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LEATHER INDUSTRY SURVEY

NC/PAK/92/040

PAKISTAN

<u>Report</u>

Prepared for the Government of Pakistan under UNDP-financed TSS-1 facility

V.93 89187

The report was co-ordinated by Mr. A. Zeweri, Area Programme Officer, Asia and the Pacific Programme, Area Programmes Division based on the work of Mr. F.Schmel, Agro-Industries Branch, Mr. A. Zeweri, Asia and Pacific Programme, Mr. G. Robyn, Industrial Statistics and Sectoral Surveys Branch, and Mr. T. Niklas-Salminen, International Consultant.

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UNITED NATIONS DEVELOPMENT PROGRAMME Programme of the Government of Pakistan PROGRAMIMIE DOCUMIENT

Number :: NC/PAK/92/040 Programme Site :: Karachi, Lahore, Kasur, Sialkot UNDP Code/Class : 0500 - Industry 0510 - Industrial Development Support Services Government Sector : Industry Industrial Development Support Services (Manufacturing Automation) Government : Industry OF INDUSTRIES Implementing Agency : Government of Pakistan MINISTRY OF INDUSTRIES Implementing Agencies : UNIDO, Vienna FAO, Rome ITC, Geneva Starting Date : January 1994	Title	:	Development of the Le	eather Sector				
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ITC, Geneva Starting Date : January 1994 Government Inputs' : Rs	• • • •		FAO, Rome	party cost sharing	US\$			
Starting Date : January 1994			ITC, Geneva	Total	US\$ US\$ 31,536,458			
Government Inputs ¹ : Rs	Starting Date	:	January 1994					
	Government Inputs ¹	:	Rs					

Brief Description: This Programme of the Government of Pakistan is to facilitate the overall integrated growth of the leather related sector. The main objective of the Programme is to increase the country's export revenues through the production of value added leather products with special emphasis on extending the shoe upper, footwear, fashion gloves and leather goods manufacture based on locally available, good quality genuine leather. The assistance will enhance the potential of the Pakistani leather based industries through marketing, investment promotion, human resources development, including the integration of women. The Programme will contribute to employment generation and will also provide assistance in environmental protection and waste utilization.

On behalf of	Signature	Date	Name/Title
the Government			Joint Secretary Economic Affairs Division MINISTRY OF INDUSTRIES
the UNDP	<u> </u>		Resident Representative

¹UNITED NATIONS official exchange rate at the date of last signature of the Programme Document: US\$ 1.00 = Rs 26.50

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A. CONTEXT

1. Analysis of the general country situation²

The total *population* was 117.3 million in 1991-92, the average growth rate from 1986-87 to 1991-92 was 3.2 per cent. According to the 1981 census, 44.5 per cent of the population was under the age of 15. 16.1 per cent of the population above the age of 15 lives in urban areas.

In 1991-92 the *per capita* income was Rs 10,358 corresponding to US\$414. The growth rate of GNP at constant prices was 4.5 per cent over the past 5 years. Manufacturing constituted 13.8 per cent of the GNP in 1980-81 and 18.4 per cent in 1991-92.

The *labour force* was 33.8 million in 1991-92, of which 32.8 million was employed. The share of self-employed was 64 per cent in the rural and 42 per cent in the urban areas. The manufacturing sector employs 4.2 million people, i.e. 12.8 per cent of total employees.

The average growth rate of manufacturing at constant prices has been 6.7 per cent during the period 1987-1992. The manufacturing value added at current factor costs reached Rs 200 billion in 1991-92.

	N.	Country	Urban	Rural			
	Year	average	area				
	Rs/capita/month						
Income	1987-88	2.131	2,956	1,815			
	1991-92	3,320	4,480	2,090			
Consumption	1987-88	2,029	2,736	1 ,759			
	1991-92	2,920	3,940	2,530			
Estimated expenditures on textile, garment and footwear	1991-92	225	270	208			

Household statistics

Table 1

2. Analysis of sector

The first contact of the leather sector with the international market started with exporting raw hides and skins. This resulted in a three-stage modernization sequence. First, the hides and skins were progressively semi-processed to pickled and wet-blue. Then, crust and finished leather

²Sources:

^{1.} Pakistan Statistical Yearbook. Federal Bureau of Statistics, Karachi, 1991.

^{2.} Economic Survey. Finance Division, Government of Pakistan, Islamabad, 1992.

^{3.} Estimates by UNIDO.

were introduced. The second phase reached maturity at the beginning of the 1980's when 80 per cent of leather exports were in the form of finished and semi-finished leather. Finally came the stage of leather products. Except for a few manufacturers of leather sports goods, there were no exportable leather products in the beginning of the 1980s. The only other leather-made goods industrially produced in Pakistan at that time were footwear for domestic consumption. In those days international demand for leather and leather made-ups was quite strong. The local supply of hides and skins was fully used and the Pakistani tanneries lacked the technological means to finish to upscale specifications. Accordingly, tanners decided to go for downstream diversification. The focus was initially set on garments, specifically leather jackets, because these items use large quantities of leather, can be made in the most labour-intensive way, require no other design capability than the ability to copy an imported pattern, and are not subject to rapid fashion changes. Thanks to a supportive policy obtained from the Government, the field was soon encumbered by a host of micro-enterprises - often but not always linked to the tanneries - and by the mid 80s, a breakthrough was achieved. Following this success, a comprehensive programme of incentives was set up to promote the export of these processed products. Industrial gloves and small leather goods were developed with a view to making use of the small-size skins and the wastes from garments. More recently, an attempt to build on the breakthrough was made in the direction of footwear, the role of which will be to use the hide leather. The main thrust is made by two large-scale manufacturers who dominate the domestic markets, and therefore have the necessary technological and financial resources, but a few new enterprises exclusively export-oriented are presently entering the footwear-export area.

The downstream drive is an undeniable success. The share of leather products is now preponderant in the composition of exports. Since the mid 1980s, exports have grown at more than 20 per cent yearly and penetrate an increasing diversity of destinations. Most of the firms export to importers, but a few have signed agreements with distributors and manufacturers.

In turn, the success of leather products exports increasingly involves an internationalization of the Pakistani leather industry supplies. In order to match the quality demanded on world markets, the available domestic imports are insufficient. Furthermore, additional hides and skins must be imported to supplement local supply. Accordingly, the Government has established a liberal policy of imports which allows the industry to insert in its processes raw materials, machinery, parts and inputs from anywhere in the world.

Domestically oriented cottage and small-sized firms have not fared well in the current policy environment and their prospects are not bright. The focus on local consumers where market size and product prices are constrained by low income, confines these firms to rudimentary techniques and deprives them of Government support (for example, duty drawbacks, sales and income tax exemptions). Furthermore, they are squeezed as expansion in the modern, export-oriented sector pushes up the prices of local hides and skins and attracts skilled labour. If the modern sector continues to grow as it has in recent years, this is likely to be at the expense of the traditional inward-oriented sector.

The industry's sales can only be guessed because there is no statistical survey on which to base a measurement. The guess, as is perhaps adequate for the leather industry, sustains itself in the air by pulling its own bootstraps.³ Nevertheless, by virtue of coherence with indicators concerning the livestock and the domestic consumption of footwear, it is thought to have a good chance not to be much off target. The industry's sales to final users are reported at US\$ 600 million for exports and estimated at US\$ 200 million for domestic sales of footwear; the intermediate sales

³Tanner, production is estimated on the basis of an assumption concerning the number of hides and skins processed.

- from a tanning unit to a finishing unit or from a finishing unit to a leather products unit - represent perhaps US\$ 200 million. Thus the total is one billion dollars.

Using a ratio value added to value of production of 27 per cent,⁴ a value added of US\$ 270 million, or Rs 11 billion is found for 1991-92. As a contribution to total manufacturing value added 11 billion represent 5.5 per cent. It is to be noted that this proportion is the highest reported for any country in the world. In other words there is no other country where the leather industry contributes as much to industry as in Pakistan.

The only leather products bought on the Pakistani *domestic market* are footwear (including, of course, the traditional sandals) and - in a very small proportion - leather goods, such as belts, wallets and sports goods.

The consumption of these items is based on a large population of 117 million (1991-92) but quality and prices are constrained by a low level of average income. LIDO, the Leather Industry Development Organization of the Ministry of Industries, estimates that this population buys 53 million pairs of leather shoes every year, i.e. the consumption is approximately 0.5 pair/person/year. There is some evidence to corroborate that estimate. Based on a household budget survey of 1987-88, it was estimated that in 1991-92 an average household would spend 225 rupees on textile, garment and footwear.⁵ Supposing that a fifth on this sum goes to leather footwear and that an average pair costs 200 rupees, an household of 5 persons would buy 2.7 pairs yearly or about half a pair per person as estimated by LIDO.

The average monthly income of an household will probably increase by 40 per cent between 1991-92 and 2000. Footwear consumption is not likely to increase proportionately⁶ but it can be conservatively estimated to increase by 10 per cent. At the same time the population will grow by 30 per cent, if a slight decrease of the demographic rate is assumed. The combined influences of economic growth and demography are likely to bring about a footwear expenditure increase equivalent to 43 per cent of the 1991-1992 level. At constant real price, consumption would accordingly reach 76 million pairs, but the real price is likely to increase thereby limiting consumption to some 70 million pairs.

Demand on the domestic market is governed by the seasonality of rural activities and the calendar of religious feasts. Since working capital is extremely scarce, both at the production and distribution stage, inventories are kept to a strict minimum. Consequently, the task of coping with demand fluctuations is placed on the production level. This is simply done by hiring and releasing home-workers or by subcontracting part of the orders to cottage industries.

The *export market*: In 1991-92 export of leather and leather products reached US\$ 591 million which is 8.6 per cent of all Pakistani merchandise exported. Within the country's narrow

⁵See basic indicators.

⁴Source: Five Year Development Plan for the Leather Industry in Pakistan, 1992-1996. National Management Consultants (on the request of EXPORTS PROMOTION BUREAU and PAKISTAN TANNERS ASSOCIATION), December 1991.

⁶The proportion of income spent on footwear is krown to decrease when incomes increase (see basic indicators).

export basket⁷, leather garments at US\$ 257 million, leather at US\$ 241 million and leather gloves at US\$ 66 million, figure prominently. Moreover, the composition of exports rapidly changes in favour of manufactured goods. Table 2 clearly shows the rise of leather manufacture. The permutation between tanned leather and leather products is indeed marked. Tanned leather was almost twice as important as leather products in 1987-88 but four years later was only 41 per cent.

I able	2
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	1987-88	1988-89	1989-90	1990-91	1991-92
Tanned leather	285	244	279	276	241
Leather garment	94	102	159	220	257
Gloves	39	39	36	43	66
Footwear	7	6	4	10	16
Others	8	9	4	8	11
Sub-total leather products	148	156	203	281	350
GRAND TOTAL	433	400	482	557	591

Export of leather and leather products⁶ Million US\$

Two sets of factors have played a role in the reorientation towards manufactured exports. On the one hand, the Government offered incentives and restrictions to foster more processing. On the other hand, the private sector found ways and means to seize the new opportunities. New products were developed and put on the market in a very short time. Table 1 demonstrates that the exports of garments accelerated in 1988-89, and gloves and footwear in 1989-90.

It is too early to be sure that this acceleration announces a new trend. Yet, the fact that leather products exports have more than doubled in three years seems more than episodic. Moreover, markets or rather niches, have been created in practically all the countries open to leather products - Europe, Japan, the USA, Middle East countries, East European countries - thus indicating that acceptance is general and based on the competitiveness of Pakistani products.

Pakistan's exports of finished leather and leather products are emerging in the arena of international trade in an atmosphere of intense competition. The internationalization of the world leather industry has already come a long way. The well-known successes of Brazil, South Korea and Taiwan province are being relayed by China, India, Indonesia, Malaysia, Thailand and Turkey. At the same time as Pakistan, countries like Colombia, Mexico, Morocco and Venezuela are appearing and some East European countries are preparing to enter the market. The fact that Pakistan made a break-through in this intensely competitive atmosphere and at a time of world economic depression, can be taken as a very serious indication of competitiveness. To understand the source of this competitiveness it is now necessary to closely look at the industry itself.

⁷Only 12 items account for 85 per cent of Pakistan's exports: cotton yarn, cotton fabrics, cotton garments, cotton made-ups, raw cotton hosiery, synthetic textiles, rice, leather garments, leather, carpets and rugs, sports goods.

⁶Source: Review on Pakistan's Exports (various issues). Export Promotion Bureau, Government of Pakistan, Karachi.

The annual supply of raw material is estimated at 6 million hides (with a predominance of buffalo) and 35 million skins (two thirds of which is goat). Room for improvement exists, not only in flaying (a UNIDO project followed by a FAO project have demonstrated the concrete possibility of improving flaying, salting and curing), but also in the basic condition of the hides and skins. The livestock itself is excellent. Buffalos and cows from Punjab, goats and sheep from Sind are world-renowned races. However, because of the climate and the parasites and because the hides come from animals used for field work, the hides and skins are not in optimum condition. Furthermore, flaying is not done properly, not because of lack of care, but because the slaughterhouse infrastructure is not adequate for optimal flaying (the slaughterhouses are old, congested, badly maintained, poorly supplied with water and electricity, under-equipped); or, simply, because butchering in the countryside or in preparation for Eid-ul Azha - a religious feast - does not necessarily take place in slaughterhouses. Finally, curing and salting - so important in the high temperatures of Pakistan - still leave a lot to be desired, particularly in distant rural areas where salt is expensive. On the whole, notwithstanding the deficiencies, experts consider the raw material of local origin to be reasonably good.

It is certain that improvement will take place even if only at slow pace. In the long run, mechanization will replace animal work and meat consumption will generate feedlots. The normal course of events can be accelerated and this is precisely what the Government is trying to do by providing incentives for the development of cattle and sheep breeding farms. Moreover, as scarcity of hides and skins sets in, traders and tanners are offering price premiums for material in good condition and the butchers are starting to react to the price signals by flaying, curing and salting more carefully.

Thus, both the quantity (more yield) and the quality of the raw material have the long-run potential to grow. Since 1988 the supply of domestic hides and skins is insufficient to meet the demand of the tanneries. The domestic supply deficit is estimated at 50 per cent in 1993 and is destined to increase because there is no way that in the short run the supply of raw material could increase as fast as leather production. There is, however, no risk of bottleneck because imports of hides and skins are allowed in Pakistan free of duty.

On the one hand imported raw material is more expensive than domestic, because larger inventories have to be maintained and - on the other hand - because a change of tannery processing techniques is needed to adjust to the characteristics of imported hides and skins.

In 1991-92, **labour** engaged in the organized sector of the industry is estimated at 50,500 persons. Leather garment manufacture employs 20,300 people and the footwear industry has 14,200 workplaces, i.e. these two leather products manufacturing sectors employ 70 per cent of the total labour engaged in the entire Pakistani leather based industry. In addition to the "organized" sector, the informal sector is known to occupy a large number of artisans. In total, the leather industry employs around 210,000 persons, which is 5.0 per cent of the manufacturing sector's total labour force.

The industry is located all over the country but especially in Punjab where cattle is relatively abundant. Indeed, the demographic rate of growth of establishments is very high in the leather industry. Yet, the main features do not change that easily. It can be seen that there is a concentration of tanneries in Kasur, Karachi and Sialkot. The garment units are mostly installed in Karachi and Sialkot. The footwear units are in Lahore and Karachi. Most of the gloves and leather sports goods units are in Sialkot. Leather goods units are in Karachi and, to a less extent, in Sialkot.

The size of most firms is small with very few exceptions. One such exception which figures prominently is BATA, classified as the 14 largest Pakistani firm. Out of a total of 1,550 units in the

formal leather and leather products industry, 4 employ more than 1,000 persons, 4 have between 1,000 and 500 persons, 160 have between 500 and 25 persons and 1,392 have less than 25 employees.

The 170 largest firms are considered *mechanized*, the others - those with less than 25 employees - have hardly any fixed capital and practically none in the form of machinery.

The labour is comprised essentially of male workers with very low qualifications (some analysts estimate that 90 per cent of the leather workers are illiterate). A rough guess is that only 5 to 10 per cent of the work force in the establishments is female, not because the industry would not employ women, but because tradition refrains from their labour supply⁹. Among homeworkers, however, the percentage of females is very likely to be higher. Children are commonly employed to do light tasks requiring minimum skills. The seasonality of domestic demand and the precariousness of foreign demand favours a system of production in which a large portion of the manpower is released when the order books are emptying. Therefore, home-workers and seasonal workers are common features of the leather labour market. The *salaries* vary regionally and according to qualifications, but a monthly pay equivalent to US\$ 100 is often cited as a representative average for basic workers.

Being a leather-making country as defined in the introduction, not a leather-transforming one, Pakistan must, to a large extent, count on its own forces to acquire technology. In this respect, remarkable achievements have to be credited to the tanneries. From wet-blue, to crust, then to finished leather, the industry learned to perform all the processing operations to the standards required by exacting international markets. Recently, the tanneries demonstrated a great deal of technological autonomy by successfully adjusting successfully their processes to the use of imported raw hides and skins. Much still remains to be done to master the technology of such processes as finishing, buffing and polishing where the quality of finished leather is at stake. At the manufacturing stage the industry is well in command of the cutting and stitching techniques, but in pattern design and in operations management much know-how is still missing.

The channels of technology acquisition differ according to the segment of the industry which is considered. Old and successful tanneries usually send sons or relatives to be trained abroad in the arts of tanning and manufacturing leather products. The large units can hire foreign experts or obtain technological information from machine and chemical suppliers. The small units, however, have to rely on learning-by-doing. If they sell abroad, the foreign clients would contribute to product innovation by setting design, styling, packaging and technical specifications. If the client is a manufacturer, he may contribute to production technology by setting programmes to improve quality. In one instance, technology is being transferred by means of a joint-venture between a Spanish and Pakistani firm.

As leather firms are eager and capable of learning, but find that access to international technology is limited, sporadic and focused by the interest of the donor, there is a strong case for public sector assistance to build-up know-how. Technical knowledge is not the only problem, the industry also faces difficulties in perceiving new market opportunities and in obtaining technicians and training.

⁹Evidence that the industry encourages female employment is that a producer's association gives stipends to women willing to attend training courses in the LEATHER PRODUCTS DEVELOPMENT CENTRE of Sialkot and subsidizes the transportation of female workers living in rural areas to urban establishments.

3. National policy and strategy

The Government policy towards the leather industry is quite liberal. It started in 1989 when a ban was imposed on the export of raw hides and skins later was followed by wet-blue from cows. At the same time a duty of 20 per cent was imposed on the export of wet-blue from sheep and buffalo. Whatever the effect of losing foreign markets was on the value and quality of raw material and semi-processed leather, the restriction on exports oriented the industry towards finishing and manufacturing leather products.

In line with the general privatization policy, the Government fostered an investment-prone atmosphere by releasing investors from the requirement to disclose the origin of the invested funds, authorized importing second-hand machinery without producing a surveyor's certificate and offered loans at concessional rates of interest for the purchase of local machinery. In order to attract foreign know-how, joint-ventures were made unproblematic and repatriation of capital and dividends fully authorized.

