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**REGIONAL AFRICA**

**HIDES & SKINS, LEATHER AND LEATHER PRODUCTS IMPROVEMENT SCHEME**

**US/RAF/88/100**

**MISSION REPORT**

**Ethiopia 21 - 28 November 1992**

**Kenya 28 Nov - 06 Dec 1992**

**Tanzania 06 - 09 December 1992**

**Sudan 09 - 15 December 1992**

by

**Mr. Juhani Berg, Senior Interregional Adviser**

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## I. Executive Summary

The mission was partly a monitoring and partly a programme development travel to four African countries, namely:

Ethiopia	21 - 28 November 1992
Kenya	28 Nov - 06 Dec 1992
Tanzania	06 - 09 December 1992
The Sudan	09 - 15 December 1992

The terms of reference of the mission was:

- to study the present industrial situation in the countries visited, discuss the assistance needs within the proposed second phase programme US/RAF/92/200 including the RALFIS, REFAM, and NALFIS projects.
- to conduct meetings with UNDP/UNIDO representatives, the local industry, relevant government authorities and other funding agencies who may be potentially interested to participate in the financing of the second phase of the Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme.
- participate in the sectoral meetings to be organized and provide advise in the establishment of local Associations in the hides and skins, leather, footwear and leather products sector.
- participate in the official opening of the regional model tannery and effluent treatment plant in Sagana, Kenya

The mission findings re-confirms that the proposed second phase of the programme is indeed well needed and would provide the industry a suitable vehicle for further industrial development. The programme concept which includes further development of agro-based indigenous co-product, raw hides and skins to value added products with export potential, environmental improvements to an industry with effluent problems, gender development and assistance to small and medium scale private industry is very much within the industrial development priorities of the countries concerned.

The mission established initial, positive contact with the African Development Bank. The second phase of the project should cooperate closely with ADB and similar financial institutions and this contact should be followed up from UNIDO headquarters.

Separate reports on country level has been included for the various countries visited. The writer like to take the opportunity to thank the persons, institutes, governmental and non governmental organizations who have so freely provided the help and information needed by the mission.

## II. Explanatory Notes

BSO	-Backstopping Officer
CAD	-Computer Aided Design
CTA	-Chief Technical Adviser
NEX	-National Expert
EEC	-European Economic Community
FAO	-Food and Agricultural Organization
HQ	-Headquarters
ITC	-International Trade Centre
KIRDI	-Kenya Industrial Research and Development Institute
LDC	-Leather Development Centre
NALFIS	-National Leather and Footwear Industry Scheme
PTA	-Preferential Trade Area
RAF	-Regional Africa
RALFIS	-Regional Africa Leather and Footwear Industry Scheme
REFAM	-Rehabilitation and Establishment of Finished Articles Manufacture
RCO	-Regional Coordinator
TOR	-Terms of Reference
UNIDO	-United Nations Industrial Development Organization
UNDP	-United Nations Development programme

Br Ethiopia Birr is the monetary unit of Ethiopia US\$ 1.00 = EBr 5.00 during the mission (UN official rate 4.95 as of 12/10/92)

Ksh Kenya Shilling is the monetary unit of Kenya US \$1.00= Ksh 35 during the mission

Tsh Tanzania Shilling is the monetary unit of URT US\$ 1.00 = Tsh 350.- during the mission

SE Sudanese Pound is the monetary unit of Sudan US\$ 1.00 = 134.- during the mission

US\$ Dollars of the United States of America

### **III. General Background Information**

The following few paragraphs are to provide the reader clarifications on the scope and the objectives of the mission and some information on the US/RAF/88/100 & US/RAF/92/200.

The mission was to cover the countries which were not visited during the June/July 1992 mission of the writer (The report of Berg/ Felsner July 1992 refers) and to look specifically in the following matters:

*In Ethiopia:* Discuss the preparation of a large-scale leather programme for the coming UNDP cycle. Discuss with UNDP possible cost sharing of US/ETH/92/200. Participate in the first sectoral meeting of the tanners and the leather products sub-sector and advise on the possible establishment of a sectoral association to represent the industry after the discontinuation of the parastatal NLSC.

*In Kenya:* Participate in the official opening of the model tannery and effluent treatment plant established with the assistance of US/KEN/88/100 and US/RAF/88/100. Take part in the second sectoral round-table meeting of the hides and skins, leather and leather products sector. Visit the factories receiving assistance under US/KEN/88/100.

*In Tanzania:* Check on the privatization plans of Morogoro Tannery and give recommendations on possible UNIDO assistance to the factory in effluent treatment and modernization. Participate in the sectoral meeting of the hides and skins and derived products sector and provide information on the revolving fund operations.

*In Sudan:* Inspect equipment delivery to Salim Tannery. Participate in the steering committee meeting of project US/SUD/88/100. Provide information on the revolving fund operations. Attend the official opening of a shoe designers training course.

#### ***Information on US/RAF/88/100 and associated projects; US/RAF/92/200 and associated projects:***

The large-scale Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme, US/RAF/88/100 is the largest IDF programme and comprises several new elements in so-called "programme approach". The programme is a joint effort of three agencies namely UNIDO, FAO and ITC. UNIDO is the executing agency and provides the total funding through IDF special purpose contributions from six donor countries.

The programme consist of two regional umbrella projects (US/RAF/88/100 and US/RAF/88/102) and seven national projects in Ethiopia, Kenya, Malawi, Sudan, Tanzania, Zimbabwe and Zambia. The total international funding of the programme, provided by special purpose contributions through IDF, exceeds 13 million US dollars.

The programme was scheduled to end December 1992 but has been extended to continue about six months in anticipation to start the second phase.

The second phase programme which has been developed is a direct continuation of the presently operational large scale Regional Africa Hides and Skins, Leather and Leather Products Improvement Scheme, US/RAF/88/100, US/RAF/88/102 and the associated national projects US/ETH,KEN,MLW,SOM,SUD,URT,ZAM and ZIM/88/100.

The programme continuation - and enlargement to include three additional countries namely Botswana, Uganda and Namibia - has been requested by all the participating countries, PTA secretariat and endorsed by the regional and national TPR meetings. Furthermore, the extension and expansion of the programme has been recommended by the FAO organized ECDC Workshop On Trade In Hides And Skins And Their Derived Products (Zimbabwe, July 1991) and UNIDO 10th Leather Panel Meeting (Madras, India December 1991).

The second phase of the programme is designed to follow up the experience gathered during the first phase implementation and to be the logical second step to enhance the capabilities of the African leather sector. The goal is to focus on the further development of the African Hides and Skins based sector and sensitize producers and suppliers to produce more value added articles. The sector being Agro related industry and based on by-products of meat, dairy and wool industry i.e. on indigenous, renewable resources, has a large underutilized potential. The programme is designed to provide assistance for a large group of people including African herds men, farmers, butchers, flayers, tanners and leather product entrepreneurs and traders.

Women development within this industry sector, specifically in the downstream side is going to play an important role and the training of people is addressed through upgrading the local institutes within a regional net-work to higher standard and importance.

The private industry assistance will play an important role and a new feature is that the assistance provided to private industry in machinery and equipment will be provided by the programme against pay-back arrangements to Revolving Fund Operations (RFO). These revolving funds are under the control of the local private industry associations and the funds are used for the activities within the hide and skin improvement and similar operations.

