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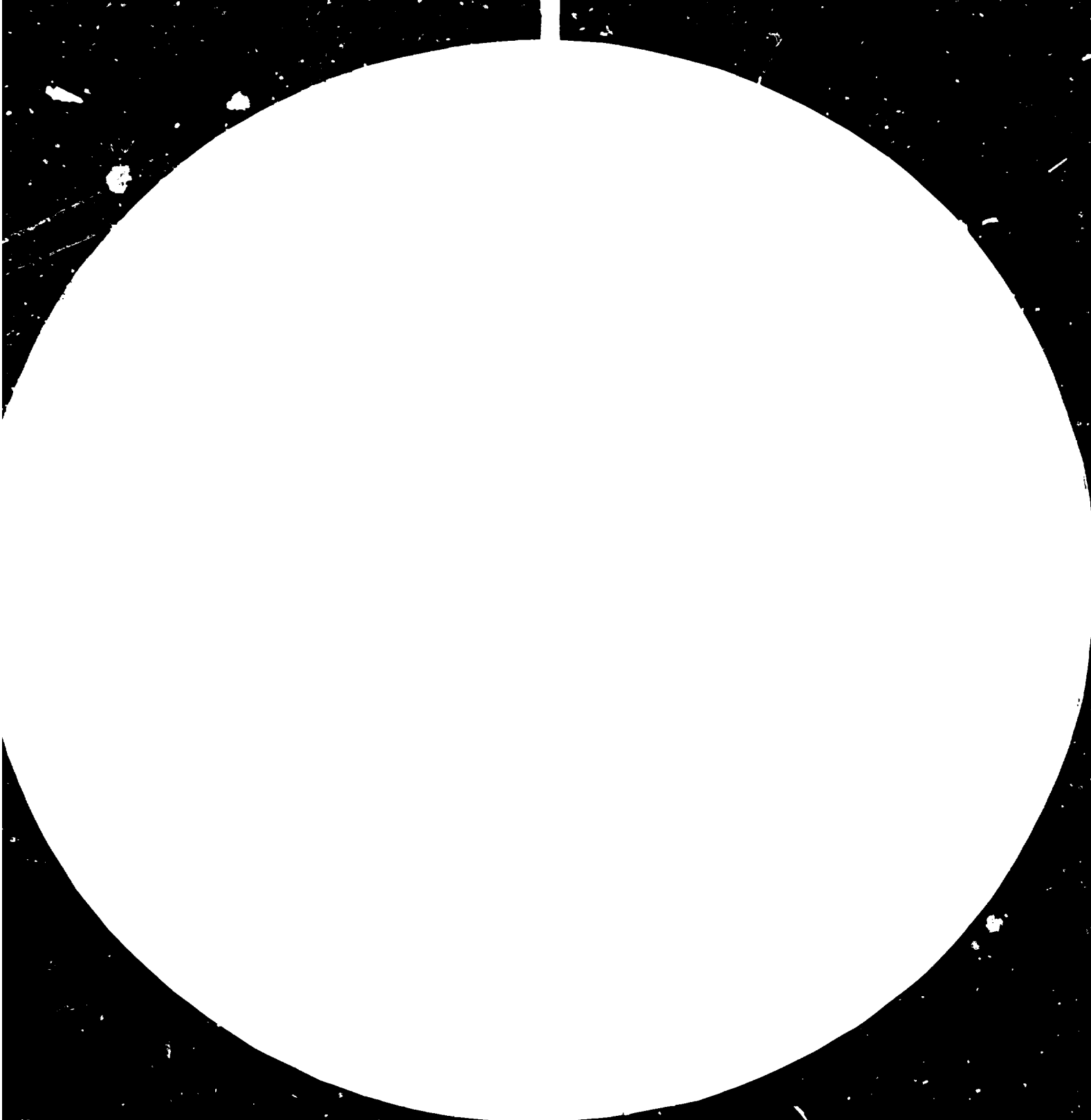
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Leather Products Industry Panel

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UNIDO Technical Assistance Activities  
in the Field of Leather and Leather Products as at  
end September 1982 \*

Prepared by the UNIDO Secretariat

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The following report gives an account of UNIDO's technical assistance activities during the past year in the leather and leather products industries sector, which continued to follow much the same pattern as presented in the previous activity reports (for 1980 and 1981).

