of non availability of additional lasts. This range of production has increased by 50%.
4. Production of men's shoes has been made possible by the lasts obtained from UNIDO, thus enabling us to provide an additional range of shoes.

Expected benefits from machinery now being received:-

1. The splitting machine will increase production capacity by upto 100%.

Upto now all the leather was manually skived for the purpose of making it thin. The splitting machine will also enable leather shoes and goods to be lighter in weight and more even in proportion, thereby giving a certain finesse to the product

2. All the goods upto now had been hand cut and there was a serious problem in accuracy and wastage of leather. The clicking press should eliminate this major deficiency and increase the speed of the cutting department by more than 100%.

3. The finishing of shoes upto now has been done by hand and the quality has not been upto standard.

The combined finishing machine will enable immediate improvement in finishing of not only shoes, but also of other leather products.

cont.

P.O. Box 78546, Nairobi, Kenya.



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# Nalina Limited.

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*For Exclusive Leather Goods*

cont.

4. Nalina Ltd at present has only 2 stitching machines with a very limited range. The addition of a postbed sewing machine and DSC = 245 Unison feed and DSC = 245 drop feed will enable more sophisticated stitching of goods.

Nalina Ltd will be in a position to give a detailed report on the full benefits of the machinery provided in the later part of 1992 after receiving and fully utilising all the machines.

P.O. Box 78546, Nairobi, Kenya.

## ANNEX 3

17 July 1992

MINUTES OF THE ROUND TABLE MEETING ON UNIDO ASSISTANCE  
TO THE LEATHER INDUSTRY SECTOR HELD AT UTALII HOTEL  
THIKA ROAD, ON FRIDAY, 17 JULY 1992 AT 0900 HRS

## Present:

J.W. Kuria	Chief Executive, Kenya Association of Manufacturers
Prof. F.M. Luti	Chairman, KIRDI
A.M.R. Odipo	KIRDI
B.O.F. Odongo	KIRDI/LDC
M.C.Z. Moturi	KIRDI/LDC
R.K.M. Ronoh	Department of Veterinary Services, Ministry of Livestock Development
Wanjau Kirima	Chairman, Kenya National Butchers Union
H.G. Combos	Secretary, Kenya Tanners Association
H. Awale	Chairman, Kenya Tanners Association
S. Ng'ang'a	Simjon Shoes
C. Ng'ethe	Pachar Shoes
M.W. Gatu, Mrs.	Kays Shoes
P.M. Gakwa	Gakwa Shoes
S. Mwanaongoro	Ministry of Industry
S. Bologna	UNIDO Country Director
J. Berg	UNIDO Senior Consultant
G. Felsner	Chief Technical Adviser, UNIDO Regional Leather Projects, US/RAF/88/100
S. Koivula	UNIDO Programme Officer
J.M. Muriuki	Regional Coordinator, UNIDO Regional Leather Project US/RAF/88/100
S.M. Kiruthu	UNIDO Leather Industry Consultant

The meeting was organized on the UNIDO initiative in cooperation with the Kenya Association of Manufacturers (KAM) and the Kenya Tanners Association.

The meeting was opened by the Chairman Mr. J. Kuria and he thanked UNIDO for taking the initiative to organize this meeting which is the first meeting between the KAM, Butchers Association, tanners and footwear manufacturers, KIRDI/LDC and the government competent authorities including Ministry of Industry and Livestock. He then invited the chairman of the Kenya Tanners Association Mr. H. Awale to address the meeting.

Mr. Awale stressed that all the participants of the meeting had the same interest and the concern of the development of the leather sector of Kenya. There is inter-dependence between those who produce the raw hides and skins, the butchers, without whom the tanners would have no raw materials. The footwear and leather goods manufacturers would, on the other hand, not have raw materials without the tanners. The meeting, therefore,

represented the whole spectrum of the sector. Mr. Awale thanked UNIDO for initiating this type of integrated sectoral meeting.

The chairman introduced the agenda of the meeting and requested Mr. Berg, UNIDO to discuss the first agenda item which was concerning the UNIDO Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme, its structure and operations.

M. Berg presented the status of the present phase of the programme making special reference to the donor contribution and the in-depth evaluation mission recommendations. The first phase was designed to provide international expert services, upgrading of KIRDI/LDC, training and seminars at the regional level while the national projects addressed the individual needs of the participating countries.

The in-depth evaluation indicated that from the UN point of view, good results had been achieved during the implementation and therefore recommended continuation of the program including three additional countries. It was also recommended that the assistance should be continued in hide and skins improvement and emphasis should be given to higher value added products such as manufacture of footwear and leather goods. Due attention should be given to environmental aspects, women development, and private industry operations through their associations.

