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#### MISSION REPORT

PROJECT NUMBER: US/RAF/88/100 AND US/KEN/88/100 HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME KENYA: 29TH NOVENBER 1989 - 3RD JANUARY 1990

BY

DAVID TRACY, LEATHERGOODS EXPERT (11-07)

#### INTRODUCTION

The time span allocated to US/KEN/88/100 for the expert on this particular visit, was left open-ended due to the timing and requirements of those other projects within US/RAF/88/100.

It developed that 5 weeks were available, but unfortunately much of this time fell within a period of several national holidays, which reduced the period to 4 weeks and limited the range of activities possible.

The greatest proportion of time was spent within the Leathergoods Development Centre (LDC) at KIRDI, working with the trainee leathergoods staff, although several days were needed to shop around for fresh adhesives, secondary materials and additional handtools.

An emphasis was put on the use of local Nile Perch skins to produce and extend a sample range of articles whilst giving training to the leathergoods staff at the LDC.

One external visit was made to "Wabeca Leather Fashions".

With consideration given to the limited time available, training needs, and the nature of the Nile Perch skins, a workplan was compiled with direction given by the CTA.

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#### a) Activities planned

A short appraisal period was necessary to determine the training needs of the LDC counterparts.

- A short course was devised to reinforce the pattern cutting, cutting, benchwork and machine operation skills on two dimensional products.
- Those products produced to be made from Nile Perch skins and marketed locally, which may also be displayed at the PTA exhibition in Addis Ababa in January 1990.
- Visits should be made to two or three leathergoods factories in Nairobi to become familiar with the standard of production and provide on the spot advice.

## b) Activities carried out

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The training course provided very satisfactory results with four new two dimensional products made from Nile Perch. The achievements of the counterparts indicated that simple three dimensional products could be included in the course and two such products were made. Unfortunately, only three of the five counterparts were able to attend regularly.

A number of good finished samples in Nile Perch are available for display at the PTA exhibition if required.

Six products have been marketed in Nairobi gift shops by the expert and one counterpart and orders taken for short production runs.

Formal organised visits to local factories never materialised, due mainly to the holiday period, and it was felt that this activity would be more productive on a future occasion. One visit was requested, however, by "Wabeca Leather Fashions" which is a new company not yet in production. One half day was spent advising on products and technical problems that will be encountered.

#### RECOMMENDATIONS

#### KIRDI Management

The three members of the leathergoods staff that attended the training course, namely, Mary Otieno, Jane Sagara and Wilson Muinamia, were highly motivated towards increasing their knowledge and skills. To maintain this motivation, support must be given from the KIRDI management.

To generate cash flow, items produced at KIRDI should be sold on the open market. This will ensure continuous work, and a rapid development of skills and experience, but this will not happen unless:

- 1. A representative of management meets with the leathergoods staff at least once a week to discuss their needs, and supports them both financially and morally.
- 2. The head of the leathergoods unit, Wilson Muinamia, should have a detailed job description, indicating clearly his authority, responsibilities and the names of those to whom he is responsible.
- 3. Morale within the leathergoods staff is low, although in conflict their desire to improve themselves is high. To ensure a continuation of motivation, their specialisation and unique skills must be recognised by management and encouraged. An upgrading of their status and the removal of menial tasks from their duties would demonstrate a commitment from management.
- 4. A few tools need to be provided immediately to simplify the manufacture of products. See Annex 1.
- 5. Fashion magazines are essential to product development. A subscription should be made to Arpel, Italy, which is specifically a leathergoods publication.

#### UNIDO

The three counterparts who were involved in the training course proved themselves to be competent in all aspects of leathergoods manufacture. A letter stating their competence and successful completion of two courses should be submitted to KIRDI management.

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#### Counterpart staff

 Continual production of a range of products must be maintained, either through fulfilling orders, or, making for a stock to be sold when produced in quantity.

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- 2. The techniques, adhesives, tools and templates developed must be maintained and used.
- 3. Records to be kept of costings, style numbers, labour timings, materials purchased and products sold. Information from records should be timetabled onto a production programme sheet to encourage a responsibility to meet production deadlines, plan work in advance, and identify bottlenecks before they occur. See Annex 2.
- 4. Buy sufficient stock of materials, adhesives, threads etc for continuous production. Piecemeal purchasing is counterproductive and time consuming. Fabric linings should be sprayed with water based PU for use in wallets and notecases and then <u>rolled</u> onto a pole or tube to prevent creasing.

#### TRAINING PROGRAMME

Before training could begin it was necessary to establish the levels of skills and knowledge that had been reached by the counterparts. Once this had been identified it was decided to concentrate on two dimensional products from conception through all processes to final product, although three dimensional products were incorporated to stretch their pattern cutting skills.

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a) The main subject areas of training were:

- An appreciation of quality and cleanliness of finish.
- Designing to fulfil a market need.
- Aesthetic. functional and commercial design.
- Leather, metal and secondary materials selection.
- The value of master patterns and making patterns.
- The conversion of making patterns to cutting patterns.
- The value of jigs and templates.
- Correct use of skiving and sewing machines.
- Assembly techniques and specialised tools.
- Leather estimating. First and second waste.
- Product pricing.
- Production planning.