The large-scale projects in Brazil, China, Ethiopia, Indonesia, Kenya, Pakistan, the Philippines, Tanzania, Tunisia and Democratic Yemen were continued, the projects in Burundi, Lesotho, Portugal, St. Kitts and the Sudan were operationally completed. A new large-scale project in Sri Lanka became operational and small-scale assistance projects through SIS financing started in Faraguay and Syria. The UNIDO Project Review Committee approved projects for Nepal and the Sudan for negotiation with special purpose donor countries, and UNDP-financed projects in India (Calcutta Institute) and Uganda have been approved in principle by the Governments in question and will be expected to start operations during 1983. A sum of US\$ 374,030 were made available through the Government of Italy on a trust fund basis to start a project in Costa Rica, entitled: Assistance to the Leather Technology Centre, CETEC.

Negotiations are continuing to establish additional large-scale assistance projects in Angola, China, Colombia, Somalia and the Sudan. The negotiations on the project in Colombia are practically completed and a preparatory mission in October/November 1982 had the objective to prepare the final project document for the leather centre.

It may be of interest to note that the total project portfolio handled by the leather and leather products unit of the Agro-industries Branch/IO is presently US\$ 10,649,754. The yearly implementation of approved project funds shows the following picture for the past three years:

1980	US\$ 2.6 million
1981	US\$ 2.8 million
1982	US\$ 3.2 million (estimated)

AFRICA

1. ANGOLA

DP/ANG/80/012 "Assistance to the Leather Industry"

Starting Date: October 1981

Duration: One month

- Objectives:
1. To assess the situation of the leather and leather products industry of the country and to identify the needs for technical assistance of this industrial sector.
  2. To make recommendations for necessary action which should be taken to ensure a sound development of the entire leather industry sector.

Total UNDP/  
UNIDO inputs: US\$ 7,500

A leather industry consultant was fielded for one month to assess the situation and needs of the leather and leather products industry of the country. A draft project document for large-scale technical assistance involving UNDP inputs of US\$ 1,011,300 has been prepared. The Government has indicated interest in such a project, however, owing to lack of IPF funds for this type of assistance the financing of the project could not be included in the next country programme. UNIDO's backstopping branch has, therefore, prepared a modified document for possible financing from a special purpose contribution through UNIDF. This modified proposal is presently with the Government of Angola for approval.

2. ETHIOPIA

DP/ETH/78/001 "Leather and Leather Products Development"

Starting Date: September 1979

Duration: Three years with possible extension

- Objectives: The project is designed to enhance the capabilities of the National Leather and Shoe Corporation (NLSC) to discharge the responsibilities entrusted to it in developing and strengthening of the leather and leather products sector, in particular:

1. To increase the supply of quality raw hides and skins through the establishment of a systematized collection network, the introduction of better flaying and preservation techniques, and the development of financial and marketing policies aimed at processing increasingly raw material locally.
2. To increase capacity utilization and especially to improve the quality of tannery and shoe factory products through:
  - (a) the adaptation of processing techniques suited to local conditions;
  - (b) the introduction and maintenance of quality levels of semi-processed and finished leather and leather products;
  - (c) the establishment of machinery maintenance, with replacement schedules, including the establishment of a centralized maintenance services centre.
3. To strengthen the NLSC's manpower development schemes.
4. To develop marketing strategies and distribution networks both domestically and abroad for raw hides and skins, semi-processed and finished leather as well as leather goods.
5. To assess the potential of the entire leather sector and as required assist in the development of new processing capacities especially in leather garment production, leather-board, glue and shoe manufacturing.

Total UNDP/ UNIDO inputs:	Original	US\$ 1,772,519
	Revised	US\$ 2,168,254 of which
	International expertise: (8 experts + consultants)	US\$ 1,047,375
	Training	US\$ 599,864
	Equipment	US\$ 560,873
	Subcontract (foot measuring)	US\$ 39,400
	Miscellaneous	US\$ 20,742

The project's implementation has been most satisfactory. An effluent treatment study was carried out by a consultant under the project funding.

A foot measuring study on the Ethiopian population is expected to commence end of 1982. A pilot plant for last and unit soles has been approved and procurement of the machinery is under way.

Six fellowship students have returned after completing their training in Europe and will assume their new responsibilities within the NLSC. Five fellows have started a two-year course in Europe in September 1982.

The Ministry of Industry has requested the continuation of the project. Because of the shortage of IPF funds, the Government of Ethiopia, UNDP and UNIDO are examining ways and means to accommodate this request.

### 3. KENYA

US/KEN/78/204 "Establishment of a Leather Quality Control Laboratory"

Starting Date: May 1981

Duration: Thirty months

Objectives: The immediate objective is to establish in Kenya a national institution, with leather laboratory and pilot demonstration unit, capable of:

- Assisting the leather and leather products manufacturers to obtain in their production quality standards that are acceptable in the international market;
- Assisting the Ministry of Industry in implementing its long-term development strategy for the leather sector, ensuring that the degree of processing is progressively advanced;
- Carrying out tests with regard to the quality of leather and leather products, and to the characteristics of the products used in their production;
- Conducting a systematic programme of applied research in the leather sector.