Mr. Muriuki presented a status report on the Kenya national project and Mr. Felsner provided budgetary information on the programme and the project. It was noted that the present funds were practically exhausted facilitating only to keep the essential services running until end 1992.

Mr. Felsner and Dr. Kiruthu presented the functions of the rehabilitation project and the revolving funds purpose and modus operandi.

Mr. Berg and Dr. Kiruthu then presented the concept of the second phase which has been designed on the request of the recipient countries and various sectoral meetings such as the UNIDO Leather panel, FAO organized ECDC meeting and the FAO's Intergovernmental Hide and Skin group meeting. The design has closely followed the in-depth evaluation recommendations and the documents are expected to be forwarded to the recipient and donor countries by September 1992. The Kenya National project US/KEN/92/200 has two main components, the hides and skins improvement and the industrial development component. The total value of the Kenya project is foreseen to be US \$ 619,800. Kenyan industries are, however, expected also to be beneficiaries of the Rehabilitation programme.

Mr. Kirima, Chairman of the Butchers Association proposed that Nairobi area should be considered in addition to the Mount Kenya Region due to the high slaughter rate of the City. He also proposed that the training of flayers should be emphasized and the role of the Athi River Meat Training Center should be considered for this activity. His suggestions were welcomed by UNIDO and will be added to the project document.

Dr. Kiruthu proposed that the tanners and footwear manufacturers should provide recommendations on the involvement of the LDC in the project activities, the linkage with KAM and the technical cooperation with the industry.

The KIRDI Chairman, Professor Luti and his senior staff presented the KIRDI/LDC capabilities and the service and development work carried out by LDC up to date. It was recognized that LDC has well equipped laboratory and tannery pilot plant which could be used by the industry for product development and training activities to much greater extent than is the case presently. Mr. Odipo emphasized the needs of the LDC self-financing and Mr. Odongo indicated that although there is cooperation at technical level with the industry the training activities could be enhanced if LDC was registered with the Directorate of Industrial Training (DIT). The chairman advised LDC to register with DIT as soon as possible.

Mr. Awale stated that the role of LDC would be more effective if there would be closer liaison with the industry to enhance leather development. This has been hindered by the LDC's poor functional capability and lack of funding. He proposed that the levy currently charged to the leather sector by Kenya Bureau of Standards (KBS) should be channelled to LDC. It was noted that the KBS neither had facilities nor capabilities to serve the leather industry. These facilities and capabilities are available at LDC.

The Chairman and Mr. Mwanaongoro of the Ministry of Industry proposed that this matter should be taken up by the Kenya Tanners Association (KTA) and a letter should be written from KTA to Ministry of Industry indicating how payment of levies to KBS instead of LDC affects negatively the development of the sector.

The Ministry of Livestock representative stated that the hides and skins improvement has been negatively affected by lack of Government funding and therefore private industry involvement was long overdue and he therefore welcomed the UNIDO initiative to involve the end users through Kenya Association of Manufacturers (KAM) and the revolving fund. He also felt that privatization of the hide and skin improvement could be a viable alternative and the Ministry is willing to second staff for such type of venture.

The chairman, in his closing remarks called for closer cooperation between the Ministry of Livestock, butchers, tanners, leather product manufacturers, LDC and the Ministry of Industry during the implementation of the proposed second phase which was strongly supported by all present.

The following recommendations were agreed upon:

1. Formation of a task force to create the framework for the operation of an effective hide/skins improvement system in selected target points/areas

Action: Tanners Association, Mr. R.K.M. Ronoh of the Ministry of Livestock Development, Dr. S.M. Kiruthu, Mr. J.M. Muriuki of UNIDO and Mr. Wanjau Kirima, Chairman of Butchers Association will meet at the end of August 1992 to prepare the Draft Action Program

2. Presentation of proposal by KIRDI/LDC to the Tanners Association of Kenya (through Kenya Association of Manufacturers) outlining the planned co-operation on the sectoral involvement of KIRDI/LDC in assisting to formulate a short and medium term industry oriented development programmes.

Action: KIRDI/LDC - proposals expected to be received by Kenya Association of Manufacturers mid October 1992.

3. Project Cost Sharing: The recipient industry agrees to pay the assigned UNIDO International Experts/Consultants the entitled DSA (Daily Subsistence Allowance) in accordance with the prevailing UN Rules. Pending the nature of service provided and the size of the plant assisted, the key for cost sharing will be initially evaluated on a case per case basis.
4. The Tanners Association agrees to utilize the financial sources of the established revolving fund managed under the Kenya Association of Manufacturers to pay for office rent of the National Project Office, US/KEN/92/200 at KIRDI/LDC to be used by the national and international experts as from beginning of 1993. The subject office is presently housing the Regional Project Administration (US/RAF/88/100).