The above measures are intended to foster investment in the leather industry and, more specifically, in the downstream stage of the industry. In order that this investment will be as export-oriented as possible, two sets of dispositions complete the above measures. On the one hand, the Pakistani leather industry is placed on par with its international rivals when it comes to accessing the world raw material markets, machinery and parts, by freeing imports from duty (or offering duty draw-backs paid within one week) and red tape. On the other hand, incentives in the form of a 75 per cent income tax rebate, exemption from sales tax and an export finance scheme for footwear - should draw the industry to take advantage of the competitive position in which it is placed.

4. Prior and/or on-going assistance

The Pakistani cattle hides, sheep and goat skins have good inherent quality but are partly downgraded through poor flaying and curing practices. The project DP/PAK/73/027 included the services of a hides and skins improvement expert, who during three years (1975-1977) provided services to the Punjab area and the achievements were encouraging.

Under the project **DP/PAK/89/025**, preparatory assistance was provided in treating tannery wastes in Kasur. In 1991 two consulting firms were engaged under two separate subcontracts to elaborate a detailed comparative techno-economic study for the establishment of a common tannery effluent treatment plant, and a sudy of socio-economic issues related to this subject respectively.

The UNDP/UNIDO project **DP/PAK/89/027** is aiming at starting a facility-cum-training centre for leather finishing in Kasur. It is being set up for the small and medium-scale tanners of Kasur who, following traditional methods, used to process leathers to the wet-blue and crust stage only; these facilities should enable them to master this part of the process, to produce fully finished leather and thus to survive in the increasingly competitive leather market. The building is under construction, all equipment has been ordered; it is expected that the centre can start its services in 1994.

For the past decade UNDP/UNIDO has provided technical assistance to the sector through technical cooperation projects. It started by upgrading the INSTITUTE OF LEATHER TECHNOLOGY (ILT) in Gujranwala under the administration of the PUNJAB SMALL INDUSTRY CORPORATION (PSIC). UNIDO provided the expert services to install and start up machinery and equipment delivered by the Government of the Federal Republic of Germany and provided new syllabi for the training courses.

Through the same project, a small leather garment training centre was established in Karachi. The Karachi leather garment centre was further upgraded under the project **DP/PAK/79/022** and transformed to the LEATHER PRODUCTS DEVELOPMENT CENTRE (LPDC) with a sub-centre in Sialkot for leather gloves and sport goods.

The project **DP/PAK/84/010**, HYDERABAD LEATHER FOOTWEAR CENTER (HLFC), started end-1988. This Centre was designed to assist the Hyderabad small-scale shoemakers and cobblers through a common facility and training centre. The main aim of this project was to provide training and facilities in the process of mechanizing the footwear units in the Hyderabad area. The small-scale manufacturers were expected to be granted soft loans through a WORLD BANK ID credit which was granted to the SIND SMALL INDUSTRY CORPORATION (SSIC). The Centre trained 260 people in footwear pattern engineering, process technology and quality control. Furthermore, it rendered extensive facility and consultancy services in Hyderabad and Karachi. The local staff received onthe-job and overseas fellowship training during the project and, finally, has become well motivated and sufficiently qualified to run HLFC independently. The project was completed early 1993, but SSIC could not provide the required conditions (permanent employment of the instructors, sufficient budget, advertisement of training courses), so the sustainability of HLFC is rather questionable.

The European Economic Community (EEC) has provided assistance to the Pakistani leather products private sector through LIDO during the past 3-4 years. It concentrated on establishing commercial contacts, facilitating representation of local manufacturers in international fairs, providing technical assistance in the form of short expert services and training courses in design and manufacturing technology. Depending on the results of the forthcoming evaluation of this project further assistance may be given in the field of marketing and transferring technology.

Over the past 5-6 years, the *Government of the Netherlands* has provided assistance to the ILT through PSIC. The recently completed evaluation exercise revealed that the project was generally successful, but the Institute should be more responsive to the local private industry requirements.

The Bannu Leather Service Project financed by the WORLD BANK was designed to set up a training-cum-service institution. Due to various reasons the institute had been transformed into a leather goods production unit, which received technical assistance from GOPA CONSULTANTS, through the bilateral programme of the Federal Republic of Germany.

5. Development assistance under consideration

Based on the findings and recommendations of the surveys made under the UNIDO project **DP/PAK/89/025**, a comprehensive programme was elaborated by a joint experts' mission of UNIDO, NORAD and the *Dutch Government*. It has been decided that a *common effluent primary treatment plant (CEPTP)* would be constructed and started up in 1995. The total value of this US\$ 9.4 million project **DP/PAK/93/006** will be financed by UNDP on a cost sharing arrangement with the Dutch and the Norwegian Governments, as well as by the association of Kasur tanners.

UNIDO is planning to launch a sub-regional programme for environmental protection related to the tanning industries in South-East Asia. Pakistan's participation is foreseen in the field of solid waste and sludge processing. The entire pollution control programme, including the eight country projects, are under serious consideration with the international donor community.

The Government of the Netherlands approved further two years assistance to ILT through PSIC. This project aims at making the knowledge and know-how of ILT available to the small scale leather industry with emphasis on reducing the detrimental environmental effect of this industry.

The same donor is considering participation in financing the CETPT in Kasur, if the management aspects of the project are satisfactorily solved. Otherwise they will include in-house improvements in tannery pollution control in the ILT project.

The establishment of a CETPT in the Korangi industrial area of Karachi, known as Karachi Industrial Trading Estate (KITE), is being considered by UNIDO in cooperation with and financial support from EEC. The Government of Pakistan has also applied for assistance in starting a similar CETPT in Kasur.

The Canadian aid agency CIDA, with financial assistance from the WORLD BANK, is implementing a large scale programme to establish WOMEN'S TECHNICAL TRAINING CENTRES under the *National Training Bureau* of the Manpower Division of the Government of Pakistan. Two such centers have been started up and three more are under construction. There are plans to introduce training programmes specially tailored for female workers in appropriate leather products manufacturing.

B. THE PROGRAMME

1. Problem to be addressed

1.1. Present situation

While the larger slaughter houses pay sufficient attention to flaying, curing and storing of *raw hides and skins*, the small abattoirs in the country side supply relatively low-quality material. The infrastructure, hand tools and handling need further improvement. A fairly well elaborated grading system had been used in Pakistan until raw hides and skins have been exported. Unfortunately this practice discontinued when local processing of leather absorbed all the supply.

The present utilization of available hides and skins is demonstrated on Fig. 1. Good quality finished cattle hides are exported to industrialized countries. Larger pieces of sheep and goat skins are processed into leather garment and also sold on the world market. Pakistan has supplied good quality sheep skins in large quantities to Romania, where they were used in fashion glove manufacture for the former Soviet market. Due to the collapse of the latter, Romania has practically stopped its glove export. Consequently, the import of this type of finished leather from Pakistan has decreased dramatically. Therefore, good quality finished bovine leather, sheep and goat skins - especially those of smaller surface - are available in the country and offer a firm basis for production of value added leather products.

Recognizing the above potential private entrepreneurs - primarily tanners and leather garment manufacturers - are planning to invest in *shoe upper, complete footwear* and *glove manufacturing* plants. The private sector has sufficient financial resources to extend their operation and start new manufacturing plants. What is missing is technical know-how and management skills in leather products technology, as well as appropriate support industries, such as local shoe last manufacturing, mould making capacities and quality control facilities. The Government of Pakistan encourages this tendency by offering special facilities (e.g. import duty draw-back, export promotion) to companies making efforts toward downstream production. Starting and/or diversifying leather products manufacturing will create new jobs and offer employment opportunities to the local population.

The main constraints preventing development of the leather products industries are the *lack* of market intelligence and unavailability of skilled labour. All existing institutions are operating under the federal or provincial government organizations at $v_i ry$ low efficiency. LRC has no links with the local leather industry and apparently their attitude will not change in the foreseeable future. Only ILP has facilities for training in footwear technology, but that plant is practically non-operational. LPDC imparts training in leather goods and garment manufacture and renders facility services only in Karachi. Its sub-centre in Sialkot has even more limited resources.

The main leather processing communities in Karachi (Karangi), Kasur and Sialkot face very serious problems with regard to their effluent. The accumulation of solid and liquid waste in some areas reached intolerable levels and presently represent a significant health hazard. No appropriate technology is available in Pakistan for tannery effluent treatment and waste processing - either for individual tanneries or their clusters. If no sound measures are taken toward *environmental protection*, tanneries will have to be closed, which would result in the loss of thousands of workplaces and a drastic decrease of export earnings.

1.2. End of programme situation

The hides and skins improvement scheme will increase the quantity of raw materials supplied to tanneries by eliminating some of the present losses occur as a result of the insufficient incentives and an inadequate collection system. This will also affect leather quality by improving flaying and curing techniques - especially in the rural areas and small slaughterhouses.

By implementing the proposed integrated development of the leather based subsector, a coherent institutional framework will be in operation, providing a reliable basis for human resources development. All assisted institutes will be run by management committees with solid private industry representation. Consequently, their services will be tuned to the actual needs of the manufacturing units. With the introduction of the transfer scheme and study credit earning system, a wide range of educational opportunities, including economic and management skills, will be incorporated into the professional training system. NILT and ILT will train leather technologists of various levels. LPDC and LPDDI will train skilled workers for the leather products industries. The total annual output of these institutions is planned at 20-30 BTech level engineers, 30-40 supervisors and 60-70 highly skilled specialists. Furthermore, every year these institutions will run 10-15 different short courses on selected subjects such as leather finishing, pollution control, design and pattern cutting, production management, quality control, marketing etc. NILT and LPDDI will render laboratory testing, quality assurance and consultancy services to the local leather processing, footwear and leather goods industries. LPDC will be able to provide up-to-date training, facility and extension services to the leather goods, garment and glove manufacturing units.

Entrepreneurs starting to extend their operation in leather products manufacture will find a clear picture regarding *export* possibilities, channels and promotional support. The industrial infrastructure, especially in the footwear subsector (e.g. shoe last and mould manufacture), will provide the local companies with more and more services, which will be at international standards. Most of the finished leather produced in Pakistan will be processed into leather products in the country, thus the *value added* on raw hides and skins will increase considerably. The direct assistance to be offered for private units will improve the quality of products, increase the productivity of labour and utilization of fixed assets. Thousands of *new jobs* will be created and more women will find employment and business (entrepreneurial) opportunities.

Three large clusters of tanneries in Karachi, Kasur and Sialkot will have operational, primary *effluent treatment*, considerably reducing the health hazard of discharged water. Technology and solution will also be available for individual tanneries to clean their effluent and eliminate solid wastes. The Government will be in a much better position to introduce strict standards on environmental protection.

LIDO will be developed into the LEATHER INDUSTRY COUNCIL (LIC), which will have direct private industry involvement and provide the Government with more accurate economic and statistical information on the leather industry sector. Manufacturing units and trading organizations will receive up-to-date information on fashion market trends prevailing on the world scene.

1.3. Target beneficiaries

The programme addresses the requirements of the *entire leather sector* consisting of raw hides and skins collection, leather tanning and finishing - including its pollution control activities - leather products manufacture - including footwear, leather goods, gloves, leather garment and sports goods. It also offers *integration* of efforts made in developing production facilities, support industries, training and service institutions, Government bodies and professional associations. The direct beneficiaries of the programme will be:

- a) tanneries will receive better quality raw hides and skins, improving yield, diversifying the product range, eliminating hazardous wastes;
- b) *leather products manufacturing units* through direct assistance in range building, design and pattern engineering, processing technology, marketing and by establishing direct contacts with the international trade through export and investment promotion;
- c) the entire *footwear subsector* by having established shoe last and mould manufacturing support in the country;
- d) training and service institutions through implementing state-of-the-art professional training programmes, certification of diplomas and receiving direct assistance in strengthening their consultancy capacity;
- e) the Government of Pakistan by having more precise information on production and export of the leather sector, utilization of raw material base and collecting more taxes.

The target beneficiaries of the integrated programme are entrepreneurs and employees engaged in the leather sector. As employment is generated, more and more local workers will have an opportunity to earn their living. The institutes will train middle and top managerial staff of manufacturing units. Reducing the health hazard through efficient treatment of tannery wastes, better living conditions will be available in three industrial cities of the country. Women will have better employment opportunities and/or starting their own businesses.

2. Objectives, outputs and activities

The overall objective of the programme is to **multiply export earnings** by supplying value added leather products such as shoe uppers, footwear, fashion gloves, leather goods and garment at competitive quality and consumer services. The strategy of the Government also includes increasing the utilization of indigenous materials (hides and skins), generating additional employment (including involvement of women), pollution control (especially in the tanning subsector and by utilizing cutting wastes) and human resources development. The increased collection of hides and skins and production diversification (gloves and leather goods) will also contribute to the development of rural areas in the country.

2.1. Programme Objective A

Full utilization of locally available raw material such as bovine hides and goat, kid, sheep and lamb skins by eliminating wastes in quality and volumes.

Output 1

Increased supply of raw hides and skins through an improved collection system. Activities

- Introduce incentives for collection of raw hides and skins in the rural areas.
- Eliminate waste by training in flaying and curing of raw hides and skins.
- Improve transportation and storing facilities.

Output 2

Improved quality of raw hides and skins, elimination of defects and handling errors. Activities

- Revise grading standards for raw hides and skins.
- Training in quality control and grading.

2.2. Programme Objective B

Increase the export potential of the Pakistani leather products manufacturing subsector, facilitate higher export earnings through supplying value added products, achieving of a stable presence on the world market and establishing long-term contacts in foreign trade.

Output 3

A coherent policy and control system promoting production and exporting higher value added on commodities supplied by the tanning, footwear and other leather-based industry subsectors. Activities

- Collect data on existing Government regulations limiting and/or promoting the export of hides and skins, semi-finished and finished leather, footwear components (including shoe uppers), leather goods, gloves, leather garment, upholstery, sport goods and other leather based commodities.
- Analyze Pakistani taxation, custom duty and levy systems with special reference to implementing its efficiency.
- Economic analysis of existing barriers and support measures, evaluate the Government revenues, produce value added and reasons for losses.
- Elaborate a coherent incentive system and recommend their implementation.
- Determine the Government's role in promoting export of value added leather products, recommend non-economic action.

Output 4

Improved supply of good quality finished leather for shoe uppers (including lining), leather goods and fashion gloves.

Activities

- Introduce appropriate tanning and finishing technology in tanneries producing bovine leather and sheep skins.
- Implement in-process grading and sorting system providing maximum yield with regard to quality and surface.
- Organize a seminar on shoe upper and glove leather finishing, disseminate technical information on recipes and quality requirements.

Output 5

Market survey on supply of shoe uppers, footwear, various leather goods and fashion gloves to potential markets in North America, Europe and the Middle East.

Activities

- Prepare promotion material on the features of the Pakistani leather based industries and trade and distribute it at fairs, exhibitions, among foreign representations and potential business partners.
- Prepare special product ranges, samples and technical descriptions.
- Participate in international trade fairs, organization of national days and special campaigns in selected industrialized countries.
- Organize investment promotion meetings in Pakistan and overseas.
- Design and implement country image-enhancing campaigns using mass medias.

Output 6

Opportunity and (pre)feasibility studies on starting new, and rehabilitating existing, leather products manufacturing plants.

Activities

- Identify project ideas (products, plant sizes, locations etc.), potential investors and entrepreneurs.

- Visit trade fairs, potential suppliers
- Detailed market and price analysis, determine product range and justify the plant . size.
- Product costing, determine material inputs by range, volume, quality and possible sources.
- Prepare plant layouts, identify infrastructure requirements, select appropriate technology, compile equipment lists.
- Determine staff and labour requirements, prepare training schedules and management structure.
- Compute financial and economic indicators, analyze of alternative investment schemes, sensitivity analysis of different options.
- Prepare implementation schedules.
- Prepare samples, test marketing of main products.
- Present studies to potential donors, fi. incial institutions, investors and entrepreneurs.

Export information centre on genuine leather and leather products.

Activities

- Select the most appropriate location and premises, design layout, acquire furniture.
- Purchase and install equipment, computer hardware and software.
- Identify technical and marketing information sources, subscribe important international periodicals, establish contacts and cooperation with fashion centres.
- Train local personnel in information maintenance (collection, classification and distribution) using electronic medias.
- Start publishing fashion and market trends and other technical information for local manufacturers.
- Organize seminars and workshops on fashion trends, marketing strategies, technical developments etc.

2.3. Programme Objective C

Increase international competitiveness of the Pakistani leather products manufacturang subsector by improving its product range, quality and services to its customers and cooperating partners.

Output 8

(Certified) quality control laboratories rendering services to the local industry, foreign partners and utilized for training purposes; services in quality testing, assurance and (total quality) management. Activities

- Establish fully equipped chemical and physical material and product testing laboratories at selected institutions (ILT, LPDDI, NILT).
- Prepare the premises, supply special furniture, provide conditioning devices, purchase and install testing and data processing equipment.
- Establish contacts and (if possible) cooperation with leading quality control and research associations specialized on leather and leather products in industrialized countries, enter into twinning arrangement(s) and obtain third party certification rights.
- Select and train local personnel abroad on up-to-date testing and quality assurance methods.
- Start material and product testing services, collect quality related data, publish trends and guidelines on quality and related technology problems.

Introduce quality assurance, total quality control and management systems in selected manufacturing units with special reference to adapting the ISO 9000 family of standards.

Output 9

Extension, facility and consultancy services for the local manufacturing units. Activities

- Determine conditions (including prices and fees) on extension, facility and consultancy survices offered for manufacturers.
- Distribute information on facilities and expertise available at various institutions which can be utilized by private manufacturers
- Start facility services (use of equipment and computer systems), extension services (e.g. pattern engineering and grading, die making, mould design, factory layout design, costing, material and product testing) and consultancy services (in marketing, solving quality and productivity problems).

Output 10

Facility-cum-training Centre for leather finishing in Kasur. Activities

- Finalize layout and infrastructure design, specify equipment, technical guidance in civil works.
- Install and test-run equipment.
- Training of technologist/supervisor and machine operators.
- Prepare recipes, technological guidelines and parameters for machine settings for various types of leather to be finished.
- Train machine operators, organize practical training courses in leather finishing for local tanners.
- Provide extension/facility services.
- Install laboratory equipment for physical and chemical tests.
- Train counterpart in testing methodology including sampling and representation of results.
- Start testing and quality control services related to leather finishing.

Output 11

Direct consultancy services to (private) tanneries, effluent treatment plants, leather products manufacturing units to improve their technology and efficiency.

Activities

- Collect and/or identify requests/needs in direct consultancy and/or technology transfer assistance to manufacturing plants.
- Determine possible sources of information and/or technology, the most feasible ways of assistance (consultancy, subcontracting, in-plant or external training, study tours).
- Provide direct assistance services to the selected companies, plants or manufacturing units in marketing, range building, product development, pattern engineering, layout design and production management, introduce new (high) technology, labour training, quality control.
- Organize "open days", factory visits, seminars, workshops in the assisted companies and plants to disseminate technical information for the entire subsector.

Increased efficiency of the small-scale leather products manufacturing subsector. Activities

- Reorganize ILT management system in order to make it more flexible and responsive to industry needs.
- Enhance the quality control laboratory at ILT.
- Organize short, specialized courses for small tanneries in Punjab.

