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JULY 1990
ENGLISH

TERMINAL REPORT*

US/RAF/88/100

AND

ASSOCIATED PROJECTS

**US/KEN/88/100, US/ETH/88/100, US/SOM/88/100, US/ZAM/88/100,
US/URT/88/100, US/ZIM/88/100 AND US/SUD/88/100**

**REGIONAL HIDES AND SKINS, LEATHER AND LEATHER PRODUCTS
IMPROVEMENTS SCHEME**

August 1989 to July 1990

Based on the work of A. RONGVED, Machinery Expert

Backstopping Officer: Juhani Berg, Agro Based Industry Branch

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BACKGROUND

The Regional Meeting on the Leather and Leather Products Industry in Africa, held in Alexandria in 1987, focused on the need to improve the collection of raw hides and skins and the quality of the produced leathers.

The outcome of this meeting materialized as the Regional "umbrella" project US/RAF/88/100, set to cover eight East-African countries. The project, financed by six donor countries, has an immediate follow up in the Rehabilitation project, US/RAF/88/102. This rehabilitation project was made possible by a special contribution by the Government of Italy.

IMPLEMENTATION

The implementation started in early 1989 by the fielding of the CTA and two short term consultants. The fielding of the International Experts started in August 89, with the maintenance expert A. Rongved (Norway).

WORK PLAN

The project UC/RAF/88/200, implemented by the CTA (US/RAF/88/100) and the two short term consultants, consisted of a preparatory study based on a visit to the eight participating East-African countries, and established a plan for the international experts. This plan has, however, been modified in such a way that the maintenance expert (11-06) has during the first year visited seven of the countries. Two of the countries, Kenya and Ethiopia have been visited two or more times.

INTRODUCTION

This report is an extract and summary from the country reports, prepared after each mission.

The expert has been visiting seven of the eight East-African countries under the regional "umbrella" project, US/RAF/88/100.

A total number of twenty seven tanneries have been visited, several of them two or more times. Several shoe factories have also been visited but the expert is, however, not too familiar with this side of the industry, so the major input has been towards the tanneries.

There is a very big difference between the tanneries which have been visited. Some are doing very well, others are practically non operating.

The expert, whom started August 89, joined the project before some of the essential equipment, project vehicles, arrived and experienced because of this some constraints in the early stages of the assignment. Generally speaking it can nevertheless be stated that the mission has been completed without too many difficulties.

SUMMARY

Among the eight countries in the project it is unfortunate to find that political and social instability is present in several of them. This not only hampers the countries development, but also creates difficulties in terms of implementing the project intention. This is one of the reasons why difficult working condition has led to the situation that several tanneries with a good potential are either at a standstill or working far below their capacity.

On the other hand there are also countries where the conditions are totally different and the industry is doing very well indeed. Generally it can be stated that only one or two of the countries are in a position where articles in the crusted or finished state can be exported outside the PTA market. This is due to the above mentioned reasons and raw material conditions.

FINDINGS

KENYA. US/KEN/88/100.

Duration; August 2 - August 30, 1989
February 15 - March 5, 1990
June 14 - July 20, 1990

Tanneries visited; Sagana Tannery Ltd.
Kitale Tannery Ltd.
Kisumu Tannery Ltd.

Sagana Tannery Ltd.

Sagana Tannery is located 100 km from Nairobi. The tannery was established complete in 1975, but with second hand machinery and equipment. The tannery was first visited on a working visit in August 89 and revealed a number of errors and shortcomings. The tannery has, due to insufficient maintenance and re-investment, been run down to a bad condition. It is still operational, but much in need of rehabilitation. The finances of the tannery has gone down, both beyond the means of rehabilitation and the means of maintaining a production of own material. The tannery is consequently mainly occupied with contract tanning to wet blue stage.

During the period from the first visit and up to date several changes has taken place in the tannery. A new manager has been appointed, some of the long overdue cleaning has taken place and the shareholders have agreed to raise more capital.

The tannery has been selected by UNIDO as the tannery to be rehabilitated and also as the tannery in which a model effluent treatment plant is to be installed. These two issues are under the subject of the subcontractor, although some problems have been met during the preparations. As a result of these problems some sketches of lay-out proposals and ideas around rehabilitation have been presented by the maintenance expert. The final evaluation of the rehabilitation project is presently looked into by a consultant.

Kitale Tannery Ltd.

The Kitale Tannery is located in Kitale, some 450 km from Nairobi. It is a small tannery concentrating on wet blue production. The production is mostly for export even though local customers have also been supplied.

The tannery, established in 1983, is owned by two brothers whom have managed to go through the establishing phase and are presently running the production on their own material. They are, however, not utilizing the capacity more than 50%.