Action: KIRDI/LDC informs KAM and the Regional Project Administration of their agreement and proposed office rent by October 1992.

5. The Tanners Association through KAM will request the Ministry of Industry to explore the possibilities to redirect payments or a portion made by the Tanning Industry to the Kenya Bureau of Standards to the Leather Development

Centre of KIRDI instead where better facilities to serve the leather industry exist.

**Action: Kenya Association of Manufacturers August 1992**

6. Senior technical staff and marketing executives of the tanning industry should discuss on a quarterly basis the work and product development programmes with LDC/KIRDI and make recommendations regarding LDC involvement.

**Action: LDC/KIRDI invites the tanneries for meeting and provides agenda - first meeting to be held in October 1992.**

7. The Tanners Association requested UNIDO to fund and organize a study tour for local expertise, Messrs. P. Weru, Chief Pollution Control Officer, Ministry of Water Development and Engineer G. Murungi (Consultant in Effluent Plant Construction) to visit selected tannery effluent plants in Malawi and Zimbabwe to study the operation, effectiveness and have discussions with the Government Departments concerned. It is also recommended that the Regional Project Co-ordinator, Mr. J. Muriuki will be part of the mission. The mission should be carried out in November 1992 for a duration of 7-8 days.

**Action: UNIDO will check on the availability of funds (US/KEN/88/100) and prepare a draft mission programme by July 1992.**

8. The Tanning Association requested UNIDO to prepare as an initial measure with regards to fleshing waste utilization updated information on industrial technologies and methods available particularly in respect of animal feed products.

**Action: UNIDO will take up the issue and report back to KAM on the progress/action initiated by end September 1992.**

9. The meeting requested UNIDO to finalize the project documents (US/KEN/92/200, US/RAF/92/200, US/RAF/92/202) and present them to potential donor countries and international organization for possible funding.

10. It was agreed that the next Round Table Meeting will be convened in Nairobi in November 1992.

**The meeting started at 0900 Hrs and ended at 1315 Hrs.**

## ANNEX 4

16 July 1992

**Minutes of the Footwear Manufacturers' Meeting  
Held at KIRDI/LDC on 16 July 1992**

**Present:**

J.M. Muriuki	UNIDO
B.O.F. Odongo	KIRDI/LDC Head
A.M.R. Odipo	KIRDI CAO
I. Kipera	KIRDI Head Project Studies Division
P.M. Gakwa	Gakwa Shoes
Moses G. Chitai	C&D Shoes, Personnel Manager
Sammy Njenga	Macquin Shoes, Sales Manager
Charles Ng'ethe	Pachar Shoes
M.W. Gatu, Mrs	Kays Shoes, Managing Director
Mbugua Kiarie	Count Shoes
Simon J. Ng'ang'a	Simjon Shoes
S.M. Kiruthu	UNIDO Consultant
G. Felsner	UNIDO
J. Berg	UNIDO
N. Rupani, Mrs	Director, Nalina Ltd
Shyam Solanki	Slapper Shoe Industries Ltd
Fanuel Chamwoma	Slapper Shoe Industries Ltd
Joseph Kamau	Limlands

1. The status of the second phase of the UNIDO Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme was presented by Mr. Berg. He emphasized that the second phase financing of the whole programme and specifically the Kenya part was not so far formalized and the projects continuation was entirely depending on the generosity of the donor countries. The purpose of the meeting was:

a. To critically examine the assistance needs of the footwear industry especially the assistance to establish a footwear training centre to be combined with footwear designing and pattern cutting unit and cutting die making plant.

b. To discuss the possibilities of establishing a leather unit sole manufacturing plant in accordance with initial study made by Mr. W. Foran.

c. To discuss the industry and the institutions willingness to provide the counterpart funding including building and operational costs.

2. Mr. C. Ng'ethe provided information on the status of the Kenya Association of Shoe Manufacturers (KASM). A meeting was held on 23 June 1992 at Utalii Hotel and a provisional committee was selected to look after the registration of the Association.

The members of the committee are as follows:

Chairman	Mr. Kiriko, United Footwear
Vice Chairman	Mr. C Ng'ethe, Pachar Shoes
Treasurer	Mr. Kimani, Macquin Footwear
Secretary	Mr. Mbugua Kiarie, Count Shoes
Assistant Secretary	Mr. Simon J. Ng'anga

3. Mr. Berg presented the findings of Mr. Foran on the training centre operations and the Leather unit sole project and stressed the importance of the development of the sector from the value added point of view. The importance of starting to work with indigenous raw materials instead of importing raw materials from other countries for the sole manufacturing was seen as an important development goal for certain type of footwear. This development would also provide components for exportable shoes.