Output 13

Enhanced support industry potential through well-defined and justified investment opportunities in local production of shoe last, mould, components and selected machinery. Activities

- Opportunity and feasibility studies on starting up and/or rehabilitating local manufacturing facilities for plastic shoe lasts, injection and vulcanizing moulds, cutting dies, basic (e.g. insoles, stiffeners, unit soles, heels) and auxiliary components (e.g. leather board, steel shanks, locks) and simpler types of leather products manufacturing equipment (e.g. die cutting, skiving machines, sole presses).
- Investment promotion seminar(s) in the above areas.
- Direct assistance to shoe last, mould, footwear component and machinery manufacturers in improving quality, productivity and services.

Output 14

Model leather products (footwear, fashion glove or leather goods) manufacturing factory producing high quality products for export according to the actual fashion trends. Activities

- Prepare conditions for technical assistance, repayment, management and use of the revolving fund.
- Identify local investor(s) and potential sources of finance.
- Range building, prepare samples, test marketing.
- Prepare the feasibility study (in several variants).
- Construct or renovate premises, provide the required infrastructure.
- Purchase, install and test-run technology equipment.
- Staff and labour training, determine wages and introduce an efficient incentive system.
- Start production under close supervision of international experts.
- Organize seminars, workshops and factory visits.

2.4. Programme Objective D

Human resources development in the Pakistani leather and leather products industries by establishing a self-sustaining professional training system suitable for raising a new generation of well-educated and skilled specialists - with special reference to managerial skills and capabilities.

Output 15

A coherent professional education and training system built on the transfer scheme and study credit earning philosophy.

Activities

Elaborate the leather industry education and training system based on actual practical requirements, establish links with the local basic and other higher level education systems, certify diplomas.

- Curriculum design, elaborate training programmes and syllabi, certification and equivalence criteria, elaborate the transfer scheme and study credit accumulation system.
- Prepare training programmes and syllabi for specialized and short-term courses.

Fully functional NILT.

Activities

- Start training (short courses in footwear manufacturing) and consultancy activities using the facilities and/or staff of HLFC (to be transferred to NILT).
- Construct premises, install technical and communication infrastructure.
- Establish contacts and cooperation with reputable institutions abroad which provide training in leather based industries, introduce a twinning arrangement.
- Select, purchase, install and test-run pilot plant, laboratory and computer equipment.
- Fellowship training of trainers, lecturers, instructors abroad (if possible at the twin institute).
- Start diploma and certificate courses with international experts' assistance and under supervision of the twin institute abroad, moderation of examinations first in leather processing, later in footwear manufacturing technology.
- Start extension and consultancy services in product development, testing and quality control, production management.

Output 17

Established and functional LPDDI.

Activities

- Construct premises, install technical and communication infrastructure.
- Establish contacts and cooperation with appropriate institutions abroad which provide training and/or technical development services in leather based industries.
- Select, purchase, install and test-run pilot plant and laboratory equipment.
- After on-the-job skill development, fellowship training of laboratory staff and instructors abroad.
- Start courses with international experts' assistance in footwear, leather goods and glove manufacturing technology.
- Start up facility, extension and consultancy services for the local footwear, glove and leather goods industry units.

Output 18

Enhanced LPDCs in Karachi and Sialkot.

Activities

- Review activities, define new functions and professional areas.
- Select, purchase, install and test-run pilot plant (balancing) equipment.
- On-the-job and fellowship training of staff and instructors abroad.
- Start courses with international experts' assistance in the new areas.
- Extend and/or start facility, extension and consultancy services for local industry units.

2.5. Programme Objective E

Adopted and implemented environmental protection philosophy in the local leather processing industry by introducing cleaner technology, establishing tannery pollution control, effluent treatment and solid waste processing.

Common effluent primary treatment plant in Kasur minimizing the environmental degradation caused by the expanding tanning activities - without placing undue economic burdens. Activities

- Reconstruct secondary drainage network within the cluster of tanneries.
- Collect effluent along the Rohi Nullah River, arrange the rain water overflow and connection to the treatment plant.
- Install coarse screen and simple grit/grease chambers, process water meters in every tannery in Kasur.
- Construct suitably sized, common effluent primary treatment plant on the selected site.
- Finalize equipment specification, collect offers and place purchase orders for special equipment.
- Guide national constructor(s) in executing civil works on the plant.
- Install, trial run and commission the plant.
- Advise on the establishing, staffing and management of the company running and maintaining the plant.
- Install and equip a small, specialized effluent treatment control laboratory located close to the plant, put it into operation.
- Construct an intercepting canal to protect the pool from storm water and build a prolongation of the canal to the Pandoki Outfall.
- Prepare the selected dump site for disposal of different solid wastes.
- Practical arrangement for transportation of solid waste from tanneries including sludge from the effluent treatment plant.
- Evaluate available cleaner technologies and their applicability to various types of leather to be produced.
- Recommend more environment-friendly technologies and ways for their gradual utilization in tanneries.
- Measure the micro-climate according to international standards for maximum concentration of potentially harmful and toxic agents in tanneries. Monitor any possible contamination of underground water around the effluent treatment plant.
- Conduct courses, workshops, demonstrations for tanners, consulting companies and specialists of national environmental protection agencies.

Output 20

Common effluent treatment plant (CETP) for tanneries at the Kotangi Industrial and Trading Estate (KITE) in Karachi and a fully operational model chrome recovery unit, installed in one medium-size tannery.

Activities

- Detailed appraisal of the pollution loads from the existing and planned tanneries in the KITE cluster.
- Elaborate the design of the CETP and select appropriate technology for the effluent treatment system to be used in the selected cluster.
- Elaborate equipment specifications and requisition the selected equipment.
- Guide the contractor executing the civil works on the CETP.
- Install, trial-run and commission the plant.
- Train personnel to be attached to the CETP.
- Monitor the CET system.
- Organize a demonstration for tanners on operational aspects.
- Install and equip a small pilot unit to carry out practical development work and train local personnel to use this unit.
- Appraise the processing methods followed by tanners in the cluster, monitor the amount of pollutants generated.

- Evaluate the available cleaner technologies with a view to their applicability under certain given conditions for various types of produced leathers.
- Finalize recommendations and gradually introduce them in all the tanneries in the cluster. Train technical tannery personnel on this subject.
- Design the chrome tanning floats collection system and a pilot scale unit for chrome recovery and calculate its viability. The possibility of simultaneously demonstrating chrome bath recycle to be considered.

Common tannery effluent primary treatment plant in Sialkot. Activities Analogue to those listed for Outputs 19 and 20.

Output 22

Cleaner technologies and primary effluent treatment systems and/or pilot solutions for individual tanneries.

Activities

- Identify appropriate in-house effluent primary treatment technology.
- Select typical tanneries of different sizes and product ranges, make arrangements for entrepreneurs.
- Introduce cleaner technologies and water saving systems.
- Design and install internal treatment systems and chrome recovery units.
- Disseminate information on results achieved and typical solutions available for various tanneries.

Output 23

Appropriate solid waste and tannery by-product processing technology.

Activities

- Assess the present situation regarding solid waste collection and disposal.
- Recommend appropriate measures to ensure optimum collection and disposal of these solid wastes.
- Recommend in-plant physical pre-treatment of effluent before discharging them into the common drainage, to separate coarse materials and grease.
- Advise on the proper utilization of different by-products resulting from tannery operations.

2.6. Programme Objective F

Improve conditions for the involvement of women (employment and entrepreneurship) in the leather-based trade of Pakistan, enhance the possibilities of the participation of women in manufacturing and management activities.

Output 24

A study on social, economic and educational barriers, possibilities and actions to be taken for integration of women into industrial operation with special references to house and family based activities and skill development.

Activities

- Analyze social and economic environment for employing women in Pakistan.
- Survey results achieved by women at various levels of education, industrial employment and entrepreneurship.
- Evaluate special conditions and possibilities on the involvement of women in professional training in the leather-based industries.

- Study tour to similar developing countries where visible results have been achieved in integrating women in the leather industry.
- Feasibility studies on appropriate employment of women (e.g. tamily or home work, manufacture of small leather goods and tourist articles).
- Recommend ways and means to generate higher involvement of women at all levels and areas of leather products manufacture, paying special attention to family conditions, traditions and improvement with regard to opportunities.
- Organize a seminar on survey results, recommendations (made by various local and international agencies) and possible coordination of activities.

Established and fully-functional special training facilities for women in leather products manufacture.

Activities

- Select location depending on employment opportunities, availability of leather products manufacturing units and trading possibilities.
- Acquire and/or reconstruct premises, install infrastructure with special attention to womens' needs.
- Specify, purchase, install and test-run equipment.
- Prepare training programmes and syllabi.
- Train instructors.
- Prepare information to be disseminated on the availability of special courses for women and work/employment opportunities after completing courses.
- Start training courses.
- Organize a seminar or workshop on results achieved and lessons learned, disseminate information on achievements, including recommendations on starting similar activities in other geographical regions.

Output 26

Increased employment of women in the Pakistani leather and leather products industries. Activities

- Survey on the possible ways of family and home work involvement in leather and sports goods, tourist articles, glove and shoe upper manufacture.
- Study tour to other developing countries (e.g. India, Indonesia) using extensive home and women work in shoe upper and glove manufacturing.
- Set up and/or promote organizations catering to home-based leather products manufacture.
- Recommend typical products, technology, hand tools and simple basic equipment required in home-based work.
- Organize short training courses for skill development.
- Establish common facility centres.

2.7. Programme Objective G

Establishment of effective coordination within the leather based industry subsector, ensuring coherent monitoring and control of industrial and marketing activities, relocation of production, pollution control, training, technical development, quality assurance and employment.

Output 27

A coherent policy (advise) indicating principles, measures, initiatives, incentives facilitating increase of value added on hides and skins, leather and derived products.

Activities

- Survey the recent legislation, economic conditions, foreign trade policy, environmental protection regulations, financial facilities and their impact on development of the leather based trade in Pakistan.
- Recommend incentives and measures to facilitate the integrated (balanced and coordinated) development of the leather industry subsector.
- Advise on Government policy to be adopted.

Output 28

Established and functioning Council of Leather Industry (CLI) coordinating marketing, trading and technical development of the subsector in Pakistan.

Activities

- Study similar councils functioning in other Pakistani industry sectors and in the leather based trade in other (developing) countries.
- Formulate the constitution, clear legislation, coordinate with professional associations.
- Organize members, determine services provided for the member companies and institutions.
- Set up CLI facilities, recruit and train personnel, introduce computerized office procedures and database management.

The structure of the proposed assistance to the leather based industries and its expected impact on the utilization of the available material resources are illustrated in *Fig.* 2-4.

Programme results

The basic results which are expected to be achieved by the time implementation of this programme is completed, are as follows:

- An integrated development strategy comes into existence for the Pakistani leather related trade, covering all stages of the processing technology starting from hides and skins development up to the export of various leather products. This would create a reliable base for controlling activity growth and employment in different regions of the country.
- Reliable targets can be set for foreign exchange earnings and employment generation, the related financial balances and processes can be closely controlled and influenced by the Government.
- A clear strategy will be introduced for integrating women in the leather industry, which offers favorable opportunities for female employees and entrepreneurs taking into accounts the specific position of families and traditions.
- A well-formulated, coherent human resources development scheme will be introduced for the leather related industries, which will be comparable by its contents and knowledge base to international standards and will be fully coordinated with the overall education system of the country. The system will provide sufficient flexibility in accumulating the required skills and experience, will match the up-to-date level of technology and will be backed up by an appropriate institutional framework.
- Pollution control standards will be refined and applied. Easily accessible common effluent treatment facilities or individual environmental protection techniques will be available for the local tanning subsector. The air and water pollution problems prevailing in various regions of Pakistan will be drastically reduced and/or completely eliminated.

- The leather products manufacturing sector will produce and export goods meeting international market requirements. Thereby the country will receive additional foreign exchange earnings, through taxes the Government will collect more contributions from the industry and thousands of new jobs will be generated.
- The support industry of the footwear and leather products sector will emerge and provide the necessary basis for quality improvements and consistency of export deliveries.

3. Financial summary and project resources¹⁰

The programme consists of three on-going projects (US\$ 2,098,458) financed by UNDP and through bilateral technical assistance. Five projects (US\$ 18,010,100) were formulated by UNIDO and the Government of Pakistan, of which three (US\$ 12,158,000) are under serious consideration by UNDP, UNIDO (through its *Industrial Development Fund - IDF*). There are nine new project ideas (US\$ 11,428,000). Appropriate financing arrangements have to be sought for four proposed projects (US\$ 9,179,000).

3.1. Government

3.1.1. Government and local contribution to be elaborated locally (based on the respective PC-I documents).

3.1.2. Five projects (total value of US\$ 9,435,000) in the field of *institution building*, *establishing a model leather product. factory and tannery effluent treatment (in Kasur)* may be financed through trust fund arrangements with international (UN) implementing agencies utilizing the locally accumulated export promotion fund.

3.2. UNDP

The UNDP (IPF) contribution is recommended (US\$ 4,425,118) to cover the cost of five projects in the field of hides and skins improvement, women in development, coordinating industrial development, tannery effluent treatment (in Kasur) and establishing a common leather finishing centre (in Kasur). Of these, the one covering the cost of the latter (US\$ 729,118) is on-going assistance implemented by UNIDO.

3.3. Others

- 3.3.1. Two projects dealing with tannery effluent treatment (KITE) and waste processing (US\$ 2,778,000) are foreseen for financing through UNIDO IDF.
- 3.3.2. Two projects (*ILT and WTTC*) are being implemented through bilateral assistance financed by the respective donor countries.
- 3.3.3. Four project ideas associated with marketing assistance, technology improvement (direct assistance), effluent treatment in Sialkot and in individual tanneries (US\$ 9,179,000) need financial resources.

¹⁰See Annex 5.3 for details.

4. Programme strategy

4.1. Approach

The programme is based on a commitment by the Government of Pakistan to facilitate the *integrated development* of the leather related industry sector in the country, assigning to it high priority in the national economy. Emphasis is placed on increasing downstream product manufacture (primarily for export) and introducing an efficient tannery pollution control system. All development efforts should lead to increasing value added on locally available raw materials, expcrt earnings and employment generation. The integrated development programme has a long term objective to introduce up-to-date technology ensuring *self-sustainability* of the sector after the proposed international assistance is completed.

The programme takes into account all efforts made by local, bilateral and international agencies toward enhancing production and marketing facilities, as well as for establishing a coordinated development of the Pakistani leather based industry subsector. UNDP, UNIDO and bilateral financing is recommended for projects concerned with large scale assistance of such general problems as women in development and pollution control. Government and/or self-financing is proposed for those parts of the programme where the direct recipients should be able to recover the costs involved from the (additional) profit generated by the improved and/or extended production, improved quality and services.

The beneficiaries of the direct technical assistance are private companies. Therefore, the expense for assistance received should be (at least partly) repaid. It is recommended to establish a *revolving fund*, which:

- a) will collect the repayment¹¹ made by private entrepreneurs for equipment, direct consultancy or contractors' assistance received through the programme;
- b) will be reused to finance local training and research programmes and/or institutions, local costs involved with employing foreign expertise etc.;
- c) will be managed (controlled) by the newly constituted CLI or a foundation headed by representatives of the private industry sector, Government of Pakistan, LIDO, selected institutes and organizations.

4.2. Participation of national institutions

The programme will be implemented through local institutions, organizations and private companies (mainly manufacturing units) assigned by the Government and/or applying for participation in the activities. The relation between national institutions and the defined programme objectives is summarized in *Table 3*.

A brief description of the local participating organizations' profile is attached as Annex 4. In the case of imparting *training* and rendering *services* to the local manufacturing sector certain specialization of the institutions is foreseen, which is explained in *Table 4*.

4.3. Rationale for UNDP involvement

UNDP was requested by the Government of Pakistan to develop an integrated development programme for the leather based industries of the country. This programme was given shape after fielding various missions, preparation of surveys on the leather sector, organizing seminars and

¹¹The repayment may be interest free and may last several years. The general conditions should be elaborated in cooperation with Government authorities and professional associations.

discussions held with different organizations such as Government bodies, institutions, professional associations, private industry, UN agencies, representations and embassies of potential donors. The Government of Pakistan is committed to implementing this programme and UNDP assistance was sought to facilitate developing the leather related industrial activities. While UNDP would assist in strengthening institutional capabilities, manufacturing and managerial potential in the private sector, the assistance will reach the entire sector by disseminating the relevant technical information, organizing seminars and workshops, providing access for interested parties to manufacturing units participating in the implementation of the programme.

Table 3

Organization of programme implementation

OBJECTIVE	OUTPUT	Main activities	Participating institutions	Implementing agency
A. Better utilization of available raw	1. Increased supply of raw hides and skins	Improving the collection, transport and storage system	LIDO	FAO
materials	2. Improved quality of raw hides and skins	Improving flaying and curing methods, implementation of the grading system	LIDO	FAO
B. Increase export of leather products	3. Export market survey	Analysis of world leather trade, determination of target markets and their segments	LIDO, EPB	ITC, EEC
products	4. Product ranges for selected markets	Design and sample manufacture of various leather products	LPDDI, selected companies	UNIDO
	5. Export promotion campaign(s)	Participation in exhibitions, trade fairs, promotion actions, public relation	EPB, selected companies	ITC, UNIDO
	6. Feasibility studies on starting new shoe upper, leather goods and fashion glove manufacturing units	Preparation of the studies, financial and sensitivity analysis, plant design	LIDO, LPDC LPDDI, NILT	EEC, UNIDO
	7. Export information centre on leather and leather products	Establishment of a technical information base for leather and related products, starting dissemination	LIDO	UNIDO
C. Increase international competitiveness of the local manufacturing sector	8. Quality control laboratories and services	Establishment and/or enhancement of laboratories, introduction of quality assurance systems	LPDDI, NILT, ILT	UNIDO
	9. Extension and consultancy services	Product development, pattern engineering, improvement of production techniques, production management	HLFC, LPDC, LPDDI, NILT	UNIDO
	10. Common leather finishing facility centre in Kasur	Construction of building, installation of equipment, training local personnel, assistance in starting up services	LIDO, private sector	UNIDO

OBJECTIVE	OUTPIIT	Main activities	Participating institutions	Implementing agency
	11. Increased productivity and improved quality in the leather product manufacture	Direct assistance to private manufacturing units	Private sector	EEC, UNIL
	12. Increased efficiency of the private small scale leather products industry	Short training courses for small tanneries, consultancy and common facility services, enhancement of the laboratory, improve ILT organization structure	ILT, private sector	Local consultants, Dutch Government
	13. Enhanced support industry potential	Feasibility studies on shoe last, mould and component production; investment promotion, assistance to shoe machinery manufacturers	LIDO	UNIDO
	14. Model footwear, leather goods or glove factory	Preparation of feasibility study, identification of investors and financial institutions, construction, staff training, start up production, seminars and workshops	NILT, banks, private sector	UNIDO
D. Human resources development	15. Coherent professional training and education system	Curriculum design, preparation of syllabi and certification criteria, elaboration of a transfer scheme and study credit earning system, programmes for short courses	NILT	UNIDO
	16. NILT	Installation of pilot plants, fellowship	NILT	UNIDO
	17. LPDDI	training, twinning arrangement, assistance in	LPDDI	
	18. Enhanced LPDCs	training and education activities	LPDCs	
E. Tannery pollution control and waste processing	19. Common effluent primary treatment plant at Kasur	Plant design, civil engineering, purchase and installation of equipment, assistance in	Private sector	NORAD, UNIDO
	20. Common effluent primary treatment plant at Karachi (KITE)	starting operation	ΡΤΑ	EEC, UNIDO
	21. Common effluent primary treatment plant in at Sialkot		Private sector, Punjab Government	World Bank

OBJECITVE	ΟυΠΡυΤ	Main activities	Participating institutions	Implementing agency
	22. Primary effluent treatment in individual tanneries	Identification of appropriate technology, design and installation of equipment, introduction of cleaner technology, dissemination of results (software input only using the presence of international experts in Kasur)	LIDO, private sector	NORAD, Dutch Government, World Bank, UNIDO
	23. Solid waste and sludge processing	Part of UNIDO South- East Asia subregional programme	LIDO, PTA	UNIDO
F. Women in development	24. Study on integration of women in the leather based industries	Analysis of possibilities of women involvement in professional training, production and entrepreneurship, seminar on coordination of activities	LIDO	UNIDO
	25. Special training facility in leather products manufacture for women	Selection of location, specification, purchase and installation of equipment, training of instructors, preparation of syllabi, start up operation	NTB	CIDA, World Bank
	26. Increased women employment	Organization of house based shoe upper, leather goods, fashion glove, leather sports goods and/or leather craft manufacture	LIDO	UNIDO, CIDA
G. Effective coordination within the leather sector	27. Coherent policy for increasing value added on leather and derived products	Preparation of incentives for export of commodities with higher value added	LIDO, EPB	ITC, UNIDO
	28. Council of Leather Industry	Preparation and adaptation of the constitution, determination of functions and membership conditions, start up services	LIDO	UNIDO

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	Area	ILT Gujranwala	LPDC Karachi	LPDC Sialkot	LPDDI Lahore	NILT Karachi
Professional	Short specialized courses	and the second s	and the second second	allow and	an a	an a
education	One year certificate course				All the Mary 201	
	Two year diploma course					
	Advanced studies					al approximates
Industry	Leather processing					
subsector	Footwear					
	Gloves					
	Leather goods	1				
	Leather garment					
Function	Design, pattern engineering	[
	Consultancy					
	Facility services					
	Tool making					
	Laboratory, quality control					
Geographic	Karachi, Sind Province		and a second and a s			
area	Kasur, Sialkot, Punjab Province					

Distribution of training activities among institutions

5. Arrangements

5.1. Execution arrangements

Nationally, the programme will be executed by the MINISTRY OF INDUSTRIES, Government of Pakistan. The Director General of LIDO will be designated as the *National Programme Director* (*NPD*) and as the representative of the Pakistani Government will be responsible at the apex level for the programme, policy issues and sectoral strategies. The overall coordination of the programme and its day-to-day control will be the responsibility of the *National Programme Manager* (*NPM*) who will be jointly identified by the Government of Pakistan and UNDP; salaries, activities and offices will be funded from the programme budget.