#### b) The training course procedure

An acceptable level of skill had already been achieved by the three counterparts present for the full duration, and much of the preliminary work could be dispensed with quickly through discussion and reinforcement of basic knowledge.

A weak area proved to be pattern cutting, and considerable time was spent in explanation and practice of a methodical pattern cutting system. Within this system the use of jigs and templates and their development from patterns is a simple progression.

Leather substance and its relation to edge skiving appeared to be one area that needed particular attention, and much time was spent illustrating the importance of this, and the effects incorrect skiving can have on the finished product. A few new techniques were introduced into the benchwork processes, but very little was needed to improve their skills apart from stressing cleanliness and the use of correct adhesives. It was felt that their skills were far enough advanced to include a more challenging product in the form of three dimensional constructions.

Leather estimatging and product pricing were known to the counterparts, but there was some confusion remaining and so it was felt that a complete re-appraisal of the system was necessary.

Production planning was a new concept, and will have a place within the leathergoods unit in the event of small scale production.

## c) New products developed

Based on established skills, a natural progression was to upgrade the quality of finish on three two dimensional products.

- i) A mystic (magic) notecase (butted finish)
- ii) A soft spectacle case (turnover edge finish)
- iii) A notecase with six credit card/business card pockets, two slip pockets and two money pockets (turnover edge finish)

As a test of comprehension and pattern interpretation, item iii) was redesigned by the counterparts to create a new notecase, iv), unaided by the expert.

iv) - A notecase with two slip pockets and two money pockets (turnover edge finish)

To further develop pattern cutting skills and to increase the product range two additional items were made.

- v) A zip fastened security belt pouch (turned seam finish with cut edge strap)
- vi) A two piece body ladies handbag (turned seam body and butted finish flap)

Annex 3 illustrates these items.

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## FINDINGS

The three counterparts familiar to the expert proved themselves capable of performing all tasks set, to a satisfactory standard whilst under supervision. The two weakest areas would appear to be pattern cutting and edge skiving, which is understandable considering their limited experience.

Items i) (018), ii) (019), iv) (015), v) (017)/(003a), (009) and (012) are to be offered as sale items on the local market (see Annex 4) and by repeating these varied processes, practical skills and valuable experience will accumulate. See Recommendations 1-4 KIRDI, 1-4 Counterpart staff.

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#### CONCLUSIONS

The potential of the leathergoods unit at KIRDI is there to be developed. A modern, well equipped workshop and motivated, skilled staff that merely need experience should, given the assistance of management, eventually have the confidence to provide a service to local industry, albeit a limited service until industrial experience can be gained from exposure to full production units.

The management at KIRDI need to be aware that planning and direction must eminate from them, and without their support the leathergoods unit cannot function efficiently.

The Nile Perch skins proved easy to work, however, their size is very limiting, and waste percentage high. 'The plated finish currently available is not hard wearing enough to withstand handling during making processes, and the non-plated (ruffled) finish would need a protective finish to prevent the finished article marking badly.

#### ANNEX 1

# Recommended additional tools for LDC Leathergoods Unit

4 x USA clicking knife handles.

20 x clicking blades (straight and curved) or equivalent in hack saw blades.

6 x pairs of leather shears or good quality 7" scissors.

6 x 12" steel rulers.

6 x trimming rulers or acrylic sheet for making up the equivalent.\*

Thin aluminium or zinc sheet for setting up permanent patterns.

The tool for removing the ejector dish on the skiving machine has not been supplied. A tool must be ordered from the manufacturer to enable the bell knife to be removed when worn down, which may be very soon if production is continuous.

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TRIMMING RULER

Weekly Programme	Nonday Date:		Tuesday Date:			Wednesday Date:		Thursday Date:			Friday Date:				
Activities	2 hrs	2 hrs	1½ hrs	2 hrs	2 hrs	1½ hrs	2 hrs	2 hrs	1½ hrs	2 hrs	2 hrs	1½ hrs	2 hrs	2 hrs	1½ hrs
Cutting														-	
Skiving															
Benchwork															
Sewing 1															
Sewing 2															
Other Machinery															
Other Activities														-	

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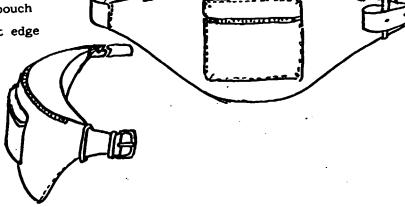
ANNEX 2

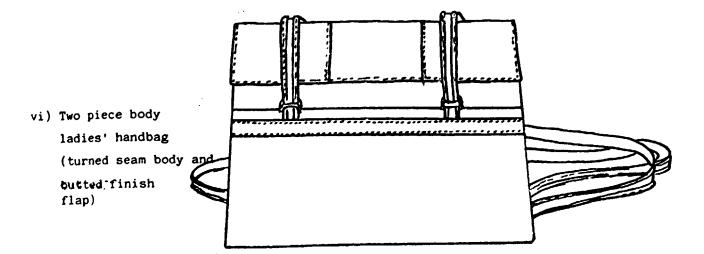
iv) Notecase with two slip pockets (turnover edge finish)
 v) Zip fastened security belt pouch