It was explained that UNIDO could only act as supplier of know-how, training and machinery and that the Kenyan side must provide the local inputs for building and running expenses. This would be best done by the industry in cooperation with a suitable institute such as KIRDI/LDC.

4. The above matters were discussed to some detail, and as summary it was agreed that UNIDO should include these objectives and activities into the project document to be presented to the donors. The first action after the project starts will be the preparation of a final investment study. The industry will be prepared to find the counterpart inputs jointly with a suitable institute. It was unanimously agreed by the industry representatives that the development direction suggested was the right way to get the presently poor shoe industry situation improved. The association would also act as the common platform to represent the industry problems to the government authorities.



Project Number  
US/KEN/88/100

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
NON-EXPENDABLE PROPERTY CONTROL RECORD

Page No. : 1

Period Ending : DECEMBER-92

Country : KENYA

Project Title : NATIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME - EAST AFRICA (ALSO  
REF. US/RAF/88/100)

Purchase Order Number	Item No.	Description	Qty. Ord.	Stock-on-hand in US\$	Received			Cond.	Qty On Hand	Remarks
					Qty.	M	Y			
15-0-00469	1	NISSAN URVAN MICROBUS LONG BODY STD ROOF MODEL: WHGE24DU.  CHASSIS NUMBER ==> WHGE24-004176 ENGINE NUMBER ==> 851621 REGISTRATION NO. => 4OUN216K	1	8,370.00	1	10	90	G	1	To be transferred to LDC
15-0-01049	1	SUBMERSIBLE PUMP FLYGHT WITH 10 M FLEXIBLE PIPE 2" DIAM..	1	999.00	1	11	90	G	1	LDC
15-0-01049	2	ELECTRIC BOARD TYPE O220/509.	1	309.00	1	11	90	G	1	LDC
15-1-00299	1	SIDECO COMBINED FINISHING MACHINE CODE 32.30.08 WITH DOUBLE DUST SUCTION SYSTEM AND WITHOUT DUST COLLECTOR, 2 SPEED MOTOR.	1	1,411.00	1	11	91	G	1	Pachar
15-1-00365	1	ENHANCED US KEYBOARD FOR IBM PC/AT COMPATIBLE PERSONAL COMPUTER.	1	208.00	1	04	91	G	1	Region Office
15-1-00365	2	MICROSOFT MOUSE WITH WINDOWS 3.0, S/N A9L24Z.	1	206.00	1	04	91	G	1	"
15-1-00536	1	GAUGE ROLLER SUPPORTING PLATES FOR TYPE 35-V SPLITTING MACHINE.	2	2,277.00	2	06	91	G	1	Sagana
15-1-00874	1	OIL DYNAMIC CLICKING PRESS ATOM S 108, 8 TON, WITH 600 X 300 MM CUTTING TABLE AND 300 MM ARM.	1	4,046.00	1	11	91	G	1	Nalina
15-1-00875V	1	MACHINE CODE 22.04.10 SKIVING MACHINE WITH SCRAP SUCTION AND COLLECTOR WITH ACCESSORIES.	1	2,545.00	1	01	92	G	1	Transferred to KAM for Nalina

Country : KENYA

Purchase Order Number	Item No.	Description	Qty. Ord.	Stock-on-hand in US\$	Received			Cond.	Qty On Hand	Remarks
					Qty.	M	Y			
15-1-00875V	2	MACHINE CODE 32.30.14 COMBINED FINISHING MACHINE WITH DUST SUCTION AND COLLECTOR.	1	2,188.00	1	01	92	G	1	For Nalina
15-1-00875V	3	MACHINE CODE 22.01.29 BANDKNIFE SPLITTING AND EQUALIZING MACHINE, WORKING WIDTH 400 MM.	1	12,353.00	1	01	92	G	1	"
15-1-00875V	4	MACHINE CODE 22.07.33 STAMPING MACHINE, STAMPING DIE.	1	1,208.00	1	01	92	G	1	"
15-1-00875V	5	MACHINE CODE 26.01.22 GUILLOTTINE.	1	3,008.00	1	01	92	G	1	"
15-1-00875V	6	MACHINE CODE 23.08.23 PUNCHING AND EYELETING MACHINE, COMPLETE WITH PUNCHING AND ONE RACEWAY, LIGHT PROJECTOR, EXTRA RACEWAY, SET OF PUNCH/MATRIX/DIE FOR ROUND EYELETS.	1	2,157.00	1	01	92	G	1	Pachar
15-1-00875V	7	MACHINE CODE 22.07.15 STAMPING MACHINE, STAMPING DIE.	1	2,882.00	1	01	92	G	1	Pachar
15-1-01123	1	JUKI PLW-1244BV SINGLE-NEEDLE POSTBED SEWING MACHINE COMPLETE WITH TABLE AND STAND, CLUTCH MOTOR 370W, NEEDLES.	1	2,830.00	1	03	92	G	1	Nalina
15-1-01123	2	DSC-245 SINGLE-NEEDLE CYLINDERBED SEWING MACHINE WITH TABLE AND STAND, CLUTCH MOTOR 370W, NEEDLES.	2	5,809.00	2	03	92	G	2	Nalina (1) Pachar (1)
15-1-01123	3	DSC-245 SINGLE-NEEDLE CYLINDERBED SEWING MACHINE.	1	2,905.00	1	03	92	G	1	Pachar