Total UNIDO/ UNIDF inputs:	original	US\$ 263,550	
	revised	US\$ 378,541	of which
	International expertise	US\$ 266,441	
	Training	US\$ 10,600	
	Equipment	US\$ 100,000	
	Miscellaneous	US\$ 1,500	



The laboratory and the pilot plant for processing wet-blue leathers is fully operational, the valuable service is already being utilized by the local leather industry sector. Five Kenyan technicians are presently being trained at the establishment.

Implementation of the third phase of the project, which is financed through a special purpose contribution from the Federal Republic of Germany to UNIDF, has been approved. The total funds of the project were increased to US\$ 378,541 and the total duration of the project is thereby revised to 30 months.

4. LESOTHO

SM/LES/80/003 "Assistance to Maluti Skin Products (Pty.) Ltd."

This project is operationally completed except for the ongoing fellowship training in European institutions and tanneries.

5. LESOTHO

RP/LES/82/003 "Assistance to the Lesotho Leather Garment Industry"

Starting Date: January 1983

Duration: Two months

Objectives: The immediate objectives of the project are:

1. The development of the existing seasonally operating, small fur garment factories;
2. Assistance to KABI Leather Works through transfer of know-how in the technology of leather garment manufacturing.

Total UNIDO  
inputs: US\$ 14,300

This project is a follow-up of project RP/LES/82/001 "Styling and Pattern Making Expert for Sheepskin Garments", executed from March to June 1982.

6. SENEGAL

DU/SEN/82/015 "Centre national de documentation scientifique et technique (phase III)"

Starting Date: May 1982

Duration: Two months

Objectives: To assess the present situation and the needs of the Senegalese tanning industry.

Total UNESCO/  
UNIDO input: US\$ 22,500

The services of a leather industry consultant were subcontracted to UNIDO from the ongoing UNESCO project DP/SEN/82/015. The UNIDO consultant completed his mission on 1 July 1982.

7. SUDAN

US/SUD/78/267 "Laboratory Equipment for Sudanese Tanneries"

Starting Date:

Duration:

Objectives: To improve the quality of leather and leather products produced in the Sudan for domestic as well as for export markets through procurement of laboratory equipment required by the three large mechanized tanneries in the Sudan and assisting in putting the equipment into operation.

Total UNIDO/  
UNIDF inputs: US\$ 71,741 of which  
International expertise US\$ 17,400  
Equipment US\$ 54,341

This project was financed by a special purpose contribution from the Government of the Federal Republic of Germany to UNIDF. The equipment has been installed and the counterparts instructed in the operation thereof. The project is therefore operationally completed.

8. TANZANIA

DP/URT/78/010 "Leather and Leather Products Industry Development"  
SM/URT/78/010

Starting Date: November 1979

Duration: 42 months

Objectives: The immediate objectives of the project are:

1. Better integrated and more efficient tanneries and leather products factories as to all relevant activities, such as: purchasing, production, maintenance, supervision and control, costing, domestic and export marketing and administration.
2. Increased capacity utilization and productivity. In 1978 the three tanneries of the Tanzania Leather Associated Industries Corporation produced about 3 million square feet of finished and 7 million square feet of semi-tanned (wet blue) leathers of all kinds from hides and skins. During 1981 the same tanneries will produce 10 million square feet of finished and 10 million square feet of semi-tanned leathers. The shoe factories of the Corporation will in the same period increase their production of leather shoes from one million to about 2.5 million pairs.
3. Improved leather products, primarily in respect of quality as such, but also of the quality consistency.
4. Balanced product mixes, utilizing in the most favourable way the available raw materials and potentially usable waste materials from the leather and allied industries.
5. A well-functioning leather centre co-operating closely with the production units.

Total UNDP/ UNIDO inputs:	DP/URT/78/010	US\$ 1,196,382
	SM/URT/78/010	US\$ 210,849
		US\$ 1,407,231 of which
	International expertise (7 experts + consultants)	US\$ 1,068,656
	Training	US\$ 280,737
	Equipment	US\$ 40,733
	Miscellaneous	US\$ 17,105

This large-scale ongoing project is, apart from providing direct extension services to the local leather industry, instrumental in the implementation of training courses and fellowships. During 1982 fellows have completed their training in Europe as follows:

Study tour - shoe manufacturing	2
Fellowship - shoe technology	2
Fellowship - leather technology	2
Fellowship - rubber technology	1
Fellowship - shoe manufacturing	1

Cumulatively the ongoing fellowships amount to a total of:

Leather technology	19 fellows
Shoe manufacturing	10 fellows.