In geographical terms the programme is designed to operate in the region of Africa which has the greatest concentration of domestic animal population (over 50% of whole of Africa) and has, therefore, the greatest potential for the development of the hides and skins based tanning, footwear and leather products industry. The programme is designed to address the issues firstly on national level through the individual "National Leather and Footwear Industry Schemes" (NALFIS), secondly on regional level through the "Regional Africa Leather and Footwear Industry Scheme" (RALFIS), and the regional "Rehabilitation and Establishment of Finished Articles Manufacture" (REFAM). In other words the programme is designed to have individual country projects for each of the participating countries and these national projects, NALFIS, will take care of the individual needs and cater for the specific problems and different development levels of the participating countries. The regional umbrella project, RALFIS, will address the needs on the regional level and assist in the creation of regional tanners associations, regional net-working of institutes, provide assistance and services to start the regional model plants, host and organize the various regional seminars and be the headquarters of the programme management and administration and the international experts. The REFAM project is expected to be the main vehicle within the programme to address the lack of foreign exchange and provide machinery and equipment to the rehabilitation or assist the newly established plants in their initial investments through pay-back arrangements in local currency to the RFO.

The projects are clearly linked together and duplication of efforts and waste of resources, within the region, are avoided through the coordination by the RALFIS project.

The projects are presently undergoing the UNIDO appraisal and review process. The US/RAF/92/200 and US/UGA/92/200 have been approved and have been officially submitted to potential donors. Favorable reaction has been received from Germany and Austrian authorities and about 60% of the funds for the US/RAF/92/200 has been secured and the funding for the Uganda project is settled.

#### **IV. General Conclusions and Recommendations**

The first phase of the programme is now close to its end. The draft terminal reports of all countries are prepared and all the recipients have provided information on the results during the first phase. The second phase documents have been badly delayed mainly due to the increased bureaucratic demands and long processing through the UN system. The documents are now completed and appraised and should be sent to PRC final approval around 20 January 1993.

The first phase of the programme has been a very interesting exercise from the implementation point of view. Many lessons have been learned and judging from the response by the recipient industry, major achievements have been made.



The following general recommendations are provided: (additional recommendations on national level are given in the individual country reports)

1. The project documents should be **urgently** sent to the potential donors including non traditional donors such as EEC and development banks. Special, individual letters should be drafted to present the cases.
2. It is likely that we will not receive the "rehabilitation funds" for the REFAM project. Therefore it is important that individual factory rehabilitation and establishment projects will be made on "bankable feasibility study bases" and the project supported by T/A component by the programme experts and the national projects. For example the following components can be handled that way:
  - Awash tannery effluent and finishing
  - Nalbandian tannery
  - Model shoe factory Kenya/Zimbabwe
  - Component factory, Zambia
3. We should try to wind-up the present phase of the project as soon as possible in order not to land in a confusing financial/administrative situation with the second phase. A lot of administratively confusing over-lapping will take place during the near future between US/RAF/88/100 and associated projects and with US/RAF/92/200 and associated project if we do not impose a clear cut-off period. The answer may be to obtain the donor countries approval to close the US/RAF/88/100 and transfer the balance of the funds to US/RAF/92/200, at least in the case of the umbrella projects. The financial/administrative implication should be discussed with the FIMS and other concerned sections and a decision should be taken how to proceed in this matter.

## **V. COUNTRY REPORTS**

### **ETHIOPIA REPORT**

- I. Findings**
- II. Conclusions and Recommendations**

#### **Annexes:**

- 1. Questionnaire for country programme exercise**
- 2. Rongved report re: Addis tannery**
- 3. Map of Ethiopia**
- 4. List of participants "Industry Meeting"**
- 5. Anbesa list of spares and equipment**
- 6. Project concept for women development capabilities in the tanning industry and environmental sound tannery development.**
- 7. DSA rates in Ethiopia**
- 8. UNDP exchange rate**

## I. FINDINGS

### a) UNDP/UNIDO

People met: Mr. Babshola Chinsman, UNDP Deputy RR  
Mr. Peter Manorajan, UNIDO Country Director  
Ms. Claudia Linke, UNIDO JPO

The ongoing project US/ETH/88/100 and the pipeline project US/ETH/92/200 were discussed in detail and I briefed the UNDP/UNIDO staff regarding the financial situation of both projects.

It was agreed in principal that the budget of the US/ETH/88/100, after checking the financial commitments against the MOD authorizations, should be revised to secure six months operations in 1993 in expectation that the second phase US/ETH/92/200 will become operational.

The deputy RR indicated that UNDP would be willing to cost share in the US/ETH/92/200 (total inputs about US\$ 1 million) if UNIDO would be able to provide about 50% of the funds through Swiss IDF special purpose contribution.

A detailed discussion took place concerning the UNIDO supplied equipment to the various tanneries: The view of the Deputy RR was:

As the equipment is UNIDO property the transfer of title should not take place before the tanners association has been established. The private tannery "DIRE" should be requested to start immediate payments to the revolving fund (to be established). The other tanneries and shoe factory + leather goods factory should be informed that they are expected to pay back this equipment in local currency on depreciated value to the revolving fund in the event of privatization. The revolving fund payments is considered to be a pre-requisite for assistance during the second phase.

### b) THE 5th CYCLE COUNTRY PROGRAMME

The coming country programming cycle was discussed. The draft TOR for the formulating mission was discussed and it was agreed that the National Expert of US/ETH/88/100 will be seconded to do part of the study jointly with a national economist/consultant (probably Mr. Baccry Yousuf).

The rehabilitation component of the project should also be studied and I expressed my doubts about the selection of Addis tannery as one of the rehabilitation objects.

In preparing the programme we should look at the following documents:

Development strategy and policy by Manly/Kiruthu  
 PTA document  
 UNIDO draft for the sectoral programme

A questionnaire was prepared for the company level survey and handed over to the National Expert. The NEX was also briefed on his assignment for the 5th cycle programming exercise in the leather sub-sector. An official letter from the Regional Office was set to the UCD to release Mr. Hailu for the assignment.

It was agreed that I would be available to travel to Ethiopia late January or early February 1993 to assist in finalizing the leather sector programme provided an official request was received.

c) FINANCIAL SITUATION OF US/ETH/88/100

The disbursements against the MOD 13-2-05802 were checked and the situation is as follows:

BL 15-01	Local travel authorization	\$ 5,000.00	
	Expenditures	\$ 792.27	Marzo DSA, June-92
		\$ 400.00	Kiruthu, July-92
		\$ 159.00	Ext.travel
Balance		\$ 3,648.73	

Additional expenditure on B1 15 against this MOD is to be authorized by Felsner for the travel of two extension officers to the target area estimated \$1,590.- (30 x 53)

B1 33-01	Authorization	\$13,000.00
	Expenditures	\$ 0
Balance		\$13,000.00

To be unblocked and transferred to BL 42

B1 51-10	Oper & Maint	auth	\$ 1,500.00	
		expend	\$ 483.09	March-92
			\$ 202.02	June -92
Balance			\$ 814.89	

Additional authorization for the amount of \$ 200,- is needed for the end of the year. Felsner requested to authorize.

B1 51-40-2	Sundry	auth	\$ 1,000.00
		expend	\$ 0
Balance			\$ 1,000.00

Transfer total balances of 1,615 to 1993

After detailed discussions with all parties concerned the revision "F" should be handled as follows:

BL 15. Travel authorization of two extension officers against MOD 13-2-05802 for a total of about \$ 1,590.- (Felsner requested to authorize) and deducting the current year disbursement of 264 leaves a balance to be transferred to 1993 of \$ 1,794.73

B1 16. Balance to be transferred to 1993 for staff member participating in the UNDP study.