Each of the participating organization will identify an appropriate senior official as the *Project Coordinator* who will work in close cooperation with the *NPM*. Each participating institution, organization, association, private company or their consortium will provide the required staff to be part of the programme team. They will also ensure that counterpart funds are available as required for various activities under the programme. The Government will provide full support for implementing the programme.

All programme activities will be overseen by the PROGRAMME MANAGEMENT COMMITTEE (PMC) consisting of the following members:

Additional Secretary of the MINISTRY OF INDUSTRIES as Chairman

Joint Secretary of the MINISTRY OF COMMERCE

Deputy Secretary of the ENVIRONMENTAL AND URBAN AFFAIRS DIVISION (EPA)

Resident Representative of the UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

Director General of the LEATHER INDUSTRY DEVELOPMENT ORGANIZATION (LIDO), also as National Programme Director

Director General of the EXPORT PROMOTION BUREAU (EPB) as Vice Chairman

Chairman of the PAKISTAN TANNERS ASSOCIATION (PTA)

Chairman of the FOOTWEAR MANUFACTURERS ASSOCIATION (FMA)

Chairman of the PAKISTAN GLOVES MANUFACTURERS AND EXPORTERS ASSOCIATIONS (GMEA)

The following personnel will also be invited to PMC meetings in an advisory capacity:

Two foreign representatives of the private leather industry sector (selected jointly by the Government of Pakistan and UNDP)¹²

All Project Coordinators

Backstopping Officers of UN Implementing Agencies

The functions of the PMC will be:

- to monitor, review and guide implementation of the programme;
- to consider the work plan prepared and updated on an annual basis and amend, modify and/or endorse the same;
- to take into account the recommendations of independent consultants, UNDP and implementing agencies and initiate corrective action or make strategy modifications as considered necessary;
- to coordinate all external assistance programmes and projects aimed at overall development of the sector and promote linkages within the sector;
- to ensure that all required action is taken, progressively move towards achieving programme objectives within the set duration;
- to discuss and initiate action on policy related and other relevant matters considered

¹²Only travel and local expenses will be reimbursed from the programme budget.

necessary for integrated development of the leather sector;

- to act as an effective link between and among the Government, institutions and the private sector.

While the programme objectives and the expected results are broadly defined in this document, the specific work plan will be developed according to the following scheoule:

- a) As soon as the Programme Document is approved the implementing agencies, together with the NPM and the respective Project Coordinators, will draw up an overall work plan for the entire duration of the programme, list activities and inputs to be provided linking them with the counterpart activities, define detailed benchmarks.
- b) The work plan for the entire programme and all its projects will be modified, amended and corrected on an annual basis, including rephrasing and reallocating resources within the programme.
- c) The work plan will be reviewed and endorsed by PMC and approved by UNDP also annually.

5.2. Implementation arrangements

This programme will be implemented through interlinked projects, which will have their own terms of reference, requested contribution to the programme objectives, a responsible local implementing organization, list of activities and inputs, expected outputs and indicators of achievement assessment. In order to reduce risks, certain prerequisites may be stipulated for each project. The project budgets are regarded as *indicative allocations* and are subject to periodical revisions in accordance to the procedures established by UNDP and the donors. Based on the evaluation of progress in implementing, delivery reports and producing the required outputs (measured against benchmarks), funds may be reallocated to other projects of the integrated programme. Implementing agencies will be involved by signing *letters of agreement* with the Government of Pakistan and the respective agency, which describe responsibilities, procedures and determine project budgets.

Projects foreseen by the programme are included in Table 5.

6. Monitoring and evaluation

6.1. Benchmarks

Indicative benchmarks for each component and output of the programme corresponding to the set objectives and expected results will be set during the formulation of the overall work plan. These benchmarks will regularly be refined and quantified together with the yearly work plans. The PMC will specifically review progress of achievement of benchmarks and decide on further revisions and modifications accordingly.

6.2. Monitoring

Monitoring programme implementation progress will be the joint responsibility of NPD, NPM and PMC (hereafter referred to as *programme management*), and UNDP. While the UNDP field office will extend full support in execution arrangements, the programme management will closely

interact with UNDP and UN specialized agencies to ensure successful execution and implementation of the programme.

The UNDP Central Evaluation Office will provide details of the monitoring system to be introduced for impact assessment.

6.3. Reporting

Programme and project reports will be made annually by NPM (endorsed by NPD) and Project Coordinators respectively in accordance with the UNDP rules and regulations.

6.4. Evaluation

In addition to the annual reviews, the programme will be subject to evaluation once as a mid-programme exercise and for the second time at the end of implementation. The composition of the evaluation team and timing of evaluation will be decided in consultation with the Government of Pakistan.

6.5. Auditing

The programme will be subject to auditing as per UNDP regulations.
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Organization of programme implementation

	оитрит	Project No.	Project title	Local implementing agency			
NEW	1, 2	PAK/93/X01	Hides and skins improvement	LIDO			
projects	3, 4, 5, 6	PAK/93/X02	Marketing assistance to the Pakistani leather based industries	LIDO			
	9, 11, 13PAK/93/X03Improvement of the production technology in the Pakistani leather products sector8, 17TF/PAK/93/X04Establishment of the Leather Products Design and Development Institute (LPDDI)8, 16TF/PAK/93/X05Establishment of the National Institute of Leather Technology (NILT)						
	18	TF/PAK/93/X06	Assistance to Leather Products Development Centres (LPDCs)	LPDCs			
	24, 25, 26	PAK/93/X07	Enhancing women's participation in leather products manufacture	LIDO			
	14	TF/PAK/93/X08	Establishment of a model leather products manufacturing plant	РТА			
	7, 27, 28	PAK/93/X09	Coordination of technical development activities in the leather sector	LIDO			
On-going projects	10	DP/PAK/89/027	Common leather finishing centre in Kasur	LIDO, private sector			
	9, 11	NET/01	Assistance in enhancing services to the small scale tanning and footwear industry sector (Bilateral assistance financed by the Dutch Government)	psic, ilt			
	25	WB/01	Establishment of Women's Technical Training Centres (World Bank - CIDA project)	NTB, LIDO			
Projects under	19	DP/PAK/89/025	Establishment of a common effluent primary treatment plant in Kasur	Private sector			
conside- ration by donors	20	US/PAK/92/120	Establishment of a common effluent treatment plant in Karachi (KITE)	РТА			
	23	US/RAS/92/120	Tannery waste and sludge processing (Part of the UNIDO South-East Asia programme)	LIDO, PTA			
	21	DP/PAK/92/124	Establishment of a common effluent primary treatment plant in Sialkot	Private sector			
	22	PAK/93/XXX	Primary effluent treatment in individual tanneries	LIDO			

C. SUSTAINABILITY ANALYSIS

The integrated development programme will contribute to the self-sustainable operation of the Pakistani leather processing and leather products manufacturing sector. In other words, the institutions and organizations established or strengthened by the programme will have to be able to *successfully* carry on their activities without further assistance. Private manufacturing units and effluent treatment plants should also be in a position to operate at the achieved productivity, quality and efficiency level by using the transferred know-how, trained local personnel and assistance from local institutions. The entire sector will also feature a high degree of selfsustainability as the necessary knowledge base and certain experience will be available in various organizations, institutions, production and trading units within the country. The established organizations, together with specialists receiving fellowship training, participating in study tours overseas, will posses the capabilities required to initiate new projects, solve productivity and quality problems, design executing marketing action, negotiate conditions for trade relations etc. The policy making organs and Government offices will have access to all the relevant (international) information required for decision making, at the same time reliable information sources will be available within the country.

Institutions dealing with *human resources development* for the local leather related industries will have established professional education and training programmes, as well as support from reputable foreign institutions. They will have all the syllabi, training manuals, handouts and audiovisual aids required for raising a new generation of technologists and managers. Their facilities (e.g. pilot plants, laboratories, computers) will be at the international level. The established twinning arrangements, the continuous monitoring of the training activities, moderation of examinations, equivalencies of certificates and diplomas will maintain the achieved standard. The strong involvement of the private sector in the management and (partly) funding the training institutions is the strongest possible guarantee for the self-sustainability.

The (common) effluent primary treatment plants will be state-of-the-art and will provide efficient reduction of industrial hazards generated by the tanning industry. Private tanners will have to contribute to the operation of these plants and will be involved in their management as well.

The COUNCIL OF LEATHER INDUSTRY (CLI) will be a body coordinating the interests of the manufacturing sector and the Government of Pakistan. It will maintain close cooperation among professional associations, trade promotion organizations, financial institutions, Government offices and local consulting institutions. The necessity of arriving at a consensus in major economic, technical and industrial policy issues will lead to solutions satisfying all parties concerned.

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D. PRIOR OBLIGATIONS AND PREREQUISITES

1. At programme level

1.1. The Government of Pakistan will provide funds for all the counterpart activities as envisaged under this *Programme Dccument* for its implementation. This includes the provision of land, construction of building, staff salaries, procurement of indigenous equipment and other related activities. The Government will also provide required staff as project team(s) for the entire programme.

1.2. Required administrative and financial powers will be available to the *National Programme*.

1.3. As required under national execution, the MINISTRY OF FINANCE will arrange for opening separate foreign exchange account(s).

1.4. The National Programme Manager will be appoint before the programme commences, as per the agreement between the Government and UNDP.

1.5. On approval of the *Programme Document*, the PROGRAMME MANAGEMENT COMMITTEE (PMC) will be formed immediately.

1.6. The MINISTRY OF INDUSTRIES, as the responsible executing agency for the programme will arrange for designating the *National Project Directors* for each counterpart institution and/or organization immediately after approval of the *Programme Document*.

1.7. Project team(s) will also be established within each counterpart institution, consisting of all such personnel who are expected to be part of the implementation during the duration of the respective project.

1.8. The Government of Pakistan will confirm the availability of a counterpart budget for each participating institution and activities listed as per the *Programme Document*.

2. At project level

2.1. Local counterparts will be employed at reasonable conditions to ensure sustainability of institutions and organizations assisted.

2.2. Local institutions will have to form a *managerial board* in which representatives from the private industry should be in the majority and have deciding power. Government delegates will have the role to ensure the original objective of the institutes.

2.3. Private companies receiving assistance through the programme have to (legally) commit themselves to:

- a) provide access to other Pakistani manufacturers to their premises during and after the project implementation and facilitate multiplication of results achieved;
- b) actively participate in disseminating technical information and experience received and/or accumulated through the assistance,
- c) repay (in local currency) to the revolving fund the costs involved with receiving substantial assistance in form the of equipment, expertise and foreign contractors' services.

E. LEGAL CONTEXT

1. The *Programme Document* shall be the instrument envisaged in the supplemental provisions to the project document, attached hereto. The host country implementing agency shall, for the purpose of the supplemental provisions to the project document, refer to the Government cooperating agency described in the *Supplemental Provisions*.

2. The following types of revisions may be made to this *Programme Document*, with the signature of the UNDP *Resident Representative* only, provided he or she is assured that the other signatories of the *Programme Document* have no objections to the proposed changes.

- a) Revisions or additions of any of the Annexes of the Programme Document (with the exception of the Standard Legal Text for non SBAA countries which may not be altered and agreement to which is a pre-condition for UNDP assistance).
- b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the programme but are caused by the re-arrangements of inputs already agreed to or by cost increases due to inflation; and
- c) Mandatory annual revisions which rephase the delivery of agreed programme inputs or increased expertise or other costs due to inflation or take into account agency expenditure flexibility.
- 3.1. The Government implementing agency designated on the cover page of the *Programme Document* has been duly delegated by the Government coordinating authority, the *Economic Affairs Division*, MINISTRY OF FINANCE, to carry out this programme and accordingly will follow the NEX accounting, financial reporting and auditing procedures set forth in the following documents as may be amended by UNDP time to time:
 - a) the Accounting and Financial Reporting procedures set out in UNDP Programme and Projects Manual (PPM), Section 30503, Subsection 6;
 - b) the UNDP Audit Requirements set out in PPM, Section 30503, Subsection 7.0; and
 - c) the UNDP Government Execution Manual (GEM).
- 3.2. The above documents are an integral part of this *Programme Document* although incorporated herein only by reference. They have already been provided to the Government and said Government implementing agencies.
- 3.3. The officially approved auditors shall undertake periodical management and financial audits of the programme in accordance with UNDP auditing procedures for nationally executed programmes/projects, pursuant to the Government's overall national execution responsibilities under the *Programme Document* and as set out in the documents listed above.
- 3.4. In addition, all accounts maintained by the Government for UNDP resources may be audited by the UNDP internal auditors and/or the UNITED NATIONS BOARD OF AUDITORS or by public accountants designated by the UNITED NATIONS BOARD OF AUDITORS.

F. BUDGETS

The detailed *indicative* budgets for the years 1994 to 1998 are attached hereto as *Annex 5* (one for Government counterpart inputs and the other for UNDP-provided inputs).

G. ANNEXES

- 1. Work plan
- 2. Schedule of reviews
- 3. Standard annex
- 4. Profile of participating institutions and organizations
- 5. Indicative project budgets
 - 5.1. Government and/or counterparts' budgets
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- 7. Organizational structure
- 8. Terms of reference for subcontracts
- 9. NEX procedures

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Fig. 1



PARISTAN

Polly

programme

MAIN FUNCTIONS







Fig. 4

Recommended financing scheme

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Project			UNDR	UNIDO	Bilateral	Truet fund	Muidentified	TOTAL	
status	number	title		IDF	assistance		<i>umunnji</i>	4 V 4 / h W	
Proposed	PAK/93/X01	Hides & skins improvement	465,000					465,000	
NEW	PAK/93/X02	Marketing assistance			(********	1,474,000	1,474,000	
	PAK/93/X03	Improving technology	******		*********	******	1,853,000	1,853,000	
	TF/PAK/93/X04	Establishment of LPDDI		*****	*********	1,621,000		1,621,000	
	TF/PAK/93/X05	Establishment of NILT	*****	***********	******	3,344,000	······································	3,344,000	
	TF/PAK/93/X06	Assistance to LPDCs		*********	******	990,000	*******	990,000	
	PAK/93/X07	Women in development	194,000	• • • • • • • • • • • • • • • • • • • •	**************************************	61) 4) 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	*********	194,000	
	TF/PAK/93/X08	Model leather products factory	· • • • • • • • • • • • • • • • • • • •		******	950,000		950,000	
	PAK/93/X09	Coordination of development	537,000		*** *********************************	******	***********	537,000	
On-going	DP/PAK/89/027	Finishing centre in Kasur	729,118					729,118	
	NET/01	Assitance to ILT/PSIC	********	••••••••••••••••••••••••••••••••••••••	1,159,340	, ************************************		1,159,340	
	WB/01	Establishment of WTTC		***********	210,000	******	, , , , , , , , , , , , , , , , , , ,	210,000	
Under	DP/PAK/90/006	Effluent treatment in Kasur	2,500,000		4,350,000	2,530,000		9,380,000	
conside- ration	US/PAK/92/120	Effluent treatment KITE	·······	2,455,000	44499949294294294999999999999999999999	*******	********	2,455,000	
	US/RAS/92/120	Tannery waste processing	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	323,000		********		323,000	
	PAK/92/XX1	Effluent treatment in Sialkot	• • • • • • • • • • • • • • • • • • •	4 ***** ******************************	**********	19995 FE	5,090,000	5,090,000	
	PAK/93/XX2	Effluent treatment in tanneries	······································	******	*********	***************	762,000	762,000	
On-going and pipeline projects		3,229,118	2,778,000	5,719,340	2,530,000	5,852,000	20,108,458		
Projects needing financing			1,196,000	0	0	6,905,000	3,327,000	11,428,000	
GRAND TOTAL				2,778,000	5,719,340	9,435,000	9,179,000	31,536,458	

Annex 5.3

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Annex 5.2

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International programme inputs

Project		Experts		Subcont.	Training		Equipm.	Misc.	TOTAL	
status	number	title	w/m	US\$	US\$	m/m	US S	US\$	US \$	US \$
Proposed NEW	PAK/93/X01	Hides & skins	24	375,000		12	85,000		5,000	465,000
	PAK/93/X02	Marketing assistance	51	810,000	280,000	40	330,000	40,000	14,000	1,474,000
	PAK/93/X03	Improving technology	108	1,780,000	************		55,000		18,000	1,853,000
	TF/PAK/93/X04	Establishment of LPDDI	55	840,000	************************	15	95,000	670,000	16,000	1,621,000
	TF/PAK/93/X05	Establishment of NILT	64	980,000	360,000	45	276,000	1,710,000	18,000	3,344,000
	TF/PAK/93/X06	Assistance to LPDCs	43	720,000	**************************************	15	93,000	170,000	7,000	990,000
	PAK/93/X07	Women in development	6	108,000	*************		22,000	60,000	4,000	194,000
	TF/PAK/93/X08	Model leather products factory	36	660,000	180,000	15	98,000	*************	12,000	950,0()0
	PAK/93/X09	Coordination of development	60	430,000	***************		24,000	63,000	20,000	537,000
On-going	DP/PAK/89/027	Finishing centre in Kasur	22	268,083			60,000	393,277	7,758	729,118
	NET/01	Assitance to ILT/PSIC	96	846,154	******		32,967	184,066	96,153	1,159,340
	WB/01	Establishment of WTTC	6	115,000			6,000	86,000	3,000	210,000
Under conside- ration	DP/PAK/93/006	Effluent treatment in Kasur	92	1,562,000				7,818,000		9,380,000
	US/PAK/92/120	Effluent treatment KITE	63	348,000	350,000	15	110,000	1,632,000	15,000	2,455,000
	US/RAS/92/120	Tannery waste processing	12	210,000		3	26,000	85,000	2,000	323,000
	PAK/93/XX1	Effluent treatment in Sialkot	48	820,000		6	24,000	4,200,000	46,000	5,090,000
	PAK/93/XX2	Effluent treatment in tanneries	9	165,000			19,000	570,000	8,000	762,000
		GRAND TOTAL	795	11,037,237	1,170,000	166	1,355,967	17,681,343	291,911	31,536,458

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RESTRICTED



INTEGRATED LEATHER TRADES/INDUSTRY DEVELOPMENT PROGRAMME

NC/PAK/92/040/11-01/J13104

PAKISTAN

Technical Report: Programme preparation mission

Prepared for the Government of Pakistan by the United Nations Industrial Development Organization, acting as implementing agency for the United Nations Development Programme

Based on the work of Mr. Timo Niklas-Salminen, Leather and Footwear Industry Expert

Substantive officer: Mr. A. Zeweri, Area Programme Officer

United Nations Industrial Development Organization Vienna

^{*} This document has not been edited

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EXPLANATORY NOTES

A. Local currency

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Value of local currency on 21 May 1993:

USD 1.00 = Rs. 26.50

B. Definitions

Abbreviations etc.