Their first target is therefore to increase the production, a process slowed down by the difficulties in obtaining the necessary overdraft facilities. Some of the tannery equipment, drums and hide fleshing machine, are not in their best condition. The tannery is therefore considered under the rehabilitation project, US/RAF/88/102, in this respect.

The factory has an effluent system installed. The system was designed and built by locals and is functioning reasonably well. The design is in fact of such a simplicity that it can be looked upon as suitable for other tanneries, though bearing in mind that minor improvement, especially towards aeration, must be done.

Kisumu Tannery Ltd.

Lake Tanners is located just outside Kisumu town, in a future industrial area, and has been visited twice. First in August 89. That visit found the tannery to be badly organized and suffering from technical errors. This was all noted in the report later sent to the tannery. The second visit, February 90, revealed that no action had been taken. The location of the tannery is such that no water supply nor effluent (municipal) is available. The last subject has brought the tannery owner into problem with the municipality. The municipality on one hand keep pressing for effluent treatment, and the tannery owner on the other hand is reluctant to invest more under the present conditions.

ETHIOPIA. US/ETH/88/100

**Duration: September 2 - September 30 1989
May 1 - June 5 1990**

**Tanneries visited: Addis Tannery
Awash Tannery
Ethiopian Pickling and Tanning Factory
Ethiopian Tannery
Modjo Tannery
Dire Tannery (privately owned)**

The first of the two visits, Sept. 89, was a successful visit. It was made first as an introductory visit and then later a working visit. The outcome was basically that the NLSC (National Leather and Shoe Corporation) have been and are running a rehabilitation project towards the industry. UNIDO, through the rehabilitation project US/RAF/88/102, is also having a considerable input in

this respect. It was also discovered that the preventive maintenance system, developed in Ethiopia, although of good standard, unfortunately mainly exists on paper.

The tannery in which the maintenance seminar is to be held, Awash Tannery, is without doubt the tannery which have done most in terms of implementing. Nevertheless, also this tannery has some problems in this respect. The two major obstacles is shortage of qualified personnel and shortcomings in terms of highly developed workshops to improve the training of the mechanical operators.

Also during the first visit several comments and recommendations were made towards specific machines, utilizing of equipment and towards effluent. The second visit revealed that practically no action had been taken towards any of these recommendations. The second visit as such also turned out badly as the preparations done prior to the visit was done insufficiently.

SOMALIA. US/SOM/88/100

Duration: October 3 - December 13 1989.

Tanneries visited: KM 7 Tannery, Mogadhicio
Mission Tannery (privately owned)

The duration of the mission proved to be longer than necessary as the conditions in Mogadhicio were very difficult. Travel outside the capital was not possible so the only publicly owned tannery that could be visited was the KM 7 Tannery. This tannery, although recently rehabilitated and also a subject of recent assistance, is practically at a standstill. The two main reasons for this is the technical standard of the tannery and raw material scarcity.

The privately owned Mission Tannery is a bit better off with wet blue export and finished leather for the company's own shoe factory.

The civil war and the cancellation of the hides and skins collecting monopoly are important reasons for the lack of material, which now mostly goes in the parallel trade.

To improve the conditions in the tannery proved practically impossible with the limited resources at hand.

The new facilities constructed with Italian aid, a new slaughterhouse and a new skin tannery, are still not in ordinary production due to the raw material situation and partly to the lack of management agreement between SLA (Somalia Leather Agency) and the Italian Government.

ZAMBIA. US/ZAM/88/100

Duration: January 17 - February 3 1990

Tanneries visited: SIDO Tannery site, Kabwe.
Sussex Tannery, Kitwe.
Bata Tannery, Kafue.

The mission was carried out together with the expert from the rehabilitation project US/RAF/88/102, Mr. A. Lesuisse.

The mission was to assist SIDO (Small Scale Development Organization) with their proposed tannery project in Kabwe and to evaluate any eventual rehabilitation objects.

SIDO Tannery

The SIDO tannery project was in a very confused state. It proved very difficult to get reliable information related to vital elements of the project. As a result the only assistance the experts could give was to describe two production mixes, prepare lay-out and machinery lists to the respective inputs.

The drainage design of the tannery and the proposed effluent treatment were also evaluated and alternative proposals presented. It was felt from the experts that the study, on which the project was started, was insufficient and preferably should be revised.

SIDO was originally established to assist small scale industry in the establishing phase. However, this policy seems to be abandoned. The tannery project in Kabwe seems to have taken over. As a result several small scale, non mechanized, tanneries both in rural areas and in suburbs are without support. Without new backing, presumably most of these places will go under. ILO could assist in some areas. The project US/ZAM/88/100 will assist with some equipment to a German volunteer whom is establishing a small, non mechanized, tannery and manufacturing unit.