B1 17. The man months to be increased by 6 months and funds to be secured for the 6 months operations. The salary of the NEX is presently Birr 4,393.- per month which in accordance with the old rate at 2.07 Birr to one US\$ was US\$ 2,122 per month. The salary of January October is paid at this rate making a total of \$ 21,220 for the first ten months. The salary of Mr. Hailu at the devaluated rate of 4.95 Birr to the US\$ makes the salary in dollar terms \$ 890.- per month. The situation is as follows:

Current year phasing	26,001
January - October	21,122
November - December	1,780
Possible compensation	890
<hr/>	
Total 1992	23,712
Balance left	2,289

We should provide a proforma cost for 1993 of US \$ 2,000. Therefore we need \$ 12,000 for the 6 months period and \$ 9,714 are to be transferred from other B1's.

The balance of \$ 7,507 on B1 31 training should be transferred to B1 42 equipment.

The \$ 13,000 on b1 33 should be unblocked and transferred partly to B1 42 for equipment (\$3,286) and partly to B1 17. (\$9,714)

The equipment component would then be a total of 14,049 + 7,507 + 3,286 = \$24,842, This would provide the machinery for Universal and a balance kept in reserve for spareparts for 1993.

The B1 51 would have a total of 1,615 transferred from the balance of 1992 operations to secure operations for the 6 months.

c) ADDIS TANNERY

People met: Mr. Abebe Bahiru, General Manager  
Mr. Salomon, Technical Manager

The Addis tannery has been pre-selected as one of the rehabilitation objects during the UNDP 5th cycle. This pre-selection is based on a recommendation from the ministry of industry. (Another company to be selected is Universal Leather Articles Manufacturers)

The tannery is located about 13 km from Addis centre deep in a valley. between two rivers the Akaki and the Lekue rivers. The Lekue joins the Akaki river immediately after the tannery and the Akaki river flows to Awash river. The road to the tannery is very poor and only suitable for travel with a jeep. The tannery is the oldest tannery in Ethiopia, about 65 years.

The tannery produces presently about 1,000 hides per day of which about half or about 10,000 sq.ft is processed to finished leathers. The main production used to be corrected grain upper leathers for military boots and the main customer was the Tikury Abay shoe factory which is located about 3 km from the tannery. As military boots are not any longer in demand the factory has switched to upper leathers for the civilian market. The factory has also a small wet blue export and is planning to go for the production of goat and possibly sheep skins. Targeted capacity is 3,000 pcs per day.

The factory infra structure is very poor. The roofs are full of holes, the floor is mainly constructed of natural stones and is totally uneven. The effluent is discharged direct, without any treatment, to the Akaki river and when the Lekue is flooding it washes through the factory. The once a year flooding of the Akaki is usually clearing the solid waste such as chrome shavings which are dumped outside the factory on the river bank.

The factory employs a total staff of 390 people.

There is no place to build an effluent treatment plant.

The machinery available is mainly old and in poor repair. Mr. Alf Rongved, UNIDO tannery machinery engineer was assigned to the plant in September 1989. Relevant pages of his report are attached as annex 3. The quick visit this time confirmed the findings and recommendations of Mr. Rongved and it cannot be feasible to make major investments to rehabilitate this plant. The main reasons are:

- No possibility to build an effluent treatment plant
- Risk for flooding and land slides
- No proper road connections
- Very costly rebuilding of the old buildings
- No likelihood that the plant can be upgraded to export quality production

A blueprint with the factory lay-out is available

**d) MINISTRY OF AGRICULTURE**

People met:     Atu. Habtamu, Assistant Vice Minister MOA  
                   Atu. Sintayehu, Head of ARMD/MOA  
                   Atu. Zewedu Kebede  
                   Atu. Getachew  
                   Mr. Devassy, FAO/UNIDO expert

A very detailed discussion concerning the US/ETH/88/100 and the US/ETH/92/200 was conducted. The main points were the following:

-According to the report made by Mr. Kebede satisfactory results were obtained in all the outputs from 1 - 5 which are concerning the Hide and Skin Improvement. A recent field trip to the target area showed that the Boditi hide shed and operations were functioning well and that the Awasha shed now also was starting to operate. All the details are provided in the terminal report. It was, however, noted that the initially good results were to a great extent lost during the civil disturbances of the past year.

-The ministry confirmed that all the counterpart inputs concerning the Hide and Skin Improvement component would be made available to the second phase of the project as per the project document.

-The machinery and equipment component (annex 7 of the project document) was discussed and found according to needs. The project vehicles of the first phase, the two double cabin Toyota pick-ups with rubber lined loading area, were found satisfactory. If possible, the motorbikes for the next phase should be Suzukis instead of Hondas for maintenance reasons.

-The funding situation was discussed and in case the project has to be trimmed down, due to financial constraints, we would consult MOA for their views.

-The extension officers and the FAO expert complained that it was not possible to get any feed-back from the tanneries and that the tanners were generally speaking not willing to cooperate with the Ministry of Agriculture staff. The quality of skins was also affected negatively as the free salt supply from the NLSC through the factories had ceased. The individual tanneries, due to forex constraints, were not willing or able to provide free salt for curing. In some cases unsuitable salt quality was supplied and in some cases old salt was re-used.

-It was suggested that a technical steering committee should be formed for the second phase and representatives from the MOA and MOI should participate with the public and private tanneries and shoe factories. This would bring the end-users to a closer cooperation with the project. This is fully in line with the project document.

-The general complaint from the tanneries that the quality of the raw hides and skins has deteriorated was discussed. The view of the MOA is that some decline of quality certainly has taken place during the disturbed conditions. No travel and extension work could be undertaken during extended periods. The

present stocks of raw materials in the tanneries are to a large extent from this period.

e) MEETING WITH TANNERS AND LEATHER PRODUCTS MANUFACTURERS

The meeting was called to discuss the possibilities to start a Leather Industry Association and how a Revolving Fund Operations (RFO) can be started and how it can assist the further development of the sector. The list of participants is provided in annex 4.

I provided a status report of the project's first and second phase and provided information on how the associations and RFO operated in the other countries of the region. I also stated that the machinery provided under the first phase is the legal property of UNIDO as the transfer of title has not been effected. Therefore the title of the machinery delivered during the first phase could be transferred to the new association and some payments could also be negotiated on depreciated value of the equipment especially if the plants would be privatized. This applied already to the DIRE tannery.

The matter is urgent and actions to start the association(s) must to be taken. The following questions were presented:

i) A question was presented concerning the Awash tannery effluent treatment plant and what UNIDO could be expected to provide. I explained that UNIDO would provide the design and engineering drawings, the hardware and the installation. Awash was expected to provide all the civil engineering and local costs and pay back the equipment in local currency to the revolving fund. UNIDO's delivery of hardware was, however, subject to funding availability which presently was not clear.

ii) A question was presented concerning the criteria of selection of the rehabilitation objects now when NLSC was no longer taking the decisions. Here again the importance of the association is evident and UNIDO would clear the final selection which is based on rehabilitation, investment or engineering studies with the association. The association would be responsible for the collection of the pay back money from the company and allocate its use to the hide and skin improvement area.

iii) What experience did UNIDO have about creating the Association? Was it better to have one association for each sub-sector such as one tanners association, one shoe manufacturers association and one leather goods association etc. or was it better to have one Leather and Allied Industry Association with branches for the different sub-sectors? I recommended the later alternative.

iv) I was asked if the hide and skin improvement activities would continue as this was considered to be most important especially since the quality of the raw hides and skins was deteriorating. I provided briefing on how the immediate objective 1 of the new phase was expected to work and how, here again, the association was expected to play a major role. The



inputs provided by MOA was heavily criticized and I referred to my earlier discussions with MOA on this issue and their criticism how the Tanneries were - in the opinion of MOA - not willing to cooperate. The suggested technical steering committee of the project was discussed and its role to act as forum of the different interest groups emphasized.

f) PTA CENTRE - DISCUSSIONS WITH NATIONAL COORDINATOR MR. KALEB

-The Ethiopian Government has allocated the land for the centre. The plot is presently being fenced in.