Export levy surcharge (0.25% of FOB price)
- Hyderabad Leather Footwear Centre, part of SSIC
Institute of Leather Technology, Gujranwala
- Leather Industries Development Organization
- Leather Products Development Centre (in Karachi and Sialkot)
- Machine
 Ministries of Industries, Government of Pakistan
- National Institute of Leather Technology, Karachi (planned)
- Punjab Small Industry Corporation, Lahore
- Pakistan Rupee
Sind Small Industries Corporation
- United Nations
- United Nations Development Programme
- United Nations Industrial Development Organization
- USA dollar

ABSTRACT

Title of the programme: Integrated Leather Industry Development Programme in Pakistan.

This mission was comprised of a four-member team. It assessed the present situation of the leather-related trade/industries in Pakistan covering hides and skins resources, production and marketing opportunities, export potential, employment generation and environmental aspects. We prepared the *Draft Programme Document* for the *integrated* development of this sector - including all efforts by local authorities through bilateral and international technical assistance and investment projects. Goals were determined, development strategy, target areas, and the magnitude and structure of UNDP/UNIDO assistance to be provided to Pakistan in the next three to five years.

The team evaluated the trade situation and prepared the Draft Programme Document. The substance of this technical report is part of the effort in drafting the programme.

The team recommends that the overall objective of the Programme be to multiply export earnings through supplying value added leather products such as shoe uppers, footwear, fashion gloves, leather goods and garment at competitive quality and consumer services. The strategy of the Government also includes increasing the utilization of indigenous materials (hides and skins), generating additional employment (including development of women), pollution control (especially in the tanning subsector and utilizing cutting wastes) and human resources development. The increased collection f hides and skins, diversification of the production (gloves and leather goods) will also co. ribute to the development of rural areas in Pakistan.

It is also recommended that the **role or function of the planned integrated programme** be to facilitate the integration of the projects to render knowledge-based assistance in the form of training, consultancy and equipment to Pakistan's leather and leather products industry and its material supply in more advanced design, marketing and production methods than those still commonly used in the trade such a way that it will have a multiplying added value effect on society.

It is recommended that the programme cover the following objectives:

- A. Better utilization of available raw materials
- B. Increase export of leather products
- C. Increase international competitiveness of the local manufacturing sector
- D. Human resources development
- E. Tannery pollution control and waste processing
- F. Women in development
- E. Effective coordination within leather sector

The primary activities related to these objectives, participating institutions, implementing agencies and industry integration in running the institutes are suggested in the programme document.¹

¹ Refenece 11

I. INTRODUCTION

This technical report was prepared by Timo Niklas-Salminen, Leather and Footwear Industry Expert, after completing the planning mission for the Integrated Leather Industry Development Programme in Pakistan. The duration of the mission was one month in Pakistan, from 3 May to 2 June 1993, including debriefing in Vienna. The expert was one member of the team, other members were: Mr. Shuja-Ud-Din Siddiqui, Leather Industry Development Organization (LIDO), Pakistan; Mr. Ghislain Robyn, Senior Industrial Development Officer, UNIDO; and Mr. Ferenc Schmél, Backstopping Officer, UNIDO.

The purpose of the mission was to assess the present situation of the leather related trade/industries in Pakistan covering hides and skins resources, production and marketing opportunities, export potential, employment generation and environmental aspects. A further objective was to prepare the *Draft Programme Document* for the *integrated* development of this sector - including all efforts by local authorities through bilateral and international technical assistance and investment projects; determine goals, a development strategy, target areas and the magnitude and structure of UNDP/UNIDO assistance to be provided to Pakistan in the next three to five years.²

The team was attached to the UNDP/UNIDO Office in Islamabad and cooperated with the Leather Industry Development Organization (LIDO). Government officials, training and research institutions, trade associations, companies and some donor organizations were visited.³

The mission team collected and assessed information and ideas of the trade and its environment, development level, present development goals, plans and activities, and the potential of the Pakistani hides and skins, leather and leather products trade/industries on the world market. Based on this information and ideas, the team created a concept for the trade and its environment, defined critical development gaps, and made recommendations on policy and drafted the integrated programme for the development of the leather and leather products industry in Pakistan.

This technical report is part of the team's effort to formulate the programme.⁴

II. SET OF INDUSTRIES

The World leather and leather products industry can be characterized as being an integrated set of industries, each having its own technologies and types of products and markets. This set of industries can be broadly divided into three stages of manufacture:

- i) Processing of raw hides and skins into semi-finished leather.
- ii) Processing semi-finished leather to finished leather.
- iii) Manufacture of leather footwear and other leather products from finished leather.

² Duties of the expert, see Annex 1, Job Description.

³ See Annex 2.

⁴ Refefence 11

In the first stage of manufacture (i), the product output, is a large variety of types of semi-finished leather. From the second stage (ii), the output is types of finished leather; and from the third (iii) stage, the output is leather products such as footwear, leather garment, leather gloves, leather goods, leather sporting goods, etc. Each of these industries are served by a large number of auxiliary industries, producing:

a) semi-finished and finished leather auxiliaries:

- mineral and synthetic tanning agents, vegetable tanning extracts, fat liquor, casein and resin binders, pigment dispersion, lacquer and lacquer emulsions and finishing auxiliaries, drum dyes, dye solutions;

b) footwear auxiliaries:

- textile and synthetic upper and lining materials;

- leather, PVC, rubber, polyurethane etc. soles, heels;

- leather, cellulose, leather board, non-woven etc, insoles;

- auxiliaries (e.g. threads, nails, reinforcing tapes, laces, buckles, decorations, zippers;

- toe puffs, shanks, stiffeners/counters, and other components;
- adhesives, polishes, etc. chemicals;
- shoe lasts, moulds, cutting dies, hand and machine tools;
- packaging materials and accessories;

c) leather goods auxiliaries:

- locks, zippers, buckles, frames, fasteners, rivets, lining materials etc.;

d) production equipment:

- tannery machinery (e.g. wooden drums, fleshing and splitting machines, drying units, shaving and finishing equipment);

- equipment for leather products manufacturing (clicking presses, sewing machines, equipment for lasting, making and finishing;

- transporters and conveyers.

III. LEATHER AND LEATHER PRODUCTS INDUSTRY OF PAKISTAN

Administratively, Pakistan is divided into four provinces: Punjab, Sindh, Northwest Frontier Province (NWFP) and Baluchistan, as well as the Federally Administered Tribal Areas (FATA). The main concentration of the leather and leather products industry is in Punjab and Sindh.

During the last decade, the Pakistani leather and leather products industry sector has made great progress. The industry used to be export raw hides and skins and semi-processed leathers, but has successfully converted its operations towards more value-added finished leathers and leather products such as leather garments, gloves, sport goods and other leather goods. This transition required profound structural changes as well as large investments from the private sector. Industry development was supported through various measures, provided by the Government as recommended by the Leather Industry Development Organization (LIDO). This included duty drawbacks on exports, soft loans and duty free imports of machinery.

These changes have also required substantial inputs in training manpower, i.e. skilled workers, technicians, designers, middle management and entrepreneurs and transferring knowhow. There is no doubt that the previously executed UNDP/UNIDO and other donor projects have, to a large part, been instrumental in providing training and part of the transfer of technology. In some subsectors, like the leather garment sector, the UNDP/UNIDO assistance has apparently been the main source for the successful transfer of know-how and subsequent increase in exports.

The industry still has many opportunities to add value and share in the world market. Export potential appears to be significant in leather products, especially in footwear.

The leather products sector provides value-added opportunities in export and is labourintensive, generating employment to a large labour force. This sector in Pakistan consists of a large number of private, medium and small-scale cottage industries. Though gender-segregated data at different levels in the work force is not really available, it is estimated that around 60 per cent of operations are performed by women. Therefore, this sector, as it is becoming more export oriented, could provide excellent employment opportunities for both genders.

Pakistan's leather products industry is clearly divided into the following five subsectors:

Leather garment manufacturing; Footwear manufacturing; Shoe upper manufacturing; Leather gloves manufacturing; Leather sports goods manufacturing; Leather goods manufacturing

A. Leather manufacturing

Pakistan has some 526 large and small tanneries (semi-finished or finished leather processing) spread throughout the country; the large, modern tanneries produce the majority of leather. Many of the large tanneries are comparable in technology, quality and volunce of production to modern tanneries in de cloped countries.

About 114 tanneries are in Karachi, where approximately 25 units are fully-mechanized and the rest semi-mechanized. Hyderabad, Lahore, Multan, Sahiwal, Faisalabad, Sheikhupura, Guijranwala, Sialkot, Kasur and Peshawar also have tanneries.

In Kasur, there are some 163 tanneries working on a cottage-industry basis, and a few larger mechanized units.

Large unit concentration in Karachi is mainly due to the easier access to international markets. Tanners in Karachi specialize in goat/sheep skins, units in Lahore process buffalo/cow hides while those in Sialkot cater to the requirements to the local sports goods industry.

As most of the tanneries in Kasur are in the city centre, effluent flow presents problems. Another tannery cluster in Korangi industrial estate in Karachi has a similar predicament.

B. Leather garment manufacturing

The leather garment industry for export is the success story and it is now hoped that this can be repeated with other leather products, particularly in footwear.

There are an estimated 297 leather garment units in Pakistan, most of them are either small or medium-sized, producing about 100 or less leather garments daily. Some factories are big enough to produce 500-1,000 leather garments per day.

Many tanners have added value by starting leather garment units. Much of the leather garment industry is concentrated in Karachi in the Sindh Province. The majority of skin tanners, the basic raw material for leather garments, are situated in Karachi. The remainder are located in Punjab Province, mainly in Sialkot. This industry is growing rapidly, the production is almost entirely exported. Pakistan has succeeded to enter the export market not only with finished leather, but also with leather garments.

Pakistan imports garment leather (skins). Small skins and poorer quality skins could be used in a larger volume for making gloves for export.

In Pakistan's leather garment industry, a worker's productivity is quite low compared to that of countries like South Korea where a worker is able to produce up to 5 jackets per man/machine per day. In Pakistan workers produce only 1-4 jackets daily, at an average of 1.5 jackets depending on the design and lot size.

C. Footwear manufacturing

An estimated 316 semi-mechanized/mechanized footwear manufacturing units⁵ exist, including 12,000 artisan units, the latter representing about 75 per cent of production.

In Punjab Province the main centre of footwear production is the Lahore area, besides towns such as Guijrat, Gurjanwala, Sialkot, Faisalabad, Multan, RawaIpindi. In Sindh Province Karachi and Hyderabad are the major centres of leather footwear production.

The local footwear market is dominated by two large companies, BATA and SERVIS, both having their main manufacturing activities around Lahore and producing some 20 per cent of the total local supply.

Pakistan's export of footwear is still small. In Hyderabad, Sindh Province, however, FATEH INDUSTRIES recently built two large, modern plants for export production. A few other enterprises are modernizing and exporting complete footwear. As the shoe auxiliary industries of exportable quality does not yet exist in Pakistan, the factories are compelled to import soles and other components.

There is need for technology transfer and modern skills enhancement in order to build up the emerging footwear export industry. It appears, and it is hoped, that the tanneries will repeat the success story of leather garment export in the footwear and shoe upper industry.

Pakistani leather manufacturers are exporting shoe upper leather. This could be used for added value by producing leather footwear or shoe uppers for export.

The present footwear taxation system acted as deterrent in establishing mechanized and organized footwear units, e.g. a 12.5% sales tax is levied on footwear priced over Rs. 250. Units classified as cottage industry are exempt from such levy. Secondly, it acts as an incentive for units to remain small instead of expanding and benefitting from economies of scale, thus discouraging expansion and upgradation.

⁵ Only a handful of footwear manufacturing units can be regarded as modern.

D. Shoe upper manufacturing

The leather shoe upper industry is relatively new in Pakistan. There are only a few units manufacturing shoe uppers, mainly tanners who have diversified to this trade. Some others are planning to follow this example.

After successfully exporting uppers for the last five years, some of the manufacturers are now planning to enter into the production of complete footwear.

As in footwear, in shoe uppers there is also the need for technology transfer and modern skills enhancement for building up the emerging export industry.

E. Leather Gloves manufacturing

Gloves are mainly manufactured for export, this includes industrial gloves and sports gloves; production is concentrated in Sialkot which makes 70-80 per cent of the country's output in 208 factories. Other centres are located Karachi and Lahore.

The production of fashion/dress gloves, including high quality sports gloves - such as golf gloves - is not yet developed in Pakistan in spite of attractive marketing prospects and the availability of suitable local leather, i.e. smaller sheep skins. Greater skills are also needed for this particular line, but are unavailable in the country where the sub-sector consist of 250 factories, located only in Sialkot.⁶

F. Leather sport goods manufacturing

The leather sports goods industry is mainly comprised of judo and karate articles, horse harnesses, saddlery, and balls for cricket, volley ball, hand ball etc. The production techniques for these articles, including waterproofness of leather and marketing, need to be improved.

G. Leather Goods manufacturing

This sub-sector manufactures wallets, bags, travelling requisites and desk articles. This sector is the least developed in comparison to other leather and leather products. There are only a few small or medium-sized manufacturers, the rest are tiny, home-based work shops. The export potential has not yet been utilized by this industry.

IV. INSTITUTIONAL FRAMEWORK

A. Leather Industries Development Organisation (LIDO)

LIDO was set up by the Federal Government and is under the auspices of the Ministry of Industries, Government of Pakistan, to assist in developing the leather and leather products industry. During the past decade LIDO has set up Leather Products Development Centres in Karachi and Sialkot and has assisted the industry in technology transfer, improved manufacturing techniques, recipe improvements etc. In its training institutes (two LPDCs), LIDO

⁶ See Annex 5, gloves and leather goods made in Sialkot

has conducted several long-term and short-term training courses in leather garments, leather gloves, leather footwear and leather goods at Karachi, Lahore, Sialkot. To date more than 1,500 technicians/skilled workers have been trained. Many of the persons trained at LPDCs in leather garment are now leading exporters.

LIDO has a staff of 25 and its functions are elaborated in Annex 4.

B. Training, consultancy, and/or research institutes

The training, consultancy and/research institutes available in Pakistan are as follows:⁷

- Leather Research Centre (PCSIR), Karachi

- under Pakistan Council of Scientific & Industrial Research, Ministry of Finance Government of Pakistan

- Leather technology research
- Leather tanning industry training

- Leather Products Development Centre (LPDC), Karachi

- under Leather Industry Development Organisation (LIDO), Ministry of Industries Government of Pakistan

- Leather garment and leather goods industry training, extension and facility services

- Hyderabad Leather Footwear Centre (HLFC), Hyderabad

- under Sind Small Industry Corporation (SSIC), Department of Industries and Mineral Resources, Government of Sindh

- Footwear industry training, extension and facility services

- Leather Products Development Centre (LPDC), Sialkot

- sub-centre of LPDC Karachi

- Leather garment, ladies handbags and glove industry training and facility service centre

- Institute of Leather Technology (ILT), Gurjanwala

- under Punjab Small Industries Corporation (PSIC)

- Training, extension and facility services in:
 - Leather tanning industry,
 - Footwear industry

- Prototype Shop, Lahore

- under ILT

- Footwear pattern grading facility service only.

⁷ See Annex 9, training conducted

- Leather Service Centre, Kasur - under ILT

- Facility service centre for small scale tanneries (not for leather finishing).

- Leather Service Centre, Banu (North West Frontier Province NWFP) - under Small Industries Development Board (SIDB), NWFP Government

- Facility service centre for small leather goods

C. Trade and other associations

In Pakistan, there are following trade associations:

- Pakistan Tanners Association (PTA) and Leather Garment Committee
- Pakistan Footwear Manufacturers Association at Karachi
- Footwear Manufacturers Association, Lahore
- Pakistan Gloves Exporters and Manufacturers Association at Sialkot
- Tanneries Association Dingharh Kasur.

The Government controlled Export Promotion Bureau is assisting Pakistani export trades in export promotion, export database, training etc. activities.

IV. PRESENT GOVERNMENT POLICY

Following textiles, the leather and leather products industry is the Pakistani Government's second development priority.

Pakistan's Government visualizes having the leather and leather products industry as the next emerging sector after textiles and garments. In this respect, Pakistan's entrepreneurs are seen as willing to be engaged in business for a return (profit). More value added, based on leather, is seen as an opportunity. Footwear, the neglected sector, is to be promoted on the international markets. It is especially hoped by the Government that the well-established tanners will shift to shoe uppers and footwear - a phenomena that, to a large extent is still missing in Pakistan.

The Government has introduced policy measures which should result in setting up new industries and foreign investments in the country.

It should be noted that the Pakistani leather and leather products industry is entirely private. The Government is now encouraging trade associations to take a more active role in running trade educational and training centres.

VI. TECHNICAL ASSISTANCE REQUESTED

The mission team met with entrepreneurs, and personal from trade associations, small industry corporations, training centres etc., see Annex 2. The team was presented with a number of requests and ideas for developing the Pakistani leather and leather products industry. As is often the case with this type of survey, the information and ideas on development needs and

opportunities were rather consistent, but certain details were somewhat contradictory. This is understandable because of the different phases of development in each geographical area and/or factory, and the size, product range, exporting/non-exporting etc. set-up.

Assistance requests described in Annex 6 give indicative information of the development needs and methods in the areas that where suggested during discussions. Some requests were formulated on-the-spot, while others were formulated earlier. Requests presented in writing can be found in References 9, 13, 14, 15, 16, 17, 21, 22, and 23.