In addition to the ongoing training programme, thirteen fellowship nominations have been submitted covering all aspects of the leather and leather industries sector.

IW/URT/82/W01 "Establishment of Leather Goods Unit, Isanga, Mbeya"

Starting Date: Expected early 1983

Duration: Twelve months

Objectives: This project is to assist the expansion and the proper functioning of a leather goods unit, established by the Union of Tanzania Women, Isanga branch, Mbeya. The expansion involves purchases of additional sewing machines and equipment with the goal to produce annually about  
12,000 handbags  
12,000 wallets  
12,000 coin purses,  
and will offer employment to 25 women with on-the-job training.

Total UNIDO  
inputs:

	US\$ 42,000 of which
Expert services	US\$ 2,000
Equipment	US\$ 40,000

Financing of this project is secured through a revolving loan fund by the Voluntary Fund for Women. The sewing machines have been ordered and authorization has been given for the local purchase and erection of the workshed. It is planned to engage the services of an expert next year to undertake the training. The project will be linked to the ongoing project DP/URT/78/010 in that its team leader will arrange and provide for any support this project can give to the expert to be fielded.

US/URT/79/240 "Assistance to the Leather and Leather Products Industry Pilot Plant"

Starting Date: October 1981

Duration: One year

Objectives: To assist the Government of Tanzania in obtaining the equipment for the establishment of a pilot plant, training and demonstration centre for the leather and leather products industry in order to provide extension services in quality control, products engineering, production methods and systems and technical training of supervisory staff and operator

Total UNIDO/  
UNIDF inputs: US\$ 467,654

This project, which assists in setting up the Tanzania Leather Technology Institute (TILT), is financed through a special purpose contribution from the Government of Italy to UNIDF. Some of the machinery and equipment have arrived. It is expected to be operational early 1983. Two training consultants financed from project DP/URT/78/010 are presently engaged in preparing the syllabi for the courses and the services of an additional training adviser for a period of six months will be financed from UNIDO Regular Programme funds in 1983 to set up the training functions. A project document prepared for additional assistance to the Tanzania Institute of Leather Technology (TILT) is under active consideration.

SI/URT/82/802 "Survey of the Footwear Production and Management Methods in Tanzania"

Starting Date: October 1982

Duration: Six months

Objectives: The immediate objective of the project is to provide the competent Tanzanian authorities with recommendations on how to solve their present problems in management, marketing and in technical aspects in the footwear industry sector, specifically for the two large, state-owned shoe factories, and to provide action-oriented programmes for the implementation of these recommendations.

Total UNIDO  
inputs:

International expertise	US\$ 52,100 of which
Subcontract	US\$ 18,100
Miscellaneous	US\$ 29,000
	US\$ 5,000

A footwear industry consultant is presently assessing the situation in the footwear industry and based on his findings and proposals a sub-contract team will be fielded to put into effect the implementation of these recommendations.

ASIA

9. CHINA

DP/CPR/80/007 "Assistance to the Establishment of Central Leather Laboratory in Shanghai"

Starting Date: May 1981

Duration: Eighteen months

Objectives: The immediate objectives of the project are:

1. Establishment of a complete chemical analysis and physical testing laboratory.
2. Training of the qualified testing personnel in the field of raw materials, technology and finished products control.

Total UNDP/ UNIDO inputs:		US\$ 250,000 of which
	International expertise	US\$ 35,000
	Training	US\$ 70,000
	Equipment	US\$ 142,000
	Miscellaneous	US\$ 3,000

All of the required laboratory equipment is installed and the leather testing laboratory is well functioning. The project has already contributed in its extension services towards assessing and solving technical problems in the leather and leather goods industry. From September to December 1982 fellowship courses are being attended by two fellows in the Netherlands and two fellows in Hungary.

10. INDONESIA

DP/INS/78/001 "Improvement of Extension Services at the Leather Research Institute"

Starting Date: September 1979

Duration: Forty months

Objectives: The immediate objective of the project is to strengthen the extension service to the small and medium-scale leather and

allied industry in order to make it growth-oriented and to improve its capacity for problem solving. This will be done through:

- (a) Assessing the technical needs for improving the quality of finished products with a view to expanding their marketability both nationally and internationally.
- (b) Developing a long-term and short-term technical plan to achieve required quality standards.
- (c) Reorganizing and strengthening the Technological Development Departments of the Institute in order to augment their capacity for operational consultancies to the enterprises and for suggesting complementary and supportive activities, in relation to the backward and forward linkages with the industry.
- (d) Institute systematic product/process improvement and diversification programmes.