-The Ethiopian Government has allocated US\$1 million for the project including the land. The valuation of the land has not been agreed upon.

-One million Birr (\$200,000) has been allocated for the design and construction drawings and partly for construction.

-All other investments are expected to be received from donations on grant bases.

-Running costs sharing and payments are not clarified.

-The dismantling of the NLSC has negatively effected the PTA operations. Mr. Asnake, former general manger of the NLSC and Chairman of the PTA centre has resigned from his duties as PTA centre chairman.

-The Board of Directors meeting in Lusaka took place in September and Dr. Arunga was elected Director of the Centre. If he is not available then the second choice is Dr. Miso, Sudan.

-UNIDO is expected to receive soon a request to activate the funding arrangement and possibly modify/reduce the international inputs.

-The PTA centre should be part of the study for the UNDP 5th cycle.

g) SWISS EMBASSY

Mr. F. Sager, First Secretary

I briefed Mr. Sager on the projects first and second phase status. A copy of the project document US/ETH/92/200 was sent to the Embassy after the meeting. As Mr. Sager is a newcomer to Ethiopia the meeting was mainly to provide information for him.

h) TEMESGEN, PRIVATE LEATHER GARMENT MANUFACTURER

A small scale operation which employs about ten people and produces 10 - 15 garments and/or leather goods (hand bags, soft travel bags etc) per day. Had participated in the EEC organized seminar and found Mr. Palizzotto's training

course very useful. Some garments shown, which were a result of the training, confirmed the usefulness of the course.

The owner is also the designer/pattern maker and mainly copies his designs from magazines such as "Arpel". The quality is reasonable but lacks the special something to make it real top class.

i) UNIVERSAL

Mr. Elias Teshberru  
Mr. Teclenariam

Discussed the machinery requirements. KAEV spares lacking. (Very unsatisfied with the Hungarians). The following machines should be requested urgently:

- One upper leather splitting machine with 18" splitting width
- One upper leather skiving machine with 50mm skiving foot
- One straight edge folding machine
- One complete set of Tandy hand carving tools including swivel knife and standard types of leather stamping punches.

The factory is otherwise clean and well organized. The assistance needs are mainly in product development and marketing.

j) AWASH TANNERY

Mr. Leul Berhane, General Manager  
Mr. Gidanu Checol, Assistant General Manager  
Mr. Tesfaye Arega, Factory manager  
Mr. Tamiru Bogale, Chief engineer

All new people transferred from NLSC and Ethiopian Tannery, however a good team. Factory visit showed that the tannery is again getting going. Effluent problems must be solved during the next phase. This is the highest priority. The work of Clonfero was discussed and a long interesting discussion took place with Mr. Gidanu Checol on product development possibilities such as leather sports goods, sport gloves (specially golf) etc. He should be consulted when the discussion on the 5th cycle starts.

The machinery delivered under the US/ETH/RAF/88/100 is generally speaking working well. The Pajusco drums are not as good quality as the Valero or Olchina. There are problems especially with the sliding door construction which seems to start leaking easily. All other machines delivered are in top condition.

Blue print of the factory and a new lay-out is to be sent to Hailu for delivery to us.

k) ANBESSA SHOE FACTORY & MAMPO

Mr. Asstawessheon Teferra, General manager  
 Mr. Gedelu Gebede, Technical Manager  
 Mr. Alula Andarghe

The factory is producing about 2,500 pairs per day in a single shift and seems to be busy and reasonably well organized. Work in process is about 12,000 pairs and finished goods about 40,000 pairs. Quality improvements are needed and assistance in quality improvements should be provided under the next phase. The company employs about 600 people.

The UNIDO supplied equipment is working reasonably well. Some machinery adjustments and spare parts are, however, needed as follows:

1. The seat laster must be adjusted and the side lasting part made operational. Also the thermo-injection is defective.
2. Backpart moulder needs adjustments and the cooling of the lasts seems not in working order and the flanging of the upper is not working well.
3. The roughing machines are not operating because of the lack of suitable wire brushes and emery paper.

Spare parts should be ordered and a Torielli mechanic and UNIDO technologist sent for a follow up mission.

Anbessa is planning further expansion and requested additional machinery and spares as per annex 5. A questionnaire for a feasibility study was left to NEX to be completed by Anbessa.

MAMPO is a sister company to Anbessa which was started for the production of shoe uppers for East European export. The company has installed capacity of about 1,000 - 1,200 pairs of uppers per day depending on style. has 70 sewing machines and 14 swing arm clickers.

Present production is about 500 pairs of uppers and 300 pairs of finished gent's and children shoes. Needs quality improvements and a foreign partner/market outlet.

Wishes to expand to finished shoes and provided a list of machinery needed (annex 5). A new building is under construction. A three story building with a total of 600 sq meters floor space.

The LAST FACTORY was not operating during the visit. Good stock of last blocks is available. Spareparts needed (annex 5) and the secondhand rough turner which was transport damaged should be replaced.

This factory should be upgraded under the UNDP 5th cycle.

1) DIRE TANNERY

Mr Bedala, Proprietor  
Mr. Hailu Michael, Factory manager

One of the three private tanneries presently operating in Ethiopia. Has two tanning drums and one skin fleshing machine from UNIDO. The transfer of the title and the pay-back arrangements were discussed and a copy of a Kenya agreement was handed over as an sample. It was agreed that as soon as the Association and the revolving fund is established the pay back arrangements will start.

The tannery has major problems in effluent treatment and has complaints from the population in the nearby village. The municipality and health authorities have provided instructions on how to construct an effluent treatment plant and a construction work for a simple treatment plant is in process. Clonfero should visit the site to provide some guidance during his next visit. The small river named Kale which passes the tannery is joining the Akaki river.

The tannery is presently processing about 2,000 pickled sheep skins and 3,000 w/b goat skins per day. About 400 hides are processed to w/b and some rejected hides to crudely finished belt and harness leather for the local market. The tannery is planning to move its beam house operations to another area.

Mr. C. Marzo visited the tannery in June -92 and more technical details are available in his report.

m) WALLIA TANNERY

Mr. Alemayehu Simege, proprietor  
Mr. Mulatu Mamu, Technical Manager

The company is located in the same area as Awash tannery and Ethiopian Pickling i.e on the Akaki river. This private company seems very progressive and assistance would be well utilized.

Assistance needs are in the area of effluent treatment and possibly in assisting to expand to crust and finished leathers.

Mr. C. Marzo visited in June -92 and his report provides technical data.

n) MINISTRY OF INDUSTRY

Mr. Assefa Kebede, Minister of Industry

Mr. Manorajan introduced the subjects to be discussed namely the US/ETH/88/100, US/ETH/92/200, the Study and the PPF to be prepared for the 5th cycle under TSS1 and the formation of a Tanners Association.

I briefed his excellency on the subject matters and provided information on the present status of the Africa Regional Hides and Skins, Leather and Leather Products Improvement Scheme and its second phase RALFIS, REFAM and NALFIS.

The study for the 5th cycle was briefly discussed and I confirmed that Mr Hailu will be released for the period of two months on our projects expenses to work on the study and that I would return end January early February if so requested.

The formation of the Leather Industry Association and the revolving fund operations was discussed and the minister was positive to such development.