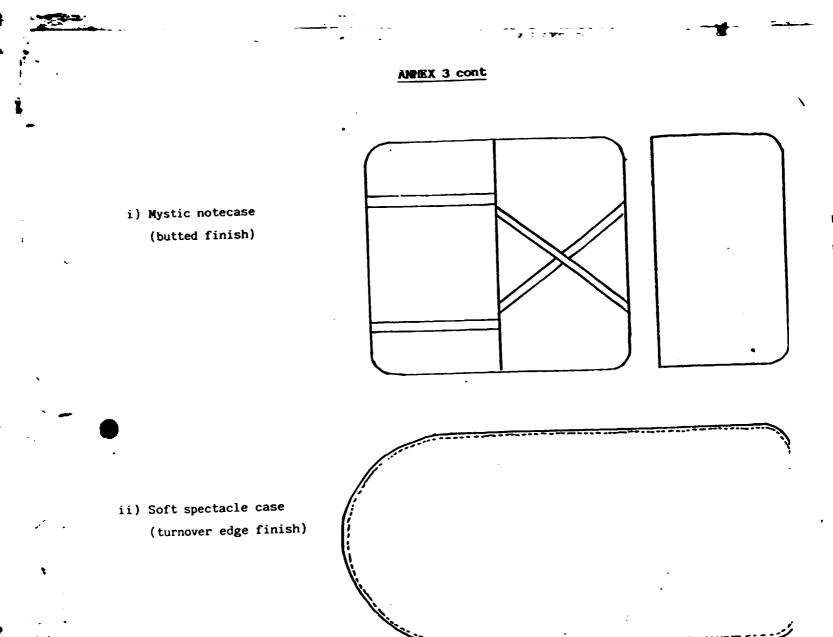
ANNEX 3

(turned seam finish with cut edge strap)

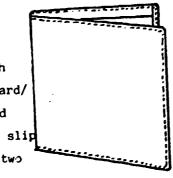
side view

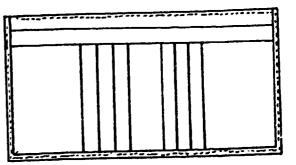






iii) Notecase with
six credit card/
business card
pockets, two slip
pockets and two
money pockets





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i) Mystic notecase (butted finish) ii) Soft spectacle case (turnover edge finish) iii) Notecase with six credit card/ business card pockets, two slip pockets and two money pockets

5.

# UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION





HIDES & SKINS, LEATHER AND LEATHER PRODUCTS Improvement scheme in cooperation with associated Projects in Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zamba and Zimbabwe

YOUR REF:

OUR REF:

NAIROBI,

## PRODUCT PRICES

Reference	Description	Price (Kshs)				
0020	Coin "fish" purse	22.20				
003a	Billfold wallet (fish)	67.25				
009a 009b	Billfold wallet (goat)	49.00				
0095	Key case holder (fish)	29.00				
012 015a	Four pocket notecase (fish cover)	61.20				
015b	Four pocket notecase (goat)	59.00				
0130	Belt pouch (cowhide)	232.00				
018a	Mystic (magic) notecase (fish)	53.70				
018b	Mystic (magic) notecase (goat)	49.00				
019a	Spectacle case (fish)	55.00				
019b	Spectacle case (goat)	. 50.00				

Prices correct at January 1990

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ANNEX 4

## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

#### **US/RAF/88/100**

HIDES & SKINS, LEATHER AND LEATHER PRODUCTS Improvement scheme in cooperation with associated Projects in Ethiopia, Kenya, Malawi, Somalia, Sudan, Tanzania, Zambia and Zimbabwe



YOUR REF: KIRDI OUR REF: Leather Development Centre PO Box 30650: Tel 504866/7 NAROBI,

2nd January 1990

To whom it may concern

The Kenya Industrial Research and Development Institute (KIRDI), situated in Nairobi, has as part of its facilities a lethergoods workshop sited within the Leather Development Centre.

The leathergoods workshop which is fully equipped with modern machinery, and staffed by several trained technicians, is now in a position to offer a limited range of products in batches of 20 pieces maximum.

The range of products presented at this time has been selected to make maximum use of the facilties available and we cannot produce articles to individual specifications. We would, however, welcome suggestions on products you feel could be part of our range and we will endeavour to produce a sample at a competitive price.

Due to the nature of our workshop and its dependence on KIRDI, we must insist that payment for goods is on a cash on delivery basis.

Mr Wilson Muinamia is responsible for the day to day business in the workshop and he is the contact person regarding any queries.

Yours faithfully

Wilson Muinamia Head of Leathergoods Unit

David James Tracy UNIDO Leathergoods Expert