Total UNDP/ UNIDO inputs:	original	US\$ 651,313
	revised	US\$ 862,742 of which
	International expertise	US\$ 711,881
	Training	US\$ 9,260
	Equipment	US\$ 128,962
	Miscellaneous	US\$ 12,639

The project has achieved its immediate objectives. Emphasis was given to the creation of a fashion and designing centre with pattern-making and a fully equipped prototype last-making plant.

Approximately 40 technicians and operators have received training in various technical fields. In conjunction with the establishment of a Mini Industrial Estate for small tanneries and footwear units in Magetan, the assistance of the project proved most satisfactory. The subject project also renders assistance to the Mandling leather goods centre in training and marketing. One tannery expert is still serving in the field and it is possible that an extension of his services may be requested.

## 11. NEPAL

UC/NEP/81/036 "Preparatory Mission: Development of Leather and Leather Products Industry"

Starting Date: March 1982

Duration: Two weeks  
Objectives: To review and update the proposed need for assistance to the Bansbari Footwear Factory in Kathmandu.  
Total UNIDO/  
UNIDF inputs: US\$ 3,500

As a follow-up to a previous UNIDO project, a UNIDO staff member participated in a pre-appraisal mission of the World Bank to Nepal in March/April 1982. The mission had the objective to study the Nepalese leather, footwear and other leather products industry and the needs of this industry sector for development credits and other types of international assistance. The UNIDO staff member concentrated his efforts on studying the needs of the Bansbari Footwear Factory. A project proposal, UF/NEP/82/152, for UNIDF financing was prepared for the total value of US\$ 737,009. The proposal was approved by the UNIDO Project Review Committee for negotiations with suitable donor countries.

## 12. PAKISTAN

DP/PAK/79/022 "Leather Products Development Centre"

Starting Date: June 1981

Duration: Two years

Objectives: The immediate objectives of the project are:

1. To expand garment training centre facilities established under project DP/PAK/73/027 to widen the centre's scope and activities to include training and demonstration in leather goods and other leather products manufacturing. The centre is to be re-named Leather Products Development Centre.
2. To create a fully qualified group of instructors to take over the technical management and activities of the centre.
3. To establish a well-equipped unit for extension and common facility services for the leather garment and leather products manufacture.
4. To design syllabi for courses, arrange seminars and workshops in accordance with the needs of the leather products industry sector.



5. To assist and follow up the activities and performance of participants of the various courses conducted.
6. To render direct, on-the-spot technical advice in trouble shooting, processing technology and quality improvement for the leather garment and leather products manufacturers, in order to improve their export potential.
7. To assist the shop floor to improve the technical practices and performance.

Total UNDP/ UNIDO inputs:	original	US\$ 417,950
	revised	US\$ 466,280 of which
	International expertise (3 experts + consultants)	US\$ 335,406
	Training	US\$ 19,200
	Equipment	US\$ 104,400
	Miscellaneous	US\$ 7,274

Activities under this project have continued as before to achieve the objectives set, by providing direct support to the local industry as well as trained personnel at all levels and in various technical fields to improve the quality of leather goods for the home and export markets.

At the centre 86 students have taken part in training until May 1982. In addition, 81 technicians and operators have received in-plant training in leather garment factories, and further 53 students attended courses in:

- Leather garments - industrial pattern cutting;
- Leather garments - process of production; and in
- Leather goods manufacturing.

Courses which commenced in September/October 1982 consist of:

- Leather garment manufacturing - 12 months
- Leather goods manufacturing - 12 months
- Leather gloves manufacturing - 6 months.

A course for industrial sewing machine maintenance, for two days a week over a period of three months, is about to be implemented. Two candidates for a six-month fellowship abroad have been selected for training in production of leather garments and production of leather goods respectively.

Most of the equipment for the centre is installed and in operation.

In the context of the subject project a pilot production plant for leather goods and leather garments is considered for implementation as a

natural extension of the ongoing project. A pilot production unit would enable the students to receive more practical training and allow them to function more effectively in their jobs within the industry.

13. PHILIPPINES

US/PHI/79/109 "Footwear and Leather Goods Training and Demonstration Centre"

Starting Date: October 1980

Duration: Three years with possible extension to five years

Objectives: The immediate objectives are:

(a) In the footwear field:

(i) To install and set up a pilot footwear plant to train and demonstrate to management, supervisors and workers (particularly young workers) the modern techniques in footwear manufacture.

(ii) To formulate a syllabus for courses in all facets of footwear manufacture, such as:

- designing and pattern cutting
- cutting and bottom stock preparation
- stitching and closing upper sections
- lasting and making footwear
- finishing of leather footwear
- repair and maintenance of machines.