The minister confirmed that the leather sector had the highest priority for the Ministry of Industry and for the country on the whole and that the 5th cycle UNDP programme was therefore expected to support this sector in very substantial manner.

o) BALE TANNERY

Ms. Mary Malbandian  
 Mr. Vartekes Malbandian  
 Ms. Mary Malbandian  
 P.O.Box 175  
 Tel 111771, 338565,553594  
 Fax (251)(1)550609  
 Tlx 21191 Buchem

The manager of the tannery project is Ms. Mary Malbandian, she is an Ethiopian citizen and born and educated in Ethiopia. Mr. C. Marzo visited the tannery in June -92, all technical details of the tannery are in his report. Mr. Lesuisse also visited the plant and has made suggestions for the effluent treatment plant. Mr. V. Malbandian is involved in import and sales of chemicals and acts as an agent to several large chemical companies. The tannery project is built with own funds with no loans or credits.

The company produces about 2,500-3,000 pairs of pre-formed leather board counters with Hollinger machines and is intending to expand to the production of unit insoles with Morbach/Schoen machinery. Plans are also being made for starting a high quality shoe production, possibly with license agreement with a suitable partner.

A most interesting discussion concerning the expropriated private property took place. The previous owners of the tanneries and shoe factories are making claims to get back their previous property. These claims of the previous private owners of the tanneries and shoe factories, if successful, may have some bearing on the pay-back arrangements of the UNIDO delivered equipment.

As the tannery project is managed fully by Ms. Nalbandian, the only female manager of a modern mechanized tannery in Africa, the project should qualify well as a good example/model for gender development possibilities in the leather industry in Africa. The assistance needs are specifically in the effluent treatment and training of women in management technic therefore a special project, under the umbrella of US/RAF/92/200, should be prepared for this. A concept is enclosed (annex 6) and should be studied by the projects gender development expert and the UNIDO gender development unit.

p) ETHIOPIAN PICKLING

Mr. Haileselassie Derso, General Manager  
Mr. Minuyellet Kassa, Technical Manager

The company is located in the outskirts of Addis close to Awash Tannery, Universal Leather Goods and Canvas and Rubber Factory. The company is on a 24,000 sq meter plot and the size of the buildings are 86 meters x 39 meters including extension of the building which is under construction.

The company has its own well which, however, is not presently used. It should be cleaned and renovated. They are presently using municipality water services. Transformer 280 Kva. No power cuts reported. Total staff 420 people.

Present production is about 8,000 skins per day.

6,000 pickled sheep skins  
2,000 w/b goat skins

Purchases wet salted sheep skins in table run (grades I,II,III excluding rejects) and dried goat skins I/40% II/50%, III 10%

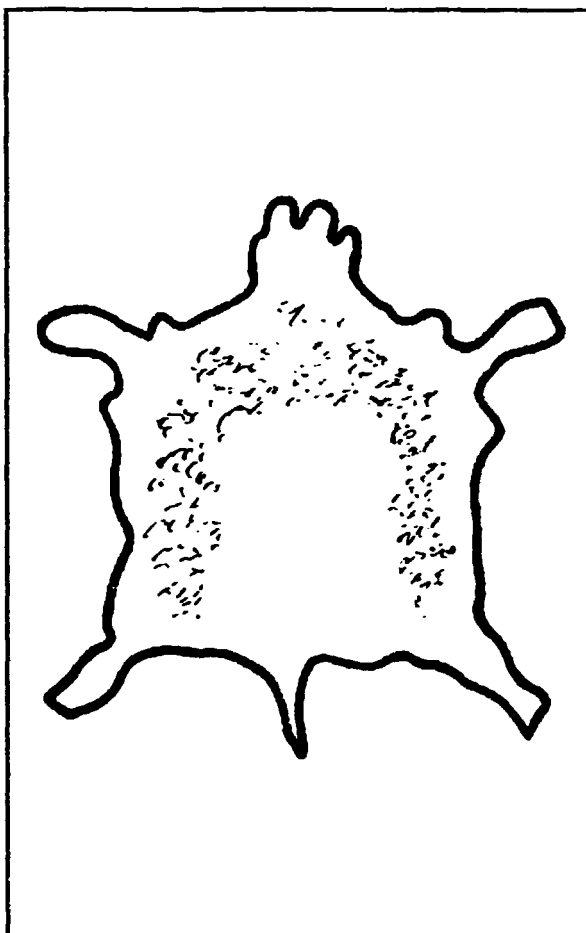
The pickled sheep skin selection is as follows:

Grade I	2%
II	8-12%
III	20-24%
IV	45-48%
Rejects	20-25%

Price for I -III is about	US \$ .95
Price for IV	US \$ .45
Rejects	US \$ .19 or 3 Birr on local market

The biggest problem presently is the low grade of the sheep skins. A bacterial decease which is believed to be spread by an insect is affecting the grain of the sheep skins and a large part of the skins are down graded to IVth or rejects because of this grain defect. This decease was first noted in 1988 (called EKEKE in Amarc) and has been increasing. Nobody in our projects H & S improvement staff has reported this matter until now. Dr. Devassy was informed about this only on 26/11.

The decease seem to be mostly found in the low land Meio region and is accentuated during the rainy and cold period from July to December. Apparently a study and report has been prepared by Dr. Ketema Shafo on this decease and I have requested a copy of the report. The decease is effecting mainly the flanks and the necks. See sketch below.



The figure illustrates the areas effected by the disease.

The factory runs its effluent without any treatment to the Akaki river. A simple effluent treatment plant was constructed by the private owners when the factory was established. This construction was made for the production of 3,000 skins per day and is presently clogged with solid waste and not used. The total effluent is about 500m, per day and a plan exists to construct an effluent treatment plant. Mr. Clonfero visited the plant in October and should pay another visit in January.

## II. Conclusions and Recommendations

The structural changes in Ethiopia, especially the abolishment of the NLSC has created certain new problems for the sector which need urgent addressing. These problems include the following:

-lack of common representation of the sector towards the national government and to international organizations and bodies.

-lack of joint marketing policy and representation in international fora such as participation in the trade fairs and common sales promotion efforts.

-lack of joint bulk ordering of chemicals including such simple items as salt for skin preservation. (Problems are already noted in the decline of raw skin quality in the hair sheep. This could have detrimental effect on sales of pickled and wet blue skins in the world market).

-no coordinated effort to approach such problems as a relatively newly discovered parasitical and/or bacterial disease in sheep and goat skins. (this was discovered by the UNIDG/FAO expert during my mission in Ethiopia)

The main recommendations are as follows:

1. UNDP should urgently confirm that they are prepared to cost-share with the Swiss government the international inputs of US/ETH/92/200. The total cost of the international inputs is US\$ 1,070,336 including 13% support cost. It is visualized that the easiest way to divide the cost-shared inputs would be if the UNDP provided funds will be used mainly for the hide and skin improvement inputs and the Swiss funds for the industrial inputs. UNDP urgent confirmation would facilitate the finalizing of the document and the final negotiations with the Swiss authorities.
2. The National Expert should immediately start working on the leather sector survey as per the jd and the survey questionnaire provided. He should closely liaise with the leather unit in Vienna.
3. Official government request is needed urgently for the participation of a leather unit staff member in the 5th country programme exercise.
4. The national association for the leather, footwear and leather products industry should be urgently registered. There is an urgent need for such an association and the UNIDO assistance within the leather sector under the proposed second phase is subject to pay-back arrangements to be monitored by such an association.