Sussex Tannery

The Sussex tannery in Kitwe started as a supplement to an already existing industry. The owner who knew little about leather wanted to start with vegetable tanned leather and gradually expand into chrome tanning. The latter only after moving to new premises. Unfortunately, all the machines and equipment, imported second hand, were for chrome tanning and not suitable for veg. tanning. It was therefore recommended to assist with some equipment for this production. (As there seems to be questions about whether this factory now has closed down, this equipment has been canceled.)

Bata Tannery

Bata Tannery in Kafue turned out to be the only possible candidate for rehabilitation under the US/RAF/88/102 project. It was also suggested to assist the tannery under US/ZAM/88/100 with some spare parts. The tannery, suffering under too small currency allocations, is much in need of such rehabilitation. This in spite of the fact that the tannery is in process of implementing their own rehabilitation program.

It was, however, the opinion of the experts that the tannery needed to improve their handling and use of some of the equipment. The tannery manager, recently appointed, promised prompt action in this matter as he was basically in agreement with the experts statements.

TANZANIA US/URT/88/100

Duration: February 3 - February 14 1990.

Tanneries visited: Afro Leather, Dar es Salaam.
Morogoro Tannery, Morogoro.

Afro Leather

The privately owned Afro Leather is a small tannery which is doing reasonably well. The main obstacles being the capacity, which is too small, and the fleshing machine. The fleshing machine is basically a skin or calf fleshing machine. This makes it too weak for the tannery which do mostly hides. This forces them to divide the whole hides into sides before fleshing. Not having a tanning machine, they are forced to sell a material with too high humidity content with the involved extra transport costs.

To rectify these biggest constraints the tannery is considered under the rehabilitation project US/RAF/88/102.

The effluent treatment from the tannery is also insufficient. A proposal has been made by an effluent expert, in order to rectify this. This is expected to be financed through the national project (equipment) US/RAF/88/100.

Morogoro Tannery

In Morogoro the big tannery and the very big shoe factory are both practically at a standstill. The Leather Goods Factory is working, but mostly on canvas.

It can not be recommended to have any additional inputs to the tannery at the present stage. The tannery, publicly owned and operated under TLAI (Tanzania Leather Associated Industries) must first be injected with fresh working capital and go through a reorganization of management and operational functions.

ZIMBABWE US/ZIM/88/100

Duration: March 7 - April 4, 1990

Tanneries visited: Imponente Tannery, Harare
Eagle Tannery, Marondera
Msasa Game Skin Tannery, Harare
Belmont Tannery/Finishing Factory, Bulawayo
BATA Tannery, Gweru

The tannery industry in Zimbabwe is more advanced than the other countries in the project. This also changes the approach from the tanneries to the project, and should be vice versa.

The Zimbabwe'n tanneries are more in the need of a professional assistance and advanced machinery than the neighboring countries. This because the tanneries and their raw material are more of an industrialized country standard, though having shortcomings in organization and administration. This is the

result of very rapid growth and too few experienced staff to keep up. All the tanneries visited are handicapped by these problems and it is felt that even though the input of the equipment already given, and most welcomed, is a good contribution, but even more can be achieved with technical/administrative support over a certain period.

Most of the countries in the project can still, for years to come, only realistically hope to export semi-processed products, whereas Zimbabwe could, and is, exporting finished leather.

However, moving seriously into this export line requires a consistency and quality which even in Zimbabwe is difficult to achieve. It is therefore felt that this is the area into which the major input should be directed for the Zimbabwe tanneries.

SUDAN US/SUD/88/100

Duration: June 5 - June 13, 1990.

Tanneries visited: White Nile fannery, Khartoum
 Khartoum Tannery, Khartoum
 El Gezira Tannery, Gezira
 Afro Tan, 40 km outside Khartoum (privately owned)
 Salim Tannery, Omdurman (privately owned)
 Several smaller tanneries in Omdurman (priv.owned)

The publicly owned tanneries are presently undergoing a large scale rehabilitation program (Khartoum area). The situation around this rehabilitation seems somewhat unclear. The large amount of machines, equipment and spares already at site needs implementing before future steps can be taken. The third public tannery, El Gezira, has only received equipment not urgently needed, and would be the only target for the rehabilitation project US/RAF/88/102.

For the public tanneries effluent seems to be a bigger problem than earlier information has indicated. There seems to be delays or non decision taken towards the municipal expansion program in this sector. Therefore a temporary solution can be needed. The very sophisticated treatment system at Gezira, presently out of operation, could be tried simplified and re-started.

The issues must, however, be evaluated by an effluent expert.