(iii) To carry out extension services to advise existing plants and give practical on-the-spot advice, and assist in planning expansion when requested.

(iv) To provide technical management and organization planning, with advice in technology, materials, production, quality control, marketing, costing and labour incentives.

(v) To assist the leather tanning pilot and training centre in carrying out training courses in leather manufacturing.

(vi) To train counterparts in the different fields to enable them to carry on the work when the project finishes.

(b) In the leather goods field:

(i) To set up a pilot and demonstration centre for the common use, and to the common benefit, of the country's leather goods manufacturers. The centre will demonstrate and disseminate production methods and techniques leading to high quality products, including the selection of quality components, proper tools and the appropriate simple equipment.

(ii) To conceive and implement training courses on all subjects relevant to the development of modern leather goods production, such as: design and pattern making, component characteristics and selection, factory layout and equipment, operation and maintenance and production operations such as cutting, skiving, sewing, assembling, finishing, etc., sample making, production, planning, marketing trends, production management.

(iii) To provide in-plant consulting services to the existing manufacturers for the improvement or extension of their operations.

(iv) To act as a centre of information on the international production methods considering market trends, for dissemination to all medium and small-scale manufacturers.

(v) To promote subcontracting between the medium and small-scale units.

(vi) To give nationals proper training in all relevant skills, in order to ensure the availability, upon completion of the project, of a suitable nucleus of trained labour, production, supervision and management staff. Whereas most of the training will take place at the centre or in the factories, it is envisaged that some overseas training will be required in order fully to achieve the project's training objective.

Total UNIDO/ UNIDF inputs:	original	US\$ 1,179,300
	revised	US\$ 1,454,155 of which
	International expertise (6 experts)	US\$ 861,635
	Training	US\$ 125,050
	Equipment	US\$ 450,500
	Miscellaneous	US\$ 16,970

This UNIDF funded project is being financed through a special purpose contribution from the Government of the Federal Republic of Germany. The Footwear and Leather Goods Training and Demonstration Centre which was assisted by this UNIDO project was officially opened in June 1982. The project has made remarkably good progress towards achieving its objectives. All machines and equipment, except for some minor items, are installed and in operation.

The training courses already conducted and ongoing are as follows:

Footwear	9 courses	50 trainees
Leather goods	6 courses	24 trainees
Counterparts + staff (instruction on visual aids, leather material design, pattern making)	4 courses	64 trainees

In addition to the integrated training programme the centre also provides through its extension services technical and managerial advice to the leather subsector, e.g. during the period March-August 1982, 66 consultations have been carried out.

Three fellows are receiving training in Italy: two in leather goods design and pattern making for five months, and one in shoe design and pattern making for seven months.

A joint FRG/UNIDO mid-term evaluation mission of the project took place in February/March 1982. The mission team was satisfied with the progress of the project and in order to guarantee self-sufficiency of the centre before handing the operations over to the Government, the evaluation mission recommended an extension of the international assistance by one year. This recommendation has been approved by the authorities in Bonn and additional funds to continue the project will be made available, bringing the total UNIDO assistance to US\$ 2.3 million.

#### 14. SRI LANKA

DP/SRL/81/007 "Assistance to the Ceylon Leather Products Corporation"

Starting Date: September 1981

Duration: Two years

Objectives: The immediate objective of this project is to assist the Ceylon Leather Products Corporation in ensuring that it becomes fully competitive. This in turn would mean that the Corporation is capable of assuring its continuity without outside intervention or assistance. Achieving this objective implies that the Corporation is able to produce for the domestic market all types of footwear demanded, at competitive prices. Moreover, its production would meet international quality standards.

Total UNDP/ UNIDO inputs:	original	US\$ 240,340
	revised	US\$ 290,600 of which
	International expertise (5 experts + consultants)	US\$ 166,600
	Training	US\$ 33,000
	Equipment	US\$ 89,000
	Miscellaneous	US\$ 2,000

The impact of the progress of the project is manifested in the increased output of the shoe factory, where the production has increased from 3,000 pairs to 5,600 pairs of shoes per day. The quality of the product has improved considerably. The initial assistance provided by UNIDO introduced the direct-moulded sole footwear. Most of the equipment has arrived and is installed. One rubber technology expert and one shoe industry training expert will take up their duties soon.

Training of two fellows, one in shoe technology for twelve months in the U.K. and one in shoe designing for three months in Italy, is expected to start early 1983.

#### 15. SYRIA

SI/SYR/82/803 "Leather Industry Consultancy"

Starting Date: October 1982

Duration: Six months

Objectives: The immediate objectives are as follows:

- To provide the Ministry of Industry with an accurate picture of the present status of the leather industry in order to have a basis for decision making on further development needs.