Country : KENYA

Purchase Order Number	Item No.	Description	Qty. Ord.	Stock-on-hand in US\$	Received			Cond.	Qty On Hand	Remarks
					Qty.	M	Y			
15-1-01123	4	PLH-982 TWIN-NEEDLE POSTBED SEWING MACHINE WITH TABLE AND STAND, CLUTCH MOTOR 370W, NEEDLES.	1	2,580.00	1	03	92	G	1	Pachar
15-1-01124	1	DURKOPP ADLER K204 990005 204-102 2-NEEDLE LOCKSTITCH MACHINE, COMPLETE WITH SEWING EQUIPMENT, FOOT, HALOGEN LAMP, TABLE CLAMP, THROAT PLATE, FEED DOG, MOTOR STAND AND MOTOR SET.	1	5,507.00	1			G	1	Pachar
15-1-01124	2	MG48 2 CAST IRON STAND SET.	1	543.00	1			G	1	Pachar
15-1-01125V	1	FISHER SCIENTIFIC 1001 PH METER/PORT LAB.	2	763.00	2			G	2	LDC
15-1-01125V	2	PH METER MDL 910 230V.	1	659.00	1			G	1	LDC
15-1-1123V	1	PLW-1244BC SINGLE-NEEDLE POSTBED SEWING MACHINE WITH BOTTOM WHEELFEED AND DRIVEN ROLLERFOOT.	1	2,391.00	1			G	1	3/92 Nalina
15-1-1123V	2	DSG-245 SINGLE-NEEDLE CYLINDERBED SEWING MACHINE WITH UNISON FEED.	3	6,933.00	3			G	3	Nalina
15-1-1123V	3	PLH-982 TWIN-NEEDLE POSTBED SEWING MACHINE, 2MM NEEDLE GAUGE, DROP FEED AND FREE ROLLER FOOT.	1	2,160.00	1			G	1	Pachar
15-1-1633V	1	RIPPING AND FLAYING KNIVES.	2E3	1,783.50	2E3	07	92			Consumables

Country : KENYA

Purchase Order Number	Item No.	Description	Qty. Ord.	Stock-on-hand in US\$	Received			Cond.	Qty On Hand	Remarks
					Qty.	M	Y			
15-9-00886	2	TOYOTA HILUX 4X4 PICKUP DIESEL DOUBLE CAB, MODEL LN106R-PRMRS. CHASSIS NUMBER ==> LN106-0020060 ENGINE NUMBER ==> 3L-2016259 REGISTRATION NO. => 4OUN375K	1	11,650.00	1	05	90	G	1	Region Office
15-9-00887	1	SUZUKI MODEL 4WD SJ413V-JA. CHASSIS NUMBER ==> SJ70-301380 ENGINE NUMBER ==> G13BA129139 REGISTRATION NO. => 4OUN51K	1	6,250.00	1	01	90	G	1	Region Office
15-9-01454	1	NATIONAL MODEL NV-M7EN VHS PORTABLE VIDEO MOVIE CAMERA WITH AUTO-FOCUS, COMPLETE WITH CHARGER AND BATTERY, PAL SYSTEM.	1	1,130.00	1	02	90	G	1	Region Office
15-9-01454	2	NATIONAL MODEL NV-G30EN VHS COLOR VIDEO CASSETTE RECORDER W/WIRELESS REMOTE CONTROL, PAL SYSTEM.	1	436.00	1	02	90	G	1	Region Office
15-9-01454	3	SONY MODEL KV-2183GE 21" COLOR TV WITH WIRELESS REMOTE CONTROL, PAL SYSTEM.	1	506.00	1	02	90	G	1	"
15-9-01459	1	BRAUN MULTIMAG 2015AFC 35MM SLIDE PROJECTOR W/85MM F2.8 LENS NO. 05011901 110-240V 50/60HZ.	1	298.00	1	02	90	G	1	"
15-9-01459	2	ELMO HP-A270 OVERHEAD PROJECTOR NO. 202386 220V, 50/60HZ.	1	473.00	1	02	90	G	1	"
15-9-01465	1	PHILIPS HR-6760 VACUUM CLEANER.	1	213.00	1	12	89	G	1	"