The private sector is managing reasonably well, Afro Tan, but the smaller, non export orientated, are in desperate need of foreign currency needed for chemicals and other consumable items.

The smaller tanneries in Omdurman is also having severe effluent problems and it can only be a matter of time before they will have to either close down, be offered municipal sewer or move to new premises.

CONCLUSIONS AND RECOMMENDATIONS.

After the project being operational for 18 months and most of the countries have been visited by several experts, some conclusions can be drawn. Presently three countries are having civil war which have disrupted the industrial life and the collection of raw materials. The conditions seems only to get worse and the implementation is obviously hampered.

Other countries, where the majority of the industry have been or are publicly controlled, are suffering from under utilization, lack of working capital and poor management.

The last group of countries have a privately operated industry which, apart mainly from lack of foreign currency, is operating very well.

With this grouping it is obvious that the outputs will be highly variable from country to country. It seems that the countries which are operating well should be taken as example by the others. The industrial policies in the well operating countries should also be made available in the other countries.

This is obviously a long process and time alone will show what the future will bring.

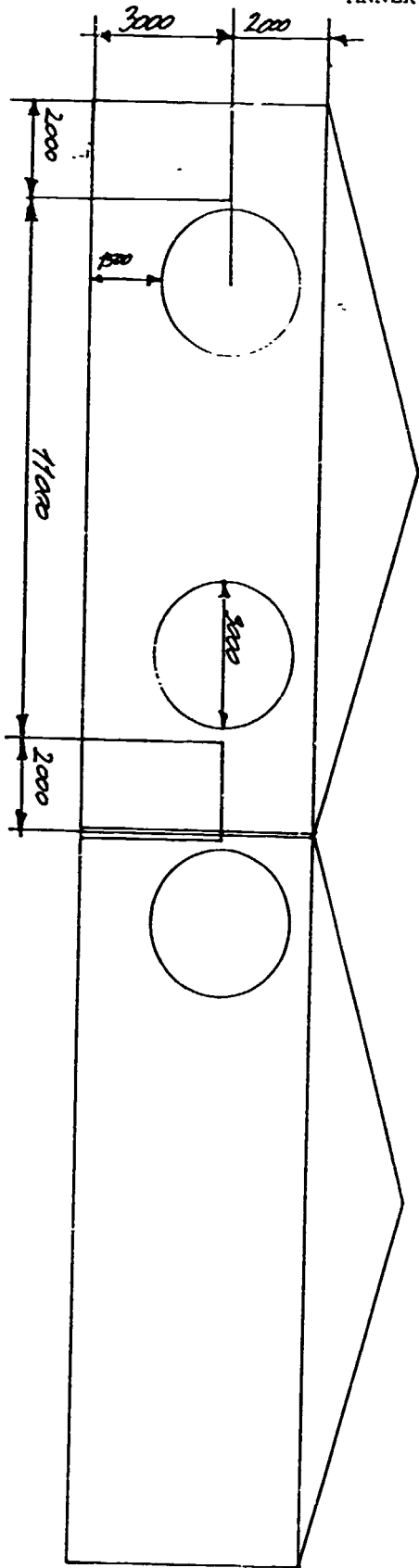
ANNEX 1.

List of mission reports prepared

-	Mission report Sagana Kenya	2 - 21 August	1989
-	Mission report Kitale Kenya	22 - 24 August	1989
-	Mission report Kisumu Kenya	25 - 26 August	1989
-	Mission report Ethiopia	2 - 30 September	1989
-	Mission report Somalia	8 October - 13 December	1989
-	Mission report Tanzania	March	1990 (*)
-	Mission report Zamiba	March	1990 (*)
-	Mission report Bata Zambia	12 March	1990
-	Mission report Zimbabwe	7 March - 4 April	1990
-	Mission report Sudan	5 - 13 June	1990
-	Rehabilitation proposal Sagana Kenya	July	1990

(*) Joint report with Mr. A. Lesuisse, Senior Leather Industry Consultant

ANNEX 2 (a)



SAGAMA TANNERY LAY-OUT PROPOSAL

THIS PROPOSAL INDICATES A POSSIBLE LAY-OUT FOR SIX NEW DRUMS, FOUR LINING DRUMS AND TWO TANNING DRUMS.

THE DRUM SIZE IS SET TO BE 3x3 METRES.

THIS GIVES A DAILY PRODUCTION OF 6400 KG SALT WEIGHT. (3200 kg per drum)

THE PROPOSAL LEAVES SPACE FOR ADDITIONAL THREE DRUMS TO BE INSTALLED.

ANNEX 2 (b)

SAGANA TANNERY LAY OUT PROPOSAL