- To provide the personnel of the industrial tanneries with new skills and expertise related to tannery technology and modern management of leather manufacture.

Total UNIDO  
inputs: US\$ 53,200

This project is a follow-up to a nine-month leather industry consultancy in 1981 and the expert started his return assignment beginning of October 1982.

16. PEOPLE'S DEMOCRATIC REPUBLIC OF YEMEN

UD/PDY/79/140 "Machinery and Equipment for the National Tanning Factory Sheikh Othman, Aden"

Starting Date:

Duration:

Objectives: This project is aimed at upgrading and diversifying the production of the only mechanized tannery in Democratic Yemen. A further objective is the reduction of imports in the leather and leather goods sector.

Total UNIDO/ UNIDF inputs:	US\$ 266,765 of which
Mission costs	US\$ 597
Training	US\$ 27,212
Equipment	US\$ 238,956

The project has been financed by a special purpose contribution from the Government of Yugoslavia to the UNIDF. Machinery and equipment have been delivered.

Fellowship training in Yugoslavia is expected to commence early 1983; four fellows in leather technology for nine months, one fellow in the maintenance of tannery machinery for nine months. Part of the fellowship training costs are being covered by project UD/PDY/82/001 for a total amount of \$ 56,038.

LATIN AMERICA

17. BRAZIL

US/BRA/80/166 "Assistance in the Establishment and Operation of a Pilot Demonstration Plant for Tannery Effluent Treatment at Estancia Velha, RS"

Starting Date: October 1981

Duration: Eighteen months

Objectives: The immediate objective is to establish a pilot demonstration plant for tannery effluent treatment in Brazil which is capable of:

- assisting the Brazilian tanning and allied industries to obtain reduction in the levels of pollutants of their effluent; to achieve the "norms" promulgated by the competent local authorities;
- assisting both the local authorities and the tanning industry in the preparation and evaluation of the technically feasible projects necessary to achieve such lessened pollution at minimal economic cost;
- evaluating, under local conditions, the cost effectiveness of a variety of effluent treatment techniques;
- conducting a systematic programme of training to develop a cadre of qualified personnel in this field;
- carrying out a programme of applied research in the treatment of tannery wastes and the economic recovery of materials from such wastes;
- initiating a programme of demonstration, extension services and dissemination to ensure that all sectors of the leather industry in Brazil (and the entire Latin American region) are able to obtain up-dated technical and economic information relating to the introduction of better environmental processes (recycling and other means) and the treatment of tannery wastes (aqueous and solid);
- Liaising between local authorities and tanners to ensure that the Government's ultimate objectives are understood by the industry.

Total UNIDO/ UNIDF inputs:		US\$ 414,500 of which
	International expertise	US\$ 70,716
	Subcontract	US\$ 191,784
	Study tours	US\$ 15,000
	Equipment	US\$ 137,000

This project is funded by a special purpose contribution from the Government of Italy and the majority of personnel inputs shall be obtained through a subcontract with an Italian enterprise specialized in the treatment of tannery effluents. It is expected that one of the four treatment systems shall be operational by December 1982.

After delivery of all the equipment the subcontractor is expected to field four experts to ensure the timely implementation and the satisfactory subsequent operation of the pilot plant. At the same time the training of the counterparts and students will commence. A study tour of four counterparts, accompanied by the project team leader, to Italy was conducted in July 1982.

#### 18. COLOMBIA

DP/COL/82/007 "Preparatory Assistance Leather Centre Project"

Starting Date: October 1982

Duration: One month

Objectives: To prepare the final project document for starting the large-scale Leather Centre project in early 1983.

Total UNDP/  
UNIDO inputs: \$ 32,500

A team of experts consisting of the Chief Technical Adviser and three Italian consultants specialized in the fields of tanning, footwear and leather goods respectively, visited Colombia and formulated the project document for the large-scale project. This project, involving some US\$ 1.3 million, is expected to be financed from the following contributions:

- 35 % UNDP
- 15 % PROEXPO
- 15 % Colombian leather and shoe industry
- 35 % Italian Government through S.I.A.

The large-scale project is scheduled for 1983.



19. COSTA RICA

TF/COS/82/001 "Assistance to the Leather Technology Centre CETEC"

Starting Date: Early 1983

Duration: Eighteen months

Objectives: To utilize properly the natural resources of Costa Rica so as to obtain the maximum added value possible. In order to achieve this strengthening of CETEC is necessary so that it can render assistance to the manufacturers of leather and leather products, to enable them to reach the quality level of production required on international markets.