Project Number  
US/KEN/88/100

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION  
NON-EXPENDABLE PROPERTY CONTROL RECORD

Page No. : 5

Period Ending : DECEMBER-92

Country : KENYA

Project Title : NATIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME - EAST AFRICA (ALSO  
REF. US/RAF/88/100)

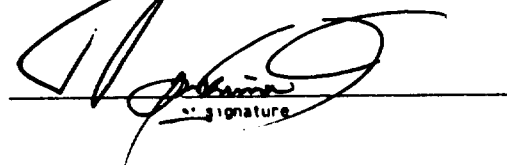
We certify that the quantities of non-expendable equipment received, less the quantities of non-expendable equipment  
written-off, reflect the physical count of the items on hand.

Unido project manager  
or  
Resident representative

  
signature

Date \_\_\_\_\_

Government counterpart

  
signature

Date 2/2/93

Project Number/Amendment US/KEN/88/100 G		Status O	Country KENYA AFRICA	Pad Date Printed 93-04-08	Programme Element J 13104	P.C.A. Name ML. BULL	
Project Title NATIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME - EAST AFRICA (ALSO REF. US/RAF/88/100)				Backstopping Officer Name: MS. CALABRO			
Authority REVISION REQUEST 30/3/1993				Multi-Fund Projects:			
				Remarks			
IDF: I	R.B:	Type:	IGO Code:	TSS-AOS:	Donor: ITA	COB Date:	
SIGNED ORIGINAL IN DA/FS/FMTC PROJECT FILE				Medium Term Plan:			

Budget Line	Functional Title	Total	prior to 1992	1992	1993	1994	1995	Subseq.
15-00	PROJECT TRAVEL	\$ 74,133	54,168	13,991	5,974			
16-00	OTHER PERSONNEL COSTS	\$ 9,000	8,156		844			
18-00	SURRENDER PY OBLIGS	\$ 23,799-	23,799-					
1X-XX	SUB-TOTAL	\$ 59,334	38,525	13,991	6,818			
31-00	INDIVIDUAL FELLOWSHIPS	\$ 47,533	44,521	3,012				
32-00	STUDY-TOURS/UNDP GROUP T	\$ 29,682	10,456	13,265	5,961			
33-00	IN-SERVICE TRAINING	\$ 23,709	23,709					
38-00	SURRENDER PY OBLIGS	\$ 5,724-	1,857-	3,867-				
3X-XX	SUB-TOTAL	\$ 95,200	76,829	12,410	5,961			
41-00	EXPENDABLE EQUIPMENT	\$ 57,080	53,904	3,176				
42-00	NON-EXPENDABLE EQUIPMENT	\$ 203,049	194,708	1,362	6,979			
48-00	SURRENDER PY OBLIGS	\$ 13,669-	5,010-	8,659-				
4X-XX	SUB-TOTAL	\$ 246,460	243,602	4,121-	6,979			

Project Number/Amendment: US/KEN/88/100 G

Pad Date printed: 93-04-08

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Budget Line	Functional Title		Total	Prior to 1992	1992	1993	1994	1995	Subseq.
51-00	SUNDRIES	\$.	44,810	28,004	14,506	2,300			
58-00	SURRENDER PY OBLIGS	\$.	2,004-	197-	1,807-				
5X-XX	SUB-TOTAL	\$.	42,806	27,807	12,699	2,300			
99-99	PROJECT TOTAL	\$. MM.	443,800	386,763	34,979	22,058			

RUN-DATE: 1993-11-03  
UNIDO - UMAP02/8

DETAIL REPORT ON PROJECTS AS AT 1993-10-31  
BY PROGRAM ELEMENT AND COUNTRY

PROJECT NUMBER: US/KEN/88/100

PAGE 2173

PROJECT TITLE: NATIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS  
IMPROVEMENT SCHEME - EAST AFRICA (ALSO REF. US/RAF/88/100)