26 November 1992

### Factory Survey

1. Company name  
Adresse  
Phone, fax, telex
2. Description of location  
Road connections etc
3. Type of company structure (Public, Private, Ltd etc)
4. Authorized capital  
Paid in capital
5. Product description
6. Installed capacity  
Capacity utilization
7. Description of infrastructure  
Size of plot, size and type of building  
Condition of building, Power supply in Kva,  
Water supply (Own well, Public services)  
Effluent treatment facilities  
Machinery and equipment, type, age and state of repair  
Bottle necks and constraints
8. Raw materials used (hides, skins, chemicals, leather, textiles components etc). Price indications.
9. Present market and marketing arrangements (local & export)
10. Modernisation and/or expansion and rehabilitation plans
11. Production value/added value/export volume and value
12. Number of employees per category

Report of Mr. A. Rongved, Tannery Machinery EngineerAddis TannerySeptember 1989ADDIS TANNERY

The Addis Tannery with its 65 years is Ethiopias oldest tannery. It is located 5-6 km from Addis Ababa, at the end of a road which is in such a condition that ordinary cars just about can make it. The location of the tannery is at the bottom of a narrow valley, with one river going at the back side of the buildings, and another almost parting the actual tannery from the boilers, workshops and office building.

Three weeks prior to the arrival this last river suddenly increased and almost totally flooded the tannery. The water level in the factory was 60-80 cm, on the floor. The water carrying a lot of mud, did a lot of damage to the leather, also carrying some of it away and also completely soaked every electric motor under the given levels.

This is not the only natural problem the location have. Located in the bottom of the valley it is also threatened by landslides. A few years back a landslide destroyed half the limeyard. This treat is by no means over, as one could see a very recent one almost touching the road in its final bend.

The capacity of the tannery is about 750 hides per day. This is partly processed to wet blue, crust and finished leather. The finished leather is mainly for army purposes. The wet blue and the crust is both very dirty, partly because of the flood and partly because the water treatment of the muddy river is insufficient.

#### SOAKING LIMING

Soaking in four pits. Liming in paddles, temporary out of function due to the flood, but shall in all cases be transferred into drums. So at the moment liming is taking place in three second hand drums and one new 3 x 3.25 m drum.

#### FLESHING

A combination of green and lime fleshing. In both cases done on sides. For green fleshing an old Svit machine, for lime a two - three year old Aletti fleshing machine. The fleshing is generally bad in both cases. This is mainly due to the fact that there is no selection into weight classes before fleshing, but also that the operators is not taken proper care to see that the entire skin is fleshed before reopening the machine.

#### TANNING

Tanning is taking place in three Vallero 3 x 3 m drums. This is at present sufficient for the todays approx. 9 tons. All drums have some door leaks, and there are very few hoops on the drums, only 8 hoops per drum. There are no compressed air available so therefore the brakes are not operating. This causes a lot of strain on the gearboxes, which in respect, for two of the drums

not any longer were properly anchored. There is no water meter for the drums.

### SAMMYING

There are two sammying machines. One old Svit machine, temporarily out of function due to the flood. This is an 1800 mm working with machine. The other machine is a Mercier machine, 3000 mm working with and thereby originally designed to same whole hides sideways. Since they sam side sideways, they don't achieve a very good result. The machine has a major slack in the main bolt for the top arms carrying the top pressure roller. Considering the age of the machine, approx. 5 years, this is very soon, especially since it once already has been repaired. This indicates lack of greasing or some other mistakes. The output from the machine is small, two sides per minute, which at the present stage leaves them to do two shifts.

### SPLITTING

Chrome splitting on two machines. One, a Moenus splitting machine is generally not in a very bad condition. When the result still is bad it is by the fact that the skins arrives creased, some minor adjustments and that the operators tenders to either lift the bridge or lower the rubber roller to ease of feeding the skin. Also some problem occurs because they do not frequently enough bring the table back to remove pieces of leather stuck to the segment roller and the segment guide.

The other, an old mechanical turner splitting machine is in a bad condition. The machine has a number of faults and needs basically a total overhaul if it is to be considered further use.

They still work on it, but it does basically more damage than acceptable work so it should not be used.

### SHAVING

Three machines. One Scit flat tabled, mainly used for splits. The machine does not hold the split which leaves to the operator a task they do not cope with. A lot of damage. No thickness control with measurements except fingers. The machine has a vibration and the grinding is very bad.

One Aletti, approx. 5-6 years old. Fully hydraulically machine. Some vibration, unbalanced cylinder and also grinding wheel. The covers for the support saddle of the grinder keeps coming loose and blocks by this the grinder movement. According to history card of the machine this is a common problem, which in spite of countless repairs, keeps on reappearing.

The results from the machine is better than one would expect in light of these informations. There ofcourse is chatter but less than one should think. As for the Svit machine, not thickness control except by feel.

One old narrow Turner machine. The type rebuilt to have hydraulic closing and hydraulic traversing of grinder. This machine was the one that we worked on. By the time Addis tannery's time was out, the motors still had not reappeared from the electrical shop where they had been taken for drying, cleaning and changing of bearings. How the machine worked, is by this reason unknown.

### TRIMMING (Wet)

After shaving the skins were literary thrown in a heap, to be later placed on tables for trimming. The trimmers used razor blades (for beard) rapped in cloth and tape, as knives. This could be some of the reason while the trimming is very hard. When you are in danger of cutting your fingers you tend to take a bigger piece of leather than normally would be necessary.

### RETANNING

Retanning drums, two Vallero 3 x 3 m. Working speed 8 to 12 Rpm. Minor oil leaks on gearboxes. All door locks needs replacement. As for tanning drums, very few hopes. There is no tempered water, and no water meters. For the last drum there is a severe misalignment between the gearbox and the drum. This has happened during the foundation building, as the same misalignment occurs from the drum foundation to the gearbox foundation. This must be rectified or else is the big crown wheel on the drum going to be destroyed.

### SETTING MACHINE

An old Svit plain setting machine. There is no dewatering except piling before setting. This makes the setting very bad as the skins are much to wet for a plain setter. The fact that they also, unknown by which reason, puts two sides on top of each other in the machines, more or less explain the bad result. The machine speed is also to high.

### DRYING

Three means. A Gozzini doublematix vacuum dryer. Has a lot of minor leaks, a vacuum reading of 45-50 cm Hg and has due to the boilers a very variable temperature. The machine is as the leather, very dirty. These facts, and mainly the temperature and the low vacuum reading, gives a very poor result. There is hardly any evaporation.

Heating plates. Three tables all connected directly to boilers. The sides are slicked on the plates and removed when they have dried for a while.

Hangdrying from the roof. Two holes are made in the butt. A piece of wood is put through the holes and the skin are hanged on hooks attached to the pin.

### STAKING

Three very old slocum stakers. Belt driven from central motor. Are all in a bad condition and needs if still continued work is wanted, to be overhauled. Leather band is missing for all which also makes them difficult to operate.

### CONDITIONING

Non existing.

### BUFFING

One Aletti and one Fulminosa. The Aletti had its motor soaked and also the underlay paper was destroyed, by the increased humidity under the flood. The Fulminosa operated without bigger problems.

### DEDUSTING

Rizzi airblast. Is not doing a good enough work so there is a repeated operation on an old turner rotary brush machine.

### PADDING

Handpadding. Also includes hand application of dye. After padding carried to drying on poles. No air heating. The dye solvent, betylacetat, is very present.

### SPRAYING

Hand spraying. The compressor for the spraying is placed close to the spray places. It has no pressure reducer and there is not any dewatering system. Drying after spraying in chamber heated, though not very much with small floor ovens.

### EMBOSSING

Two Svit embossing machine. Two different sizes, and the smaller placed to far away. Beyond this there is no problems.

### MEASURING

Two machines. One Selin, an electronically operated machine. This machine was soaked quite heavy under the flood. They claimed it to function, but did not use it since the absence of compressed air leaves out the stamping function.