VII. PRIOR AND/OR ON-GOING PROJECTS

Prior and/or on-going assistance

Pakistani cattle hides, sheep and goat skins have a good inherent quality, but are partly downgraded because of poor flaying and curing practices. The project DP/PAK/73/027 included the services of a hides and skins improvement expert, who, over a period of three years (1975-1977), provided services to the Punjab area and the achievements were encouraging.

The FAO project **PAK/90/005**, Hides & Skins and Animal By-products Improvement Scheme, is now underway. The project emphasizes hides and skins, blood etc., by-products. The project started in 1991 and will be completed by mid-1993. Priority has been give to conducting short training courses in each province and then working in provincial slaughter houses - mainly in the larger ones. The objective is to improve the quality of hides and skins by introducing modern flaying, salting, curing and preservation techniques; training butchers flaying techniques; and the economic utilization of by-products. (See excerpts of the report by Mr. I.B. Leach, CTA, elaborating the hides and skins situation and his recommendations for a future project, Annex 8).

Under the project DP/PAK/89/025, preparatory assistance was provided in the treatment of tannery wastes in Kasur. In 1991 two consulting firms were engaged under two separate subcontracts to elaborate a detailed comparative techno-economic study for the establishment of a common tannery effluent treatment plant, and a study of socio-economic issues related to this subject respectively.

The UNDP/UNIDO project **DP/PAK/89/027** is aiming at starting a facility-cum-training centre for leather finishing in Kasur. It is being set up for the small and medium-scale tanners of Kasur, who, following traditional methods, previously only processed leathers to the wet-blue and crust stage; these facilities should enable them to master this part of the process, to produce fully finished leather and, thus, to survive on the increasingly competitive leather market. The building is under construction, all the equipment has been ordered; it is expected that the centre can start its services in 1994.

For the past decade, UNDP/UNIDO has provided technical assistance to the sector through technical cooperation projects. It started by upgrading the INSTITUTE OF LEATHER TECHNOLOGY (ILT) in Gujranwala under the administration of the PUNJAB SMALL INDUSTRY CORPORATION (PSIC). UNIDO provided the expert services to install and start up machinery and equipment delivered by the Government of the Federal Republic of Germany and provided new syllabi for the training courses. Through the same project, a small leather garment training centre was established in Karachi. The Karachi leather garment centre was further upgraded under the project DP/PAK/79/022 and transformed to the LEATHER PRODUCTS DEVELOPMENT CENTRE (LPDC) with a sub-centre in Sialkot for leather gloves and sport goods.

The project DP/PAK/84/010, HYDERABAD LEATHER FOOTWEAR CENTER (HLFC), stared end-1988. This Centre was designed to assist the Hyderabad small-scale shoemakers and cobblers through a common facility and training centre. The main aim of this project was to provide training and facilities in the process of mechanizing the footwear units in the Hyderabad area. The small-scale manufacturers were expected to be granted soft loans through a WORLD BANK ID credit which was granted to the SIND SMALL INDUSTRY CORPORATION (SSIC). The Centre trained 272 people, 209 of who passed in footwear pattern engineering, process technology and quality control. Furthermore it rendered extensive facility and consultancy services in Hyderabad and Karachi. During the project, local staff received on-the-job and overseas fellowship training and has finally become well motivated and sufficiently qualified to run HLFC independently. The project was completed early 1993, but because SSIC is unable to provide the required conditions (regular employment of instructors, sufficient budgetary means, advertising training courses), the sustainability of HLFC is rather questionable.

During the past 3-4 years, the European Economic Community (EEC) has provided assistance to the Pakistani private leather products sector through LIDO. It concentrated on establishing commercial contacts, facilitating representation of local manufacturers at international fairs, and provide technical assistance in form of short-term expert services and training courses in design and manufacturing technology. Depending on the results of the forthcoming evaluation of this project, further assistance may be given in the field of marketing and transfer of technology.

The Government of the Netherlands provided assistance to the ILT through PSIC during the past 5-6 years. The recently completed evaluation exercise revealed that the project was generally successful, but the Institute should be more responsive to the requirements of the local private industry.

The Bannu Leather Service Project, financed by the WORLD BANK, was designed to set up a training-cum-service institution. Due to various reasons the institute was changed into a leather goods production unit which received technical assistance from GOPA CONSULTANTS through a bilateral programme of the Federal Republic of Germany.

Development assistance under consideration

Based on the findings and recommendations of the surveys made under the UNIDO project DP/PAK/89/025, a comprehensive programme was elaborated by a joint experts' mission by UNIDO, NORAD and the Dutch Government. It has been decided that a common effluent primary treatment plant (CEPTP) would be constructed and started up in 1995. The total value of this project is US\$ 9 million to be financed by UNDP, the Dutch and the Norwegian Governments, and the Association of Kasur Tanners.

UNIDO is planning to launch a sub-regional programme for environmental protection related to the tanning industries in South-East Asia. Pakistan's participation in this field is foreseen in the programme for early 1994, if the necessary funds are made available. The entire programme, including the eight country projects, is under serious consideration by the international donor community.

The Government of the Netherlands has approved further two years assistance to ILT through PSIC. This project aims at making the knowledge and know-how of ILT available to the small-scale leather industry with emphasis on reducing the harmful environmental effects of this industry. The same donor is considering to participate in the financing of the CETPT in Kasur, if the management aspects of the project are satisfactorily solved, otherwise they will include in-house improvements in tannery pollution control in the ILT project.

The establishment of a CETPT in Korangi industrial area of Karachi, known as Karachi Industrial Trading Estate (KITE), is being considered by UNIDO in cooperation with and financially supported by the EEC. The Government of Pakistan has also applied for assistance in starting a similar CETPT in Kasur.

The Canadian Aid Agency, CIDA, with financial assistance from the WORLD BANK, is implementing a large-scale programme for establishing WOMEN'S TECHNICAL TRAINING CENTRES under the *National Training Bureau* of the Manpower Division of the Government of Pakistan. Two such centers have started up and three more are under construction. There are plans to introduce training programmes tailored for female workers in appropriate leather products manufacturing.

VIII. DEVELOPMENT PERSPECTIVE

To be able to "grasp" the development perspective, related opportunities and gaps, the following image for the future was formulated.

VISION OF THE LEATHER AND LEATHER PRODUCTS TRADE

- 1. The **fragmented** home and export **market** for leather and leather products will become even more fragmented.
- 2. More variety and more unique products will be in demand.
- 3. The fashion and business cycle in most market segments will become shorter.
- 4. Export and home market customers will be reluctant to take any inventory risks.
- 5. Tighter **delivery** schedules; shorter production runs; more complicated, but flexible and economical production systems.
- 6. Added value export growth in leather based industries will result from footwear and shoe uppers. Other leather products such as garments, gloves, bags etc. will support this growth.
- 7. The successful Pakistani leather and leather products producers will follow a strategy that blends high productivity with drive motivate? for design and quality to reduce the time required to turn raw materials into finished products. Some producers will form *partnerships* for joint efforts on the export and domestic markets. Similar consortiums will be seen in the materials and components supply side. International partnerships will also become more commonplace in producing footwear auxiliaries, etc.
- 8. Towards the next century much of the leather and leather products industries will be situated in "clusters" having auxiliary industries and services in the same geographical area. Many customers, manufacturers, suppliers, design offices, banks, etc. will be electronically linked together for quick-respond and customer satisfaction.
- 9. Consumer loyalty towards a specific brand on export markets will become less. However, in the future, brands will still dominate the value added markets, but

consumers will more frequently shift from one brand to another. This, and closing down leather products industries in some countries will give Pakistan the opportunity for export entry to branded, higher value leather products markets.

- 10. Exports of leather products of good design and quality will help improve the Pakistani product image in the mind of the consumers on the export markets. The creative ways some of the manufacturers build up their brands will make it easier for other Pakistani firms to penetrate the market. But by and large, the new exporters will first learn exporting by selling and producing goods made accordance with customer's specifications.
- 11. **Competition** in the rapidly emerging affluent, fashion conscious domestic market segments will form a base for skills development for subsequent export drives. Gradual **liberalization** on importing leather products and components will give much needed dynamism to the home market. As a result, the more demanding home market will serve as a learning arena for export.
- 12. Large export, marketing-related training, information service and consultancy inputs will help new export entrepreneurs avoid making mistakes that could lead to an undesired image profile of Pakistani leather products.
- 13. The world **supply of leather** may reach a bottleneck. Pakistan, however, will be in a somewhat better position because of the availability of good quality domestic hides and skins. Improved flaying and other **waste reduction** efforts not only in hides and skins, but throughout the manufacturing chain will help. Perhaps alternative domestic material adoption schemes may also be found.
- 14. Labour cost advantages will diminish somewhat on exports, because there are always countries with lower costs. In future low labour costs will no longer beat the advantage of using high technology for certain leather products market segments. To compete, better productivity of labour, equipment, factory space, material and capital will be the key for achieving lower unit costs.

Some manufacturers will move their production to low cost geographical areas of Pakistan. Others will mechanize, wherever it is economical, incorporating *industrial* engineering as well as **motivational methods** for high productivity.

- 15. In some market segments it is essential to manufacture products near the market. Some larger Pakistani manufacturers will later establish small scale production and design studious in those foreign countries which not only have sophisticated consumer demands, but also business opportunities. This will help to have "hands-on" the market and serve quick-respond efforts. This strategy will also support the main production in Pakistan.
- 16. Thorough implementation of existing trade liberalization and investment schemes will enable the industry to buy technology, materials and services and also attract foreign investors. Present impediments in applying these schemes will be sorted out.
- 17. The general infrastructure in Pakistan will improve further. Telecommunications, mail, transportation, water and electricity supply, customs, banking services, government schemes, etc. will be in ever better order. Bureaucratic red tape will be turned to high quality services through privatization and/or special government efforts. Special streamlining and assistance schemes for the small, but enterprising producers will help these entrepreneurs to more readily learn how to use the services.

- 18. Footwear auxiliary and tool industries, such as the footwear components industry, last manufactures, tool making, etc. will gradually develop to exportable quality. The base for this will be the increasing demand from thriving, quick-respond leather product exporting factories.
- 19. The present shift of trade cultural values towards the common good will further strengthen as the entrepreneurs overcoming business constraints find advantages in working together in areas of interest; such as training centres, joint export marketing and footwear and leather products component manufacturing. This will greatly support the trade environment development in the leather and leather products industry clusters.
- 20. Government, and the manufacturers themselves, will find new ways to motivate entrepreneurs to shift more towards "common good working together" values. As is already the case, the availability of cess funds is motivating entrepreneurs towards common training efforts. Similar innovative schemes will emerge in export efforts, auxiliary industries build-up etc.
- 21. Through assistance schemes, modern engineering work-shops will emerge to manufacture leather processing and leather products machinery including tools, such as moulds. Some of the machinery will be simple, low-power equipment, such as the "Black and Decker" type that is needed for mechanizing small manufacturers in the leather products industry. Even in this area development funds and support will be made available.
- 22. The well-established Pakistani tanning industry will develop further. Most of the tanneries, not only certain sectors, will produce leather of good appearance and consistent quality. Rapid adaptation of automated process control systems will be a key to this. Methods will be widely developed and adapted that enhance the quality of leather produced from the low-end grades of hides and skins. Split recovery techniques adoption will be part of the programme. Improved animal husbandry, flaying, by-products recovery, etc. techniques will improve the quantity, quality and value of leather. This will be followed by special efforts to increase the area and substance yield in leather processing.
- 23. Because of just-in-time, the integrated quick response business systems of the leather products trade, the tanneries and other suppliers will be innovative in shifting to *small batch processing* techniques.
- 24. Service trades, such as shoe design studios, software houses and consultants, will reach an internationally competent level. Increasing demand will attract entrepreneurs to these fields. Apart from the assistance schemes, the market forces of the liberal trade will be the major activating factor in this phenomenum.
- 25. Some cottage or tiny leather products manufacturers will be innovative. Family firms, with an educated younger generation trained in leather or leather products manufacturing courses, will strive to break away, as already evidenced, from small scale and low quality productivity practices. They will receive financial assistance to buy simple machines in order to reach sufficient production volumes per machine to serve as facility centres to other manufacturers. This development will spread technology know-how to other manufacturers and create cash flow for further mechanization. The sales tax presently levied on footwear discourages cottage units from expanding. This will be changed to a motivating system.

- 26. Modern, rapidly developing larger manufacturing firms will have fewer layers of organizational structure for easier communication and speedier decision making. *Oppressive status* related hierarchy, that hinder progress in modern, complicated technological and business environments, will not be used. *Creativity and professionalism* will be given a chance and take hold. These larger firms, many of which will become international, will be occupied by more autonomous units to be more flexible towards continuous specialization in the rapidly changing market. In fact the units will formulate their own strategies for survival in the fragmented, competitive market. This means that the *units* will not be tied up with stiff vertical integration (such as tannery-shoe factory), but are able to form strategic alliances in order to respond to market and other environmental changes.
- 27. Modern leadership, management training and intense competition will contribute towards a change in the enterprise cultures and leadership styles. In reality, it will be the *pressure of free trade competition* and learning from foreign partners that will drive enterprises towards professionalism in management.
- 28. Leather products manufacturers will become more **specialized**. Each type of product, like various sports, leisure, safety, etc. products, requires special knowledge and technology and special distribution channels. In fact *flexible specialization* will be the password to the fast changing market segments. This differentiation not only covers the shoe products or brand images, but the whole business concept; a differentiated concept for doing business in each market niche the leather and leather products producer is in.
- 29. This flexible specialization will be supported by **quick-response** efforts. These market driven efforts will be launched to knit all levels of the business from tanners and other suppliers, to leather products component manufacturers, to leather product makers and finally to retail stores.
- 30. Mechanized factories response will be comparative to cobblers, but the production capacities and quality will be better suited for export.
- 31. Seasonality of **demand** on the home market and on some export markets will still be a problem.
- 32. Changes in international leather and leather products trade patterns show that those producers which prospered are the ones with the best and fastest access to market information. Fashion information and other organized market data will be made available by design and development centres. Well trained Pakistani export personnel and their carefully selected representatives abroad will be the key in analyzing market opportunities and implementing the marketing programs.
- 33. The export market database, to be organized by UNIDO and served to the Pakistani industry by LIDO, will provide up-to-date information on selected export markets; e.g. trade laws, practices, distribution channels, export, import and production data, and contact addresses.
- 34. Presently certain Pakistani exporters are selling shoe uppers and/or shoes to industrial markets manufacturing products according to buyer specifications. This is the way to learn export production. In future many shoe and leather product manufacturers will, for better added value and profit, succeed in selling products of their own design and brand to reseller markets.

- 35. Quality will no longer be measured on the factory floor alone, but also in the minds of customers to specify the perceived characteristics of quality. The concept of suality will ever more be related to the "four Ps" of marketing: *Product, Price, Place, and Promotion.* In other words, for customer satisfaction, the quality assurance will reflect the totality related to the "four Ps".
- 36. Most export firms will build or enhance their quality management system for quality assurance. Many firms will successfully apply for quality certification. Training courses and product quality related information will be readily available to the manufacturers. A network of common testing laboratories will be placed in the trade clusters. As is already the case, larger companies will have their own labs.
- 37. Modern technology is not about equipment, it is about *concepts*. Medium size and larger firms will not only install machinery, but also much-needed modern planning, information processing, controlling, motivational, occupational health, etc. concepts and systems. These *management systems* are for sustaining product quality, flexibility, response to markets, higher productivity and occupational health.
- 38. Information and concepts form knowledge. Learning **hands-on** creates skills. It will be the role of the leather and leather products training centres in collaboration with other Pakistani institutes and in-plant training in factories to introduce these important concepts and to teach students, as the world develops, to challenge the concepts.
- 39. Because of Government budget constraints, the Pakistani leather and leather products research and development centre(s) will be forced to earn more revenue through their services to the trade. At the same time, competition from foreign technology centres such as SATRA will intensify in Pakistan. The Government and the industry will be assisting by financing result-oriented, project-type research programmes. All these research programmes will have strong, technology transfer and adaptation components built in. Much of the personnel in research and consultancy will be hired on a project basis, as both the Government and industry will avoid supporting any fixed costs. This policy and competition will activate research and resource build-up, and in the next century even bring export earnings in research.
- 40. **Applied research** and organized transfer and adaptation of technology in environmental problem fields will help the leather industry to solve the pollution problems, not only in tannery clusters but also in scattered tanneries. Financial assistance will be made available.
- 41. Future leather based trades will be knowledge intensive. Training inputs at all organizational levels and functions will be intensive. Leather and leather products industries will be users of highly trained, flexible and motivated people as the principal means of adding value. However, in spite of training efforts, a shortage of qualified manpower may continue to create development bottlenecks, slowing trade development. This will be partly overcome by enhancing present institutes and creating some new institutes in the geographical areas where industry is concentrated.
- 42. Leather trade training institutes, together with other institutes, will form alliances in running joint training programmes. These will be designed around a professional trade education and training system, based on sequential curriculum, careful preparation of syllabi and certification criteria, and a transfer scheme and study credit earning system.
- 43. As a result, the training institutes will become even more flexible, relevant and responsive to the needs of the various segments of the trade. This will be expressed by

increasingly *flexible structures* that allow students and their employers to put together training packages that are more appropriate in the ever changing needs of the modern industry.

- 44. This will also greatly help foreign assistance inputs to the training centres, as much of the preliminary and/or specialized training of instructors will be carried out *through* existing training and consultancy centres in Pakistan. Thus foreign training assistance input can be focused on subject matters which cannot yet be covered by local resources.
- 45. For sustainability of training institutes they will be integrated in the industry either by having strong *industry involvement* in the board or letting industry associations *run the institutes.* For further integration each institute or centre will not only train, but also be active in consulting and giving facility service to the industry. Much of the foreign direct consultancy to the industry will be conducted with these institutes as a base. This will have a double effect, both the personnel of enterprises and the institutes will learn. The institute personnel will also learn to consult on specific subjects.

- 46. In order to ensure an international level, some leather products industry certificate and diploma examinations will be conducted by such institutes as the CLOTHING AND FOOTWEAR INSTITUTE (CFI), UK. Later a professional body, the "LEATHER AND LEATHER PRODUCTS INSTITUTE OF PAKISTAN", which will be founded, will conduct these demanding, up-to-date examinations. Finally, in the next century, some Pakistani training institutes will earn foreign currency by training foreigners in Pakistan.
- 47. A new generation of **export personnel** will be trained. These people will be familiar with the industrial systems and will be well-trained for export marketing. Many of them will even be able to fluently speak the language of their export markets. At the same time, their well-trained export secretaries at the home base will give professional backstopping support.
- 48. **Product design** will become more important for business success. In fact, added value and profit generation will be largely based on the quality of product design. Persons with an educational background in apparel design or in other fields will be trained in leather products pattern engineering and manufacturing methods. As a *result*, some of the best industrial *design talents* of Pakistan will be working as leather products designers. The rich Pakistani heritage in design will contribute to the success. This will enable exporters to use less foreign designers, but foreigners will still be needed because they better understand some markets.
- 49. The more knowledge-based and complex the industry becomes, the more it will depended on the willingness of individuals to take responsibility for contributing to the whole, for understanding the objectives, the values, the performance of the whole. This and tough free trade competition will motivate the industry to send more personnel to refresher courses.
- 50. Not knowing how to manage is often the single largest reason for the failure of trade ventures, including export ventures. Management refresher training will help to teach concepts and systems for business success. The *training* will challenge managers to identify those parts of Pakistan's tradition and culture that are to be used as management building blocks.
- 51. The frequent refresher training courses will not be conducted for managers alone. Supervisors, production operators, office, maintenance personnel and others will frequently attend this training. Government and trade union officials will attend the

same training. The courses will be run by several institutes, consultants and enterprises. Some of the courses will be designed for managers and administrators to understand the very basics of the production technology they are dealing with.