BACK STOPPING OFFICER MS CALABRO  
PROJECT REVISION 0  
PROJECT STATUS 0 - ONGOING  
PGM-ELEMENT CODE J13104  
FIRST ISSUED 89-03-08 LAST UPDATED 93-04-08  
DONOR ITA

BUDGET LINE	DESCRPT.	TOTAL ALLOTMENT		CUHR YR PHASING		PRIOR YEAR EXP		CURR YR DISB.		BAL CURR YR OBL		COMMITTED FUTURE YEARS (11)	BALANCE		UNCOMMITTED BALANCE	YTD IMPL VERSUS PHASING (14)	
		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)		(12) (4-8-10)	(13) (2-6-8-10-11)			
15-00		0 0	74,133	0 0	5,974	0 0	0	0 0	0	0 0	0	0	0	0	0		
15-01		0 0	0	0 0	0	0 0	68159	0 0	977	0 0	237	0	5,974	74,133			
15-99	TRAVEL	0 0	74,133	0 0	5,974	0 0	68159	0 0	977	0 0	237	0	1,214-	69,373-		20 %	
16-00		0 0	9,000	0 0	844	0 0	0	0 0	0	0 0	0	0	844	9,000			
16-12		0 0	0	0 0	0	0 0	8156	0 0	0	0 0	0	0	0	8,156-			
16-99	OTHER PERS	0 0	9,000	0 0	844	0 0	8156	0 0	0	0 0	0	0	844	844			
18-00		0 0	23,799-	0 0	0	0 0	0	0 0	0	0 0	0	0	0	23,799-			
18-05		0 0	0	0 0	0	0 0	23448-	0 0	0	0 0	0	0	0	23,448-			
18-08		0 0	0	0 0	0	0 0	351-	0 0	0	0 0	0	0	0	351			
18-99	SUR PY OBL	0 0	23,799-	0 0	0	0 0	23799-	0 0	0	0 0	0	0	0	0			
19-99	PERSONNEL	0 0	58,334	0 0	8,818	0 0	52516	0 0	977	0 0	237	0	5,604	5,604		17 %	
31-00		0 0	47,533	0 0	0	0 0	0	0 0	0	0 0	0	0	0	47,533			
31-01		0 0	0	0 0	0	0 0	14314	0 0	0	0 0	0	0	0	14,314-			
31-02		0 0	0	0 0	0	0 0	10089	0 0	0	0 0	0	0	0	10,089-			
31-03		0 0	0	0 0	0	0 0	10089	0 0	0	0 0	0	0	0	10,089-			
31-04		0 0	0	0 0	0	0 0	10000	0 0	0	0 0	0	0	0	10,000-			
31-06		0 0	0	0 0	0	0 0	3012	0 0	0	0 0	0	0	0	3,012-			
31-99	FELLOWS	0 0	47,533	0 0	0	0 0	47533	0 0	0	0 0	0	0	0	0			
32-00		0 0	29,882	0 0	5,981	0 0	0	0 0	0	0 0	0	0	5,981	29,882			
32-01		0 0	0	0 0	0	0 0	10458	0 0	0	0 0	0	0	0	10,458-			
32-02		0 0	0	0 0	0	0 0	3787	0 0	0	0 0	0	0	0	3,787-			
32-03		0 0	0	0 0	0	0 0	3287	0 0	0	0 0	0	0	0	3,287-			
32-04		0 0	0	0 0	0	0 0	8201	0 0	0	0 0	0	0	0	8,201-			
32-99	STUDYTOURS	0 0	29,882	0 0	5,981	0 0	23721	0 0	0	0 0	0	0	5,981	5,981			
33-00		0 0	23,709	0 0	0	0 0	0	0 0	0	0 0	0	0	0	23,709			
33-01		0 0	0	0 0	0	0 0	23709	0 0	0	0 0	0	0	0	23,709-			
33-99	INSERVICE	0 0	23,709	0 0	0	0 0	23709	0 0	0	0 0	0	0	0	0			
38-00		0 0	5,724-	0 0	0	0 0	0	0 0	0	0 0	0	0	0	5,724-			
38-01		0 0	0	0 0	0	0 0	3867-	0 0	0	0 0	0	0	0	3,867			



PROJECT TITLE NATIONAL HIDES AND SKINS LEATHER AND LEATHER PRODUCTS  
 IMPROVEMENT SCHEME - EAST AFRICA (ALSO REF US/RAF/86/100)

PROJECT NUMBER: US/KEN/86/100  
 BACK STOPPING OFFICER MS CALABRO  
 PROJECT REVISION 0  
 PROJECT STATUS 0 ONGOING  
 PGM-ELEMENT CODE J13104  
 FIRST ISSUED 89-03-08 LAST UPDATED 93-04-08  
 DONOR IYA