One Turner pinwheel machine. Also soaked under the flood but did not seem to have taken any damage. Was in use.

### OTHER EQUIPMENT

Due to the narrow buildings and the uneven floor at several levels, the internal transport is, for wet blue on heavy carriages,



for crust and finished, on horses and flat trolleys. There is a lot of dirt and damage on both levels due to tilting and slipping. There is one curtain coating machine which has been out of function for more than a year because the pump is destroyed. New pump is on order.

**Boilers.** Two old wood fired boilers. No pressure gauges and the situation can only be described as dangerous.

**Workshops.** Very small and equipt with machines of low quality and low accuracy. The access to the work shop is difficult for bringing in things for repairs.

#### EFFLUENT SYSTEM

Non existent. All waste water goes direct to river. This also includes all solids, such as flashings, trimmings, nonuseable splits and shavings.

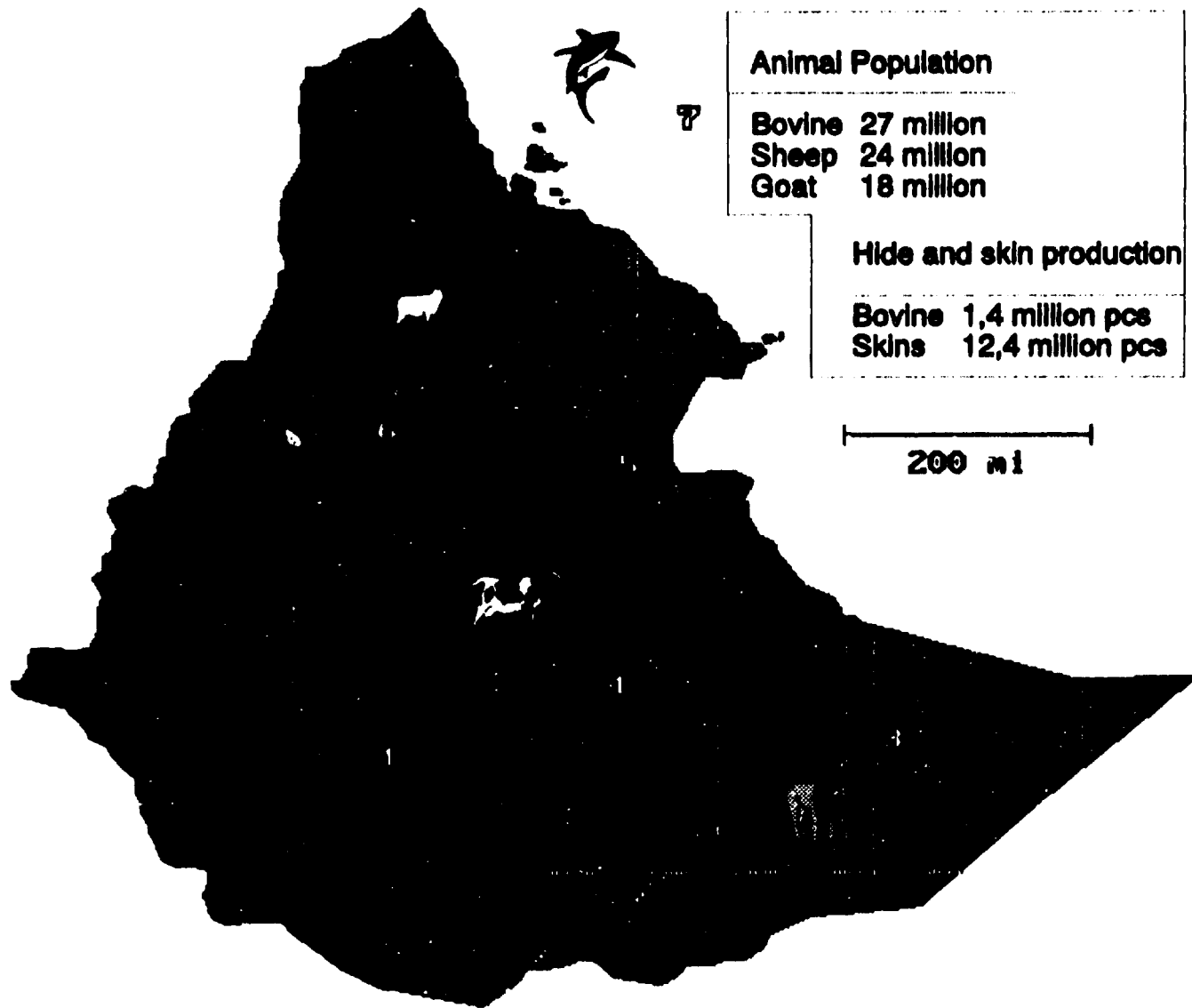
#### RECOMMENDATION

The tannery and in particular the buildings is in a bad condition. The location bearing in mind the flood risk, danger of land slide and the fact that there is no space for any expansion in most unsuitable. This also includes that there is not possible to build any kind of effluent treatment.

In the light of these facts, the best would be if the tannery could be moved to another place. if there could be found ground area within reasonable distance, the workers could remain and the present area could be used, the better part of it, to build an effluent treatment system on.

The cost of such an operation should in any case be put up against the cost of rehabilitation of the present factory. There can be little doubt that a rehabilitation would mean building almost an entire new factory, and one would still be stuck with the natural problems as flood and landslides.

As a matter of safety, the boilers should in any case be equipped with pressure gauges, and if possible be equipped with safety valves.



**Animal Population**

Bovine 27 million  
Sheep 24 million  
Goat 18 million

**Hide and skin production**

Bovine 1,4 million pcs  
Skins 12,4 million pcs

200 mi

**ETHIOPIA**

**FEATURES**

1. Great Rift Valley
2. Ethiopian Plateau
3. Ogaden Desert
4. Ahmar Mountains
5. Danakil Desert
6. Lake Tana
7. Red Sea

<b>Name</b>	<b>Factory</b>
1. Johnny Tesfaye	Johnny Tesfaye Shoe Factory
2. Belayneh Yigezu	Association of Pvt. Shoe Factory Owners
3. Tariku Tassew	Tariku Tassew Shoe Factory & from the Association of pot-shoe factory owners Tel. 751747
4. Tamesgen Iewdie	General Leather Goods Factory, Tel. 15-43-74
5. Kifle Teji	Z Leather Garment and Leather Garment Association
6. Vartkes Malbandian	Tannery Project Mary Malbandian Tel. 111771, 338565, 583594, 118752
7. Alemayehu Simegn	Wallia Tannery Tel. 652367, 654823
8. Ghenna Desta	General Manager/Eastern Shoe Factory, Tel. 650205/511574
9. Haile Selassie Derso	Ethiopian Pickling of Tanning, Tel. 651780/652077
10. Abebe Bahiru	Addis Tanner - Tel., 791780
11. Yigrav Assefa	Modjo Tannery Tel. 119535
12. Leu: Berhane	Awash Tannery
13. Begashaw Endeblehatu	Ethiopian Tannery
14. Legesse Duki	Combolcha Tannery

Request for additional equipment for Anbessa Shoe factory.**Closing department**

- 4 pcs Post-bed, twin-needle sewing machine with 2 x 6mm and 2 x 3 mm needle gauge
- 6 pcs Post-bed, lining trimming machines, single needle
- 1 pce Lining stamping machine
- 2 pcs Thermocementing and folding machine
- 1 pce Eyeletting machine
- 2 pcs Flat-bed twin-needle sewing machine with 6 mm needle gauge
- 2 pcs Binding machines for french binding