- 52. Illiterate or semi-illiterate work forces will still be a serious bottleneck in the leather products industries development. Local governments will do their best to *enhance the school system* in the trade cluster areas. The manufacturers will press hard for this improvement.
- 53. Increasingly, the short-term focus on every day business will be balanced by **long-term concern** with competitiveness and the factors related to the entrepreneurial climate. The roles of different organizations, such as industry associations, LIDO and other government organizations, research and training institutes, will be decided in the goals and strategy formulation of the whole leather and leather products industry.
- 54. The success of the Pakistani leather and the leather products industry in the late 1990s and early 2000s will be based on the careful goals and strategy formulation to be done in mid-1994 in each province and federality. The strategy will be followed up and up-dated each year.
- 55. The industry and the Government will more clearly realize that modern, complex systems do not allow prediction. In other words, the total environment of market opportunities, cultural factors, infrastructure development, political environment, technological impacts and resource availability does not allow prediction. In this unpredictable environment, the strategy will be need to be flexible. *Contingency plans* and the ability to switch strategies and resources quickly and efficiently will mark the success of the trade.
- 56. This strategy formulation process will not only reveal **opportunities**, but also **resource build-up** needs. The participants will realize that the decisions that are to be made will not only be about goals, but will also be about means, timing and implementation programmes on how to get there. The process will create serious **commitments and consensus** within the industry and the government on how to allocate resources and how to carry the programmes through.
- 57. Not only the larger, but also the **entrepreneurs** in the small production units will feel that society is providing them with an efficient system of opportunity and fairness that is within their reach. These entrepreneurs will "register once a year, pay a small tax, have a sticker on the door which prevents any other agency unnecessarily bothering them", thus allowing uninterrupted work and better access to various financing, duty free importing etc. schemes.
- 58. Positive development will also be encouraged by the forthcoming economic block that will emerge in Asia in the late 1990s. Investment by Japan and the NIEs will reshape the structure of production in the area. Leather products manufacturing will be among the industries to be relocated from the NIEs. Pakistan may have its positive share of the development through investment, providing its socio-economic set-up is favorably perceived. Certainly, Pakistani entrepreneurs will thrive. Incessant pressure to innovate will be the outcome and reward of the free trade area.

IX. TOWARD INTEGRATED DEVELOPMENT PROCRAMME

The vision and information gathered is raising the question as to what should be the role or function of each actor on the scene.

The objective of both the industry and the Government is for more volume and added value in export. The added value can be generated in leather products, mainly through increasing exports of footwear and shoe uppers, gloves, handbags and small goods.

A. Main development needs

By and large the Pakistani footwear and shoe upper export industry still needs building up. The market is volatile and under fierce international competition. The main venue to this export trade in Pakistan appears to be the tanners, which will diversify down-stream. Economic strength of the industry already exists and recent liberal government trade policies are facilitating the growth opportunity. Suitable hide leather is available, presently exported as finished leather. For the industry build-up, technology transfer and market access assistance is needed as direct assistance through present and new institutes. Gradually when the industry grows, auxiliary industry products, such as export quality footwear components, lasts, cutting and punching tools and moulds as well as some machines from local sources, should develop and be assisted.

There is an immediate need for the export footwear industry to study the economic viability for setting up auxiliary industries in shoe last, cutting and punching tools, and moulds.

The Hyderabad Leather Footwear Centre (HLFC) was recently established for footwear technology training and consultancy. The centre is situated in Hyderabad, the main industry growth in Sindh Province appears to be in Karachi. There is a need to have a similar centre in Karachi or to shift the centre to Karachi. Punjab is the other area of footwear and shoe upper industry growth. A centre, similar to HLFC should be established between Lahore and Kasur.

The leather garment export industry is already well-established with access to the market, but efforts to increase productivity lie ahead. There is a need to strengthen the present training institutes, LPDCs, to the latest technical and fashion know-how with some related equipment.

The leather **gloves** industry is also well established. It offer the opportunity further increase the volume added value in *fancy/fashion gloves* and some sports gloves like *golf gloves*. It is also an opportunity to utilize smaller sheep skins available in Pakistan which are not useful for garments. The glove manufacturers need technical know-how in the form of direct assistance and strengthening training facilities (LPDC Sialkot). Improvement assistance in suitable leathers may also be needed.

The ladies' handbag export industry also needs to be "created" to utilize opportunities in export. The same is the case of leather goods such as wallets.

Ball manufacturers of cricket, volley ball, hand ball etc. need better leather (waterproofness).

Export market information services should be created with a database on leather goods related tariffs, quotas, distribution channels, institutions, trade practices, etc.

Hides and skins availability and quality development opportunities also need to be addressed as discussed in the Annex 8.

There is also a need to continue the ongoing work or plans to contain the severe **pollution problem** caused by the tannery clusters in Kasur, Karachi/Korangi, Sialkot and Multan. Pollution problems of scattered tanneries not yet dealt with should be addressed.

B. Knowledge and design ability - principal means of adding value

It should be strongly emphasized that modern technology and marketing are *procedural in nature*. This means that technology is not only about equipment, but is based on concepts. In this sense, in order to understand concepts one needs knowledge; knowledge being perceived as a combination of information and concepts. Thus, added value generation in the modern technological and marketing environment is knowledge-based. For this reason, the general problem and opportunity that needs to be addressed is how to fill the *knowledge related gap*, the core bottleneck in the efforts of value addition, particularly in footwear and shoe uppers.

The other means for adding value, through better export prices, is **creative product design and brand-related marketing**. When the leather products' export industry feels strong enough to enter the reseller market instead of the industrial market, it follows that export products will no longer be made according to customer's designs and specification, instead these firms need to enhance creative design and marketing ability.

For sufficient export related added value generation, knowledge and product design ability in the leather and leather products industry, enhanced manpower training programmes are needed to build an adequate base for further hands-on learning in the business.

C. Recommended role and objective of the Integrated Programme

With knowledge and product design ability (when needed) as the principal means of adding value, it is recommended that:

The overall objective of the Programme is to multiply export earnings through supplying value added leather products such as shoe uppers, footwear, fashion gloves, leather goods and garment at competitive quality and consumer services. The strategy of the Government also includes increasing the utilization of indigenous materials (hides and skins), generating additional employment (including involvement of women), pollution control (especially in the tanning sub-sector and utilizing cutting wastes) and human resources development. The increased collection of hides and skins, production diversification (gloves and leather goods) will also contribute to the development of rural areas of the country.⁸

The role or function of the planned Integrated Programme⁹ is to facilitate the integration of the projects to render knowledge-based assistance in the form of training, consultancy and equipment to Pakistan's leather and leather products

⁹ Reference 1

⁸ Reference 11

industry and its material supply in more advanced design, marketing and production methods than those still commonly used in the trade in such a way that it will have a multiplying added value effect on society;

D. Objectives and main activities recommended for the Programme

It is recommended that the programme cover the following objectives:

- A. Better utilization of available raw materials
- B. 'ncrease export of leather products
- C. Increase international competitiveness of the local manufacturing sector
- D. Human resources development
- E. Tannery pollution control and waste processing
- F. Women in development
- E. Effective coordination within the leather sector

The main activities relating to these objectives, participating institutions and implementing agencies and industry integration in running the institutes are suggested in the Programme Document.¹⁰

E. Some urgent practical considerations

NILT and HLFC

The National Institute of Leather Technology (NILT) in Karachi is in the planning stage. It will include certificate, diploma and B.Sc. Tech. courses in both leather and footwear technology. It is also planned to conduct shorter courses in footwear technology, machine maintenance (tanning and footwear), leather marketing, leather goods and leather garment technology, quality control, training of trainers, accounting and finance and general management.

Recently the well-functioning footwear training institute Hyderabad Leather Footwear Centre (HLFC) in Hyderabad was established. The project was completed early 1993. HLFC has a complete set of equipment, well-qualified young, motivated staff and is serving the footwear industry in training, extension (consultancy) and facility services in both Hyderabad and Karachi. Sind Small Industry Corporation (SSIC) could not provide the required conditions (permanent employment of the instructors, sufficient budget, advertisement of training courses), so the *sustainability of HLFC* is rather questionable. For this reason it is recommended **transferring the institute to become part of NILT**. The advantage is to immediately have a modern institute working for the benefit of the growing footwear and shoe upper industry in Karachi without the painful process of 4 to 5 years to build a new institute.

Another possibility is to hire the key HLFC personnel for NILT if the transfer of machinery turns out to be difficult. A third possibility is to let HLFC staff to train the new staff of NILT before any foreign expert and fellowship inputs. It should be noted, however, that some HLFC staff members may leave the field (two staff members have worked without pay for about 3 years).

¹⁰ Refenece 11

To avoid irreparable damage in training and consultancy know-how in Pakistan, it is recommended that the industry consider paying the wages and some other costs for the time being until a suitable solution is found. It is strongly stressed that HLFC is the only institute of its kind and calibre in Pakistan, in fact it is one of the best on the Indian sub-continent.

While in Pakistan it was also recommended that during the build up of NILT's footwear training capability, LPDC in Karachi could start shoe upper training by purchasing some more machines, and have new staff members trained at HLFC.

Study for Government Policy Recommendations

There is an immediate need to have an economist or a leather technologist for 2 months to prepared Government policy recommendations on a duty draw-back system as well as import . of machinery/chemicals/spare parts/accessories and incentives given to the leather sector.
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REFERENCES AND BIBLIOGRAPHY

- 1. Emiel E. Wegelin Kasur Tannery Pollution Control Project (KTPCP) Netherlands Economic Institute, April 1993, page 2-3, Rotterdam
- 2. Economic Survey 1991-92 Finance Division Government of Pakistan, Islamabad May 1992, page 2-3
- 3. Leather Industry Development Organisation, Ministry of Industry, Islamabad, May 1993, File No. 10(14)/92-LIDO. page 16-17
- 4. Review of Pakistan's Exports 1991-92, Statistical Section, Export Promotion Bureau Government of Pakistan, Karachi, page 1,3,9.
- 5. Leather Directory 1993 Leather Industry Development Organisation, Ministry of Industries, Page iii
- 6. Project Director FAO Project PAK/005/89/ c/o LIDO, Islamabad
- The Leather Tanning Industry in Pakistan Economic Research Division, National Development Finance Corporation, Karachi January, 1993, page 57.
- 8. Leather Industry Development Organisation Ministry of Industries, Islamabad; File No. 10(14)/92-LIDO, May 1993, pages 22-23.
- Upgradation of LPDC; Leather Gloves Manufacturers and Exporters Association, (PGMEA), Sialkot 1992, page 4.
- 10. Country Study (Pakistan National Management Consultant (Private) Limited, Karachi, September 1191, page 26.
- United Nations Development Programme; Programme of the Government of Pakistan; Programme Document; Title: Development of the Leather Sector; Number: PAK/93/XXX/A/YY/99 (This document was being prepared during the mission, as a task of the mission)
- Government of Pakistan Export Promotion Bureau; Pakistan Tanners Association (PTA); Five year development plan for the leather industry in Pakistan(Volume 1 - 7); Prepared by National Management Consultants (Pvt) Ltd.; December 1991.

- National Management Consultants; Draft Report, Techno-economic Feasibility on National Institute for Leather Technology (NILT); May 06 1992; Submitted to: The Convener, Subcommittee on NILT, Pakistan Tanners Association, Karachi
- 14. Proposal for the Up-gradation of Leather Products Development Institute, Sialkot; Proposed & Presented by Pakistan Gloves Manufacturers & Exporters Association, Sialkot in Consultation and co-operation of Mr. Shuja-Uddin Siddiqui, Director General, Leather Industry Development Organisation, Islamabad
- Netherlands Economic Institute (NEI) / FACET; Assessment and formulation of cooperation projects between The Netherlands and Pakistan, in support of The Institute of Leather Technology and Metal Industry Development Centre, Final Report; Rotterdam, April 1993. (pages 1 - a.15 only)
- Letter: From Institute of Leather Technology Punjab Small Industries Corporation, Guijranwala, To: Director General LIDO, Islamabad 15/5/93, Content: List of machinery and equipment; Future machinery requirement; Data on facility service given.
- 17. Future Requirements of Foreign Assistance (for Institute of Leather Technology ILT for upgradation) one page only;
- 18. Institute of Leather Technology Gurjanwala. (About objectives and training done)
- Islamic Republic of Pakistan; Kasur Tannery Pollution Control Project (KTPCP); Joint Formulation Mission 26 January - 15 February 1993; Final Report; Emiel A. Wegelin, Netherlands Economic Institute (mission leader); Jakov Buljan, UNIDO; Willem F.E. van Gorkum; David Lees, IUCN; Anders H. Wirack, DECO A.S.; Rotterdam, April 1993; (pages i - v; 1 - 2 only).
- 20. Environmental Protection Agency Government of Sindh; PC-I/PC-II PROFORMA; Waste Water Treatment and Disposal of Tannery in Korangi Karachi
- 21. Letter from: Leather Product Development Centre (LPDC) Karachi; To: LIDO, 15th September 92; Subject: Up-Gradation of Leather Products Development Centre, Karachi; Content: List of present machinery in LPDC, existing teaching aids, existing staff, existing sanctioned capacity, training courses to be ordered, additional machinery and equipment required, furniture required, teaching aids required, staff required, etc.
- 22. Hyderabad Leather Footwear Centre (HLFC); Sind Small Industries Corporation; Terminal Tripartite Meeting of Hyderabad Leather Footwear Centre; Project Proposal from Hyderabad Leather Footwear Centre; 19th May 1993.

- 23. Hyderabad Leather Footwear Centre (HLFC); Sind Small Industries Corporation; Project Proposal for Karachi Leather Footwear Centre; 19th May 1993.
- 24. Hyderabad Leather Footwear Centre (HLFC); Sind Small Industries Corporation; Study of Footwear Industry in Hyderabad; Prepared for Terminal Tripartite Meeting
- 25. Assistance to Hyderabad Leather Footwear Centre DP/PAK/84/010/11-01 Pakistan; Terminal Report Prepared for the Government of Pakistan by the United Nations Industrial Development Organization, acting as executing agency for the United Nations Development Programme. 27 October 1992
- 26. The Gazette of Pakistan, Islamabad, Saturday, December 31, 1983; Part I; ... Ordnance No. XXXVII OF 1983;
 to provide for the control of pollution and preservation of living environment.
- 27. Government of Pakistan Environment and Urban Affairs Division; Environmental Quality Control Standards for Municipal and Liquid Industrial Effluents (MG/L) unless otherwise defined
- 28. Government of the Punjab Environmental Protection Agency Housing Physical & Environmental Planning Department; Environmental impact statement to be submitted by the industry under the clause No.8 of the Environmental Protection Ordinance 1983 for review of Environmental Protection Agency, Punjab; (including): Annexure-I; Environmental emission standards and liquid industrial effluents (mg/1) unless defined.
- 29. The Muslim May 22, 1993: "The export promotion bureau (EPB) is establishing evaluation centre for the export goods in order to ensure the quality of export goods and products. ... particularly for enhancement of quality of textile goods and leather products and garments...Final decision would be taken be taken in the light of report of international consultant the Garzi (of Germany)..."
- 30. Leather, April 1990; Leather comes second in Pakistan.
- Leather, April 1991;
 Abdul Rauf Siddiqi;
 Pakistan and the billion dollar bonanza;
- 32. Pakistan leather industry is small in world terms but has immense potential; Mohammad Naseem's interview by Abdul Rauf Siddiqi; Leather, April 1991

Annex 1, Job Description of the Expert

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

17 February 1993

JOB DESCRIPTION

NC/PAK/92/040/11-01/J13104

Post title	Leathe	er and Footwear Industry Expert		
Duration	Four w	veeks		
Date required	3 May	1993		
Duty station	Islama	bad, with extensive travel within the country		
Purpose of project	Assess Pakista opport aspect: develo throug project magni Pakista	ssess the present situation of the leather related trade/industries in akistan covering hides and skins resources, production and marketing pportunities, export potential, employment generation and environmental spects. Prepare the <i>Draft Programme Document</i> for the <i>integrated</i> evelopment of this sector - including all efforts by local authorities arough bilateral and international technical assistance and investment rojects. Determine goals, a development strategy, target areas, hagnitude and structure of UNDP/UNIDO assistance to be provided to akistan in the next three to five years.		
Duties	The expert will be attached to the UNDP office in Islamabad and wi cooperate with the LEATHER INDUSTRY DEVELOPMENT ORGANIZATIO (LIDO) and will be specifically expected to:			
	1.	Visit selected government officials, institutions, professional associations and companies working in or for the leather trade in Pakistan.		
	2.	On the basis of data collected by the national expert, assess the potential of the hides and skins, leather and leather products industries (including footwear, leather goods and garments, gloves, upholstery, sport goods etc.) on the world market.		
	3.	Evaluate the local economic and industry climate for investments and conditions for technology development; appraise social, economic and technical constraints prevailing in the country.		
	4.	Elaborate a systematized approach to be followed by the Government, bilateral organizations and international agencies,		

recommend ways of coordinating investments and assistance in order to ensure a balanced development of the subsector and optimal use of (financial) resources.

- 5. Recommend feasible alternatives concerning immediate objectives, target beneficiaries, nature and ways of implementation, performance criteria (benchmarks) for the integrated leather industry programme in Pakistan.
- 6. Recommend prerequisites for starting technical development projects, actions to be taken by the Government and UNDP/UNIDO before launching the integrated development programme.

The expert will prepare a *technical report* including his findings and make recommendations to the GOVERNMENT OF PAKISTAN, UNDP and UNIDO HEADQUARTERS for further actions which may be taken.

Qualification A leather or footwear technologist with extensive experience in international technical assistance, project/programme formulation and project implementation. Previous experience in drafting integrated development programmes for developing countries is an advantage.

Language English

<u>Annex 2</u>

Organizations visited, persons met

4 May 1993, (Islamabad)

Mission Team <u>NC/PAK/92/040</u> members:

Mr. Shuja-Ud-Din Siddiqui Director General Leather Industry Development Organization, (LIDO) Islamabad

Mr. Ghislain Robyn

Senior Industrial Development Officer Department for Programme and Project Development, UNIDO, Vienna, Austria

- Dr. Ferenc Schmél (arrived 15 May 1993)
 - Backstopping Officer, UNIDO Agro Based Industries Branch, Vienna, Austria
- Mr. Timo Niklas-Salminen Footwear Technology and Management Consultant, Finland

Briefing at UNDP and UNIDO by:

Mr. Philip Regan Deputy Resident Representative UNDP, Islamabad Mr. Amanullah Zeweri Area Programme Officer, Department for Programme and Project Development, UNIDO Vienna Mr. Jon Holten UNIDO Vienna Mr. Jon Holten UNIDO Country Director UNIDO Islamabad Mr. Oliver Bovet Programme Officer UNDP/UNIDO, Islamabad

5 May 1993, (Islamabad)

Leather Industry Development Organization, (LIDO) Briefing about leather and leather product industries Mr. Shuja-Ud-Din Siddiqui Director General Leather Industry Development Organization, (LIDO) Islamabad

6 May 1993, (Islamabad)

Leather Industry Development Organization, (LIDO) (meeting) Mr. Ian B. Leach, CTA



FAO Project PAK/90/005 Hides & Skins and Animal By-Products improvement Scheme Mr. Shuja-Ud-Din Siddiqui, Project Director/Director General,

LIDO

8 May 1993, (Islamabad)

Ministry of Industries Government of Pakistan (meeting) Mr. Muhammad Izhar Khan

> Joint Secretary Ministry of Industry Mr. Riaz-ur-Rehman Deputy Secretary, Ministry of Industries.