BUDGET LINE	DESCRPT	TOTAL ALLOTMENT M/W DOLLARS (1)	CURR YR PHASING M/W DOLLARS (13)	PRIOR YEAR EXP M/W DOLLARS (8)	CURR YR DISB M/W DOLLARS (17)	BAL CURR YR OBL M/W DOLLARS (10)	COMMITTED FUTURE YEARS (11)	BALANCE CURR YR BALANCE (12)	UNCOMMITTED BALANCE (13)	YTD IMPL VERSUS PHASING (14)
38-02		0.0	0.0	0.0	0.0	0.0	0.0	(4-8-10)	(2-8-8-10-11)	
38-03	SUR PY OBL	0.0	0.0	1857-	0.0	0.0	0.0	843	1.857	
38-99		0.0	0.0	5724-	0.0	0.0	0.0	843	843	
38-99	TRAINING	0.0	0.0	89239	0.0	0.0	0.0	8.804	8.804	
41-00		0.0	0.0	30927	0.0	0.0	0.0	0	97.080	
41-10		0.0	0.0	25187	0.0	0.0	0.0	18-	20.899-	
41-11		0.0	0.0	876	0.0	0.0	0.0	0	26.876-	
41-12		0.0	0.0	308	0.0	0.0	0.0	0	308-	
41-99	EXPENDABL	0.0	0.0	57078	0.0	0.0	0.0	18-	17-	
42-00		0.0	0.0	188071	0.0	0.0	0.0	8.978	202.048-	
42-01		0.0	0.0	188071	0.0	0.0	0.0	3.488-	188.558-	
42-99	NONEXPEND	0.0	0.0	188071	0.0	0.0	0.0	3.484	3.484	49 %
48-00		0.0	0.0	13138-	0.0	0.0	0.0	0	13.898-	
48-01		0.0	0.0	531-	0.0	0.0	0.0	0	13.138	
48-99	SUR PY OBL	0.0	0.0	13888-	0.0	0.0	0.0	0	0	
48-99	EQUIPMENT	0.0	0.0	239481	0.0	0.0	0.0	3.478	3.478	50 %
51-00		0.0	0.0	24000	0.0	0.0	0.0	2.300-	44.810-	
51-11		0.0	0.0	1800	0.0	0.0	0.0	0	29.102-	
51-12		0.0	0.0	1884	0.0	0.0	0.0	0	1.884-	
51-20		0.0	0.0	853	0.0	0.0	0.0	0	1.853-	
51-22		0.0	0.0	11584	0.0	0.0	0.0	38-	11.584-	
51-42		0.0	0.0	2235	0.0	0.0	0.0	0	2.235-	
51-99	SUMORIES	0.0	0.0	42509	0.0	0.0	0.0	2.737-	2.737-	218 %

RUN-DATE: 1993-11-03  
 UN100 - UMAP02/B

DETAIL REPORT ON PROJECTS AS AT 1993-10-31  
 BY PROGRAM ELEMENT AND COUNTRY

PROJECT NUMBER: US/KEN/88/100

PAGE 2175

PROJECT TITLE NATIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS  
 IMPROVEMENT SCHEME - EAST AFRICA (ALSO REF US/RAF/88/100)

BACK STOPPING OFFICER: MS CALABRO  
 PROJECT REVISION 0  
 PROJECT STATUS O - ONGOING  
 PGM-ELEMENT CODE J13104  
 FIRST ISSUED 89-03-08 LAST UPDATED: 93-04-08  
 DONOR ITA

BUDGET LINE	DESCRIPT	TOTAL ALLOTMENT		CURR YR PHASING		PRIOR YEAR EXP		CURR YR DISB		BAL CURR YR OBL		COMMITTED FUTURE YEARS (11)	BALANCE CURR YR (12)	UNCOMMITTED BALANCE (13)	YTD IMPL VERSUS PHASING (14)
		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)				
58-00		0 0	2,004-	0 0	0	0 0	0	0 0	0	0 0	0	0	(4-8-10)	(2-6-8-10-11)	
58-01		0 0	0	0 0	0	0 0	2003-	0 0	0	0 0	0	0	0	2,004-	
58-99	SUR PY OBL	0.0	2,004-	0.0	0	0.0	2003-	0.0	0	0.0	0	0	0	1-	
59-99	MISC COST	0 0	42,808	0 0	2,300	0 0	40508	0 0	5038	0 0	0	0	2,738-	2,738-	219 X8
99-99	PROJ TOT	0 0	443,800	0 0	22,058	0.0	421742	0 0	7488	0 0	1428	0	13,148	13,148	40 X8