**Lasting and finishing**

- 1 pce Forepart flanging machine for sandals (stitch-down work)
- 1 pce Seat flanging machine for sandals
- 1 pce Sole stitcher
- 1 pce High-cycle edge-trimmer
- 1 pce Transport conveyor for sandal line (1000 pairs/8 hours)
- 1 pce Sole edge pressing machine
- 1 pce Sole attaching press
- 1 pce Heat setter
- 1 pce Moccasin ironing machine

**Equipment for Manpo**

- 1 pce Back-part moulder with freezing system
- 1 pce Forepart laster with 9 pinchers
- 1 pce Seat laster with tack and cement
- 1 pce Transport conveyor with sole activating unit
- 1 pce Upper and toe-puff conditioning unit
- 1 pce Hot blast  
1 pce Moccasin ironing unit (6 stations)

1 pce Upper roughing machine  
1 pce Heat setter  
1 pce Toe-puff fusing press  
1 pce Eyeletting machine  
1 pce last remover  
1 pce Traveling head cutting machine 25-30 tons  
1 pce Insole moulding press  
1 pce Shank rivetting machine  
1 pce Shank edge trimming and skiving machine  
1 pce Sole roughing machine  
1 pce Counter skiving machine  
1 pce Sole attaching press  
4 pcs Swing arm upper leather clicking press

## PROJECT CONCEPT

### MODEL PROJECT FOR THE DEVELOPMENT OF WOMEN MANAGEMENT CAPABILITIES IN THE TANNING INDUSTRY AND ENVIRONMENTAL SOUND TANNERY DEVELOPMENT.

#### 1. Background

The mechanized, industrial, tanning sub-sector is traditionally not an area of women employment. There is a few women managers, leather chemist or technologist engaged in this sector. It is therefore encouraging for the gender development that a woman entrepreneur has decided to establish a private tannery in Ethiopia. The tannery is located about 45 Km outside Addis Ababa in a beautiful and environmentally critical location. The tannery plot is located on top of a hill and consist of about 20,000 sq meters. The plot is neighboring a deep, natural crater lake. The lake is about 120 meter below the tannery plots location.

The tannery proprietor and manager is Ms. Mary Nalbandian, Ethiopian citizen, born and educated in Ethiopia. The Nalbandian family has been residing in Ethiopia since early this century.

The tannery construction is practically completed and the building is simple but of good quality and the machinery installation bear witness to very professional and innovative approach. The effluent treatment plant has not been constructed but the effluent treatment channels are in place and separating the lime and chrome liquors. As a hair shaving method is being used the effluent will not contain pulped hair which is an advantage from the effluent treatment point of view.

The proprietor has expressed her specific concern of the preservation of the environment and is therefore seeking advise and assistance for the construction of an efficient effluent treatment system. The tannery construction and machinery has been financed by own capital without loans or credits.

Two UNIDO experts namely Mr. Lesuisse and Mr. Marzo have visited the site and their reports are used as base for the projects output 2. the effluent treatment plant.

During the mission of Mr. Berg in November 1992, the matter was studied from the point of view of the UNIDO programme US/RAF/92/200, Regional Africa Leather and Footwear Industry Scheme. (RALFIS). The programme has a strong gender development and environmental (effluent treatment and clean technology) components. The equipment component of the programme does, however, not provide funds for capital equipment for this project. It is therefore proposed that a special project under the umbrella of the US/RAF/92/200 will be prepared for the financial consideration of suitable donor country/agency. The US/RAF/92/200 would provide the design of the effluent treatment plant and the experts for its commissioning as well as organizing a special training seminar for the women entrepreneurs in tanning industry.

The special project is expected to provide the capital equipment on pay-back arrangements to the revolving fund as well as international fellowship training and study tours for selected women entrepreneurs/managers

## 2. Objectives

### Development objective

To assist in gender development and in environmental improvements within the tanning industry in the eastern and southern African region.

#### Immediate Objective 1

To provide training of selected women entrepreneurs/managers in tannery technology and tannery effluent treatment

##### 1. Output 1

Six women entrepreneurs/managers trained in leather technology with specialization in clean technology and effluent treatment.

##### Activity 1.1

Organizing a suitable training course for the period of 6 weeks in tannery "clean" technology and effluent treatment in a suitable location (Nairobi) for selected women participants.

##### Activity 1.2

Guided study tour to visit selected tanneries with model effluent treatment plants in Africa and in Europe.

#### Immediate Objective 2

To design and erect a model effluent treatment plant with internationally acceptable discharge standards for the selected plant in Ethiopia.

##### 2. Output 1

Fully functional effluent treatment plant for a new private tannery with a woman manager/proprietor. The tannery is expected to utilize "clean technology" and to be used as an model tannery for demonstrating how tanning industry can be efficiently operated in critical environmental conditions with no harm to the environment.

## 2. Activities

- Design of the plant (US/RAF/92/200)
- Preparing cost estimates and international bidding
- Civil engineering, piping and electrical preparatory work (local inputs)



- Ordering and shipping the hardware (UNIDO Leather Unit)
- Installation (by suppliers engineers + US/RAF/92/200 Effluent Expert)
- Commissioning of the plant(US/RAF/92/200)
- Training in operation of the plant (US/RAF/92/200)

A proper time schedule and work plan to be worked out for the final document.

### 3. Cost Estimates

The cost estimate for carrying out the Output 1 training is as follows:

activity 1.1 Training course for six selected women entrepreneurs/managers  
6 x 6 weeks.

Travel cost 6 x \$3,000	\$ 18,000
Per diem 6 x 45 x \$ 150	\$ 40,500
Training fee 6 x 3,000	\$ 18,000
<b>TOTAL</b>	<b>\$ 76,500</b>

Activity 1.2 Study tour:

Travel 6 x 4,500	\$ 27,000
Per diem 6 x 21 x 150	\$ 18,900
Guidance	\$ 12,000
<b>TOTAL</b>	<b>\$ 57,900</b>

The cost estimate for the Output 2 is provided in Annex 1. and is expected to be \$ 131,230

The total project cost is therefore estimated at:

Training course	\$ 76,500
Study tour	57,900
Effluent treatment	131,200
<b>Total</b>	<b>\$265,600</b>
Support cost	34,528
<b>Grand Total</b>	<b>\$300,128</b>

PER/261/11

23 October 1992

TO: All staff members of UNDP, UNFPA, WFP, UNIDO and  
Project Personnel

FROM: Narayan Kulkarni *N.R. Kulkarni*  
Assistant Resident Representative  
(Administration)

SUBJECT: Change in Daily Subsistence Allowance Rate

This is to announce that International Civil Services Commission (ICSC) has revised the DSA based on the exchange rate movement in Ethiopia in sequence of US Dollars and local currency for the first 60 days effective 12 October 1992 as follows:

	<u>US.\$</u>	<u>Birr</u>
Addis Ababa (Hilton)	202	1,000
Addis Ababa (elsewhere)	100	495
Dire Dawa, Massawa and Assab	60	297
Elsewhere	53	262
Asmara	101	500

Please note that after 60 days rates have not been communicated by ICSC at this moment.

cc: Heads of UN Agencies



United Nations  
Development Programme  
ተገቢት ግንባታ  
ጾገት ፕሮግራም



World Development

FIN/213/7

9 October 1992

TO: All Heads of U.N. Agencies  
All Staff Members, Project Managers, CTAs, and NPC's

FROM: Narayan Kulkarni *N.R. Kulkarni*  
Officer-In-Charge

SUBJECT: Revised Exchange Rate

Kindly be informed that revised U.N. Operational rate of exchange becomes Ethiopian Birr 4.95 per U.S. Dollar One effective 12 October 1992.

*መጠን 2.07*