Total UNIDO  
inputs:

	US\$ 331,000 of which
International expertise (2 experts + consultants)	US\$ 186,000
Training	US\$ 23,000
Equipment	US\$ 120,000
Miscellaneous	US\$ 2,000

The project will start implementation in 1983.

20. PARAGUAY

SI/PAR/82/802 "Assistance to the Leather and Footwear Industries"

Starting Date: October 1982

Duration: Three months

Objectives: The immediate objectives are:

- Strengthening of the capabilities of the leather department of the Instituto Nacional de Tecnología y Normalización (INTN) to provide extension services to the leather and footwear industries, particularly in the field of leather finishing and footwear manufacture and design.
- Training of counterpart staff at INTN's leather department as well as of specialists in the leather industry in all aspects of leather finishing of various types of leather, and specialists in the footwear industry in all aspects of footwear manufacture, including in the use of appropriate tools and equipment as well as in footwear design and the use of proper pattern cutting methods.

- Improvement of the quality of various types of finished leathers produced in local tanneries, as well as of the quality and presentation of the different types of footwear produced in local shoe factories.

Total UNIDO  
inputs: US\$ 39,500

Two experts are foreseen under this project. The leather finishing expert has already taken up his duties, whereas the shoe manufacturing expert will be fielded soon.

A request for a three-month fellowship for a counterpart staff member at the INTN to be trained at the Brazilian "Escuela do Curtimento" in Estancia Velha, RS, has been received. The additional inputs of US\$ 5,000 for this purpose have been approved under project RP/PAR/82/C02.

#### GLOBAL

#### 21. GLOBAL

UC/GLO/81/076 "Techno-economic Study on Measures to Mitigate the Environmental Impact of the Leather Industry, particularly in Developing Countries"

Starting Date: July 1982

Duration: Three months

Objectives: The immediate objectives of the study are:

- summarize available knowledge in this specific field and update the specialized technology to encompass a variety of new process and tannery effluent treatment techniques;
- outline in more detail possible effluent treatment and processing technologies applicable to developing countries and relevant techno-economic implications;
- assist governmental planning in this area;
- offer entrepreneurs and developers in developing countries guidance with respect to all aspects, technical as well as financial, of improving the environmental impact of new and existing tanneries.

Total UNIDO/  
UNIDF inputs: US\$ 25,500

The project is completed and a working draft of the study will be distributed at the Sixth Session of the Leather Panel.

APPENDIX I

Financing of the UNIDO projects in the leather and leather products industry

The total value of the active UNIDO leather and leather products industry projects is at present totalling at US\$ 10,649,754. These projects are financed from the following sources:

Source	Total US\$	Per Cent	Total Disbursements End Sept. 1982	Per Cent
UNDP Country Programme	6,810,571	63.95	1,654,777	63.00
United Nations Industrial Development Fund (UNIDF) (mainly special purpose contributions by donor countries	2,722,775	25.57	790,788	30.10
Special Industrial Services (SIS)	301,393	2.83	33,292	1.27
Regular Programme	463,765	4.35	119,648	4.55
Trust Funds	309,250	2.90	28,488	1.08
Voluntary Fund for the UN Decade for Women	42,000	0.40	-	-
	10,649,754	100.00	2,626,993	100.00

Geographical Distribution

Europe	62,223	0.58	4,425	0.19
Africa	5,025,737	47.20	1,473,744	56.10
Asia	4,600,589	43.20	983,770	37.43
Latin America	921,205	8.65	152,918	5.82
Global/International	40,000	0.37	12,136	0.46
	10,649,754	100.00	2,626,993	100.00

APPENDIX II

Experts man-months spent in the field during 1982 (estimate end-September 1982)

	<u>Man-months</u>	<u>Per Cent</u>
Africa	174.8	54.3
Asia	129.6	40.3
Latin America (incl. St. Kitts)	14.5	4.5
Global and International	3.0	0.9
	<u>321.9</u>	<u>100.0</u>

Fellowships during 1982 (estimate en-September 1982)

	<u>Total Allotment US\$</u>	<u>Current Financing US\$</u>
Africa: Ethiopia	446,923	115,000
Lesotho	9,000	10,580 (-1,580)
Somalia	19,500	5,208
Tanzania	192,441	114,700
	<u>667,864</u>	<u>245,488</u>
	68.0 %	53.3 %
Asia: China	70,000	70,000
Indonesia	5,625	5,625
Pakistan	41,048	1,300 (-321)
Democratic Yemen	83,250	83,250
Philippines	115,050	55,050
	<u>314,973</u>	<u>215,225</u>
	32.0 %	46.7 %
Grand Total	US\$ 982,837	US\$ 460,713