> > The Ministry was informed about the mission, its objectives. The team was informed about Government objectives

9 May 1993 (Sialkot)

Leather Products Development Centre, LPDC Sialkot.
Instructor Incharge
matactor incharge
Pakistan Gloves Exporters and Manufacturers Association
(meeting)
Mr. Bashir Ahmed,
Manager, Khas Traders
Mr. Naseer A. Malik
Managing Partner
Danish, Trading Corporation
Mr. Mohd. Ashraf Tahir
Partner
Matsons Industries
Mr.Mohd.Hanif Khan
Mng. Director
Hansa Leather Garments (Pvt) Ltd.
Mr. S.A.R. Zaidi
Instructor Incharge
Leather Products Development Centre
Mr. S.M. Arif
Junior Instructor """
Ms. Ghazala Yasmin
Workshop Assistant

10 May 1993 (Sialkot)

Sublime Group of Companies (Factory visit) a. Sublime Sports (Pvt) Ltd, Producing footballs for Adidas and Molten (Japan) b. Mian Muhd.Aleem Javed Usman Tanneries Malkay Kalan, Marala Road, Sialkot. Mr. Naeem Javed Director Mr. Mian M. Aleem Javed

Hope-E-Heal

(Factory visit)

Producing mens belts and now leather handbags for school children and fashion leather bags.

Mr. Naeem Anwar (and his brother) Executive Director

Hansa Leather Garments (PVT) Ltd. Producing motorcycle garments of great variety.

> Mr. Hanif Khan Mng. Director

Tajson Corporation (office only),

Mr. Khawaja Abdul Qavi Member Executive Committee Pakistan Gloves Manufacturers & Exporters Association

11 May 1993 (Lahore)

Punjab Small Industries Corporation (PSIC), Lahore (meeting)

- Mr. C.A. Hafeez Managing Director Mr. Ghulam Rasul Chaudri Deputy Managing Director Mr. S.K. Qureshi Director
- **Pakistan Tanners Association PTA (Northern Zone) in Lahore** (meeting)
 - Mr. Shaikh Mohammed Naeem Managing Director/Partner Muhammad Shafi Tanneries, Karachi Siddiq Lather Works (Pvt) Limited, Lahore Mr. S. Anjum Zafar Director Eastern Leather Company Ltd., Lahore Mr. Shahid Usman Partner East Pakistan Chrome Tannery, Lahore Mr. Mohammad Zahir Chief Executive HMB Tanneries (Pvt) Ltd., Lahore

Environmental Protection Agency (EPA) in Lahore (meeting)

Mr. Abdul Basit Shaikh

- Director
- Punjab Urban Environmental Project EPA-Punjab

Dr. Shagoofta Shahjehan

Deputy Director (Technology Transfer)

Mr. Yousaf Saleem

DD RI

Mr. Saikh Saleem

DD Administration

Also met:

Mr. Bertil Paulsson Environmental Adviser The World Bank Environmental Protection Agency, Lahore

Footlib Limited, Lahore

Mr. Muhammad Ayyub Mughal Managing Director TopFit Shoes Industries, Lahore Mr. M. Bashir, MBIM, ABSI Managing Director **BAS Enterprises, Guijranwala** Mr. Iftikar Firoz Managing Director Firhaj Footwear (Private) Limited, Lahore Mr. Faridullah Khan Chief Executive Fayva Shoes, Lahore Mr. A.M. Zafar **Technical Director** Shamin Shoes (Pvt) Ltd, Lahore Mr. Mohammad Ayub Khan Chief Executive Trust Shoes International (Pvt) Ltd, Lahore

13 May 1993 (Lahore)

Firhaj Footwear (Private) Limited (Factory visit) Produces Gent's casual shoes and leather garments for export. Mr. Iftikar Firoz Managing Director

Facility-cum-Training Centre for Leather Finishing in Kasur UNDP/UNIDO project DP/PAK/89/027 Building is partly built. Machines arrived, not yet installed.

Leather Service Centre PSCI

Facility service centre for small scale tanneries, run under Punjab Small Industry Corporation PSIC. Not for leather finishing. 18 employees.

Tanneries Association Dingharh Kasur.

(meeting)

Mr. Abdur Rehman Sheikh (President of the Association) Partner Rehman Brothers & Co., Kasur Mr. Shaikh Mohammad Niaz Niaz Tanneries, Kasur Mr. Muhammad Asif Nadhi Mehboob Tanneries, Kasur

15 May 1993 (Karachi)

- Leather Products Development Centre (LPDC)

Mr. Habib Khan Junior Instructor. Ms. Tisneem Sultana Junior Instructor.

- Environmental Protection Agency Government of Sindh (meeting) Mrs. Mahtab Akber Rashdi, Director General Mr. Fazal A. Nizamani, Director

16 May 1993 (Karachi)

Sind Small Industries Corporation (SSIC). (meeting) Mr. Mohammad Siddiq Memon, Managing Director, Sind Small Industries Corporation (SSIC) Karachi Mr. Masood Siddiqui Joint Director, Projects and Purchase Sind Small Industries Corporation (SSIC) Karachi

Leamach International (Consultancy firm) / Leather Trades Journal: (meeting)

Mr. M. Jamil Khan Chief Executive Leamach International (Consultancy firm)

Pakistan Footwear Manufacturers Association

at Lyra Shoe Company (Private) Limited in Karachi,

(meeting)

Mr. Omer Yusuf (Vice Chairman of the association) Managing Director

Lyra Shoe Company (Private) Limited

Mr. Abdul Aziz Baloch

Managing Director Baloch Traders

- Exp	ort Promotion Bureau in Karachi:
(me	Mr. Abu Chamim M. Arif
	Via Chairman
	vice Chairman
	Export Promotion Bureau Government of Pakistan
	Mr. Muhammad Sadiq Khan
	Director General
	Export Promotion Bureau, Government of Pakistan
	Mr. Rana Munir Ahmed
	Director
	Export Promotion Bureau, Government of Pakistan
- Pak	istan Tanners Association (PTA):
(me	eting)
	Mr. Fawad Ijaz Khan
	Chairman PTA Pakistan Tanners Association
	Ideal Group
	Mr. Iftikar Firoz
	Managing Director
	Firhai Footwear (Private) Limited
	Mr. Gultzar Firoz
	Partner
	Firoz & Co
	Mr. Shaikh Abdul Hannan
	Khas Traders
	Mr SM Saloom
	Managing Director
	Managing Director
	Monammad Ismail Monammad Asiam Limited,
	Zanur Sancho (Pvt) Ltd
	Mr. Masood Hassan
	Director
	Mohammad Ashraf & Sons
19 14 100	

Leather Research Centre (PCSIR) (meeting) Mr. Abdul Wadood Qureshi Principal Scientific Officer Leather Research Centre, P.C.S.I.R. Mr. A.K.M. Moslem Ali Head, Leather Technology Division Leather Research Centre (PCSIR)

19 May 1993 (Hyderabad)

.

- Terminal Tripartite Meeting of UNDP/UNIDO Project DP/PAK/84/010, Hyderabad Leather Footwear Centre (HLFC).

Present:

Dr. Ferenc Schmel, Backstopping Officer, UNIDO Mr. Oliver Bovet, P.O, UNIDO Mr. Timo Niklas-Salminen, CTA, UNIDO Mr. Saeed Ahmad Khan, S.O. EAD Mr. Shuja-Ud-Din Siddiqui, LIDO Mr. Muhammad Siddiq Memon, M.D. SSIC Mr. Abdul Sattar Channar, Reg. Dir. SSIC Mr. Abdul Sattar Channar, Reg. Dir. SSIC Mr. Mumtaz Baig, Dep. Dir. Adm., SSIC Mr. Farhan Sabih, P.O. UNDP

Mr. Tariq Usman Shaikh, N.P.D. HLFC

The Hyderabad Leather Footwear Centre also was visited.

23 May 1993 (Islamabad)

UNIDO Islamabad:

(meeting)

Mr. Jon Holten, Country Director, UNIDO

Jon Holten was briefed about mission findings so far.

24 May 1993 (Islamabad)

- EEC

(meeting) Mr. Jorg Wolff, Economic Councillor Mr. Quaiser Shakeel, Programme Officer

- Royal Embassy of Netherlands (meeting) Dr. E.C. Kengen, First Embassy Secretary,

Advisor Industrial Development

- Women Training & Development Unit National Training Bureau (Manpower Division) Government of Pakistan (meeting) Ms. Razia Zuberi, Director WTEU Ms. Diana Youdell,

CIDA

25 May 1993 (Islamabad)

- Ministry of Industry Government of Pakistan (meeting)

Mr. Vaqar Rustum Baichshi

Secretary Ministry of Industries Mr. Mohammad Izhar Khan Joint Secretary Ministry of Industries

25 May 1993 (Islamabad)

- Ministry of Commerce Government of Pakistan (meeting) Mr. Manzoor-ul-Hassan Secretary Ministry of Commerce Mr. Sajjad Hussain Deputy Secretary Ministry of Commerce

25 May 1993 (Islamabad)

- Economic Affairs Division Ministry of Finance Government of Pakistan,

(meeting)

Mr. Saeed Ahmed Khan Section Officer, Economic Affairs Division (AED)

(meeting)

Mr. Afzal Uddin Ahned, Deputy Chief E.A.D

LIDO, about FAO-project PAK/90/005 Hides and Skins & Animal By-Products. (meeting)

Mr. Ian B. Leach, Chief Technical Adviser (CTA), FAO Mr. Shuja-Ud-Din Siddiqui, Director General LIDO

UNIDO

(meeting)

Mr. Nghia Quang, Programme Officer, Assistant to UNIDO Country Director

26 May 1993 (Islamabad)

UNIDO

(meeting) Mr. Jon Holten, UNIDO Country Director Mr. Oliver Bovet, Programme Officer UNDP/UNIDO

UNDP

(meeting) Mr. Philip Regan, Deputy Resident Representative, UNDP Mr. Jon Holten,

UNIDO Country Director Mr. Oliver Bovet, Programme Officer UNDP/UNIDO

26 & 30 May 1993 (Islamabad)

LIDO

(meeting) Mr. Ian B. Leach, CTA of FAO Project PAK/90/005 Hides & Skins and Animal By-products Improvement Scheme Mr. Shuja-Ud-Din Siddiqui Director General, LIDO

30 May 1993

.

LIDO

(meeting) Mr. Shuja-Ud-Din Siddiqui Director General, LIDO Mr. Mohammad Arif Raza Accountant, ".IDO

01 - 02 June 1993

UNIDO Vienna, Debriefing

(meetings)

Mr. Amanullah Zeweri	Substantive Officer
Dr. Victor Tarzaev	Recruitment Officer, UNIDO, Vienna
Mr. Juhani Berg	Senior Inter-Regional Adviser
Mr. Jakov Buljan	Senior Industrial Development Officer
Mr. Ferenc Schmél	Industrial Development Officer
Mr. Ghislain Robyn	(team member of this mission) Senior Industrial Development Officer (team member of this mission)

Annex 3

Addresses

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UNDEVPRO ISLAMABAD PAKISTAN

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Mr. S. Anjum Zafar

Director

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<u>Annex 4</u>

Present Functions of the Leather Industry Development Organization (LIDO).

- 1. To establish technical institutes/centres for the training of technicians/skilled operators as well as for the teaching of improved techniques in the light of rapid international scientific advancement and to provide service facilities to the industrial units thus assisting in improved production of value added goods.
- 2. To conduct market/industrial surveys and to collect statistical data from different entities and feeding of the same to different Government departments.
- 3. To render technical assistance to the leather, leather products and allied industries for the development/adoption of new working efficiency at the producing level.
- 4. To motivate the interested entrepreneurs for the establishment of new industrial units in the leather sector.
- 5. To suggest fiscal measures for the overall development of leather sector.
- 6. To assist tanneries, footwear and other leather products industries through consultancy series so as to improve their working processes economically and their production to the international standard.

<u>Annex 5</u> Types of gloves and sports goods manufactured in Sialkot

Notable gloves and sport goods being manufactured at Sialkot are as under:

- 1. Baseball gloves
- 2. Boxing gloves made of leather/artificial leather
- 3. Cricket batting gloves
- 4. Cricket ball inner gloves
- 5. Cricket wicket keeping gloves
- 6. Fish gloves
- 7. Football goalkeeper gloves
- 8. Gymnastics playground apparatus
- 9. Hockey gloves
- 10. Handball gloves
- 11. Ice hockey gloves
- 12. Lacrosse gloves and gauntlets
- 13. Motor cycling gloves
- 14. Punching mitts
- 15. Punching gloves
- 16. Skate board gloves
- 17. Ski gloves
- 18. Sports protective gloves/equipment and accessories
- 19. Cross country gloves
- 20. Weight lifting gloves
- 21. Snowmobile gloves
- 22. Mitts/mitten gloves
- 23. Racing gloves
- 24. Car driving gloves
- 25. Sports fashion gloves
- 26. Motor bike or without lining
- 27. Sports fancy gloves
- 28. Motor cross gloves (Yamaha, Honda, Suzuki, Kawasaki etc. gloves)
- 29. Cyclist gloves
- 30. Judo Karate gloves

<u>Annex 6</u> Assistance requests received

Sialkot (Punjab Province):

- I. Up-gradation assistance request for Leather Products Development Centre (LPDC) Sialkot to assist the industry in designing and production techniques of:
 - Fancy/Dress Gloves and Golí Gloves,
 - to upgrade glove factories now producing cheaper industrial gloves for export;
 - Fashion Leather Garment, to upgrade the garment factories now mainly producing cheaper leather garments for export;
 - Shoe Uppers, to assist tanning industry in their efforts to divert from finished leather to shoe uppers in export;
 - Boot (motorbike) and other Leather type of Sport Footwear, to assist the industry to start to produce full shoes for export;
 - Ladies Bags;

to assist the leather goods industry in more fashion oriented export handbag manufacturing for export.

- Travelling Requisites.
- II. Direct assistance (consultancy) request for selected factories in marketing, designing and/or production techniques of:
 - Fancy/Dress Gloves and Golf Gloves for export;
 - Fashion Leather Garment for export;
 - Shoe Uppers for export;
 - Boot (motorbike) and other Leather type of Footwear (full shoe) for export;
 - Improvement of Finished Leather, as raw material for fancy/dress gloves, golf gloves and sports shoes.

Gurjanwala (Punjab Province):

- I. Assistance request by Institute of Leather Technology (ILT), Gurjanwala to enhance the present set of machinery and equipment, to purchase for the Gurjanwala institute:
 - Leather processing machinery
 - Footwear machinery
 - Chemical and physical testing and related equipment

Lahore (Punjab Province):

- I. Assistance request for establishing a Leather Products Design & Development Centre (in Lahore) for:
 - Manpower training for:
 - Shoe Upper manufacturers for export
 - Shoe manufacturers for export
 - Leather Garment operatives (stitchers)
 - Leather Garment Designer/pattern cutters
 - (pattern engineering)
 - Design and pattern engineering service for: - Shoe manufacturers

(Idea was put forward of utilizing Cess funds for establishing the centre)

- II. Assistance request for establishing a Training Centre for Fancy \Dress Gloves:
 - Location need was not elaborated
- III. Assistance request for Footwear Industry Tooling
 - Cutting knives and punch making service to be established for:
 - Shoe upper manufacturers
 - Shoe manufacturers
 - Could also serve leather goods
 - Shoe last designing/production service to be established
 - Mould (for injection moulding) designing/production service to be established
- IV. Idea was forwarded to have:
 - Promote Joint Ventures/Partnerships for technology transfer and for export market entry
 - To bring foreign buyers to study the potential of the industry as exporters
- V. Assistance request for Common Facility Centres serving small enterprises in Punjab for:
 - Leather Processing
 - Leather Products

Kasur (Punjab Province):

I. Assistance request for establishing Footwear Training Centre somewhere between Lahore and Kasur.

Tanneries Association Dinghar Kasur may agree on giving land for the purpose

- II. Further machinery for LASC Kasur (Sub-centre of Institute of Leather Technology ILT):
 - Leather processing machinery (not finishing) and drying system

Van for pick and drop service

Karachi (Sindh Province):

- I. Assistance request for the National Institute of Leather Technology (NILT) which planned to be established by Pakistan Tanners Association (PTA) in Karachi. The institute is planned mainly to be training institute, to cover following areas:
 - Tanning technology
 - Garments
 - Footwear and shoe uppers
 - Gloves and
 - Goods

The assistance need, for setting up the institute, as requested by the industry, will be for:

- Experts as Lecturers and Consultants
- Fellowship programmes
- Some equipment (main part of equipment from Cess funds)
- II. Assistance request for the Leather Products Centre (LPDC):
 - Expert for Fashion Design of Leather Garments
 - Computer Aided Design (CAD) set-up for Leather Garment
 - Expert advise on relevant management systems for higher productivity and quality
 - Various Garment and Leather Goods Machinery to upgrade the centre plus for more training capacity
 - Books, periodicals, videos etc.
 - Marketing assistance for the factories
 - Experts (technical) assistance in factories
- III. Assistance request to upgrade develop further the Hyderabad Leather Footwear Centre (HLFC)
 - a) Model export marketing, product development and consultancy package for selected footwear manufacturers
 - b) Small footwear testing laboratory
 - c) Pilot unit for:
 - cutting, punching and related tools designing and manufacturing
 - plastic last designing and manufacturing
 - moulds designing and manufacturing for footwear components injection moulding
 - d) Sub-centre to be established in Karachi for Shoe Upper training and related consultancy

Annex 7 Map of Pakistan



<u>Annex 8</u> Hides and Skins

Mr. I.B. Leach, (FAO Project PAK/90/005 Hides & Skins and Animal By-products Improvement Scheme).

PAKISTAN

HIDES AND SKINS IMPROVEMENT"

Background

1

Production of hides and skins in Pakistan is currently supposed to amount to about 5,5 million and 33,9 million pieces respectively. As in many other countries, these are derived from two types of - aughtering activities. Some animals are killed at slaughterhouse (public, military and one private). Such places may account for 60% of hides and 40% of skins production.

Facilities and operations at public slaughterhouses, operated by Municipal Corporations et cetera, are generally poor. They have attracted little attention in the past 20 - 30 years and continue to remain neglected. Improvements of by-products (especially hides and skins) at the large public slaughterhouses have been the subject of FAO Project PAK/90/005 during the period 1991-93. Similarly, part of the ADB Livestock Development Project should begin to tackle similar issues later their year. Conversely, there is no record of efforts being devoted to improving activities at the majority of smaller public slaughterhouses or at those places commonly referred to as unregistered slaughter sites. It is supposed that hides and skins production at smaller slaughterhouses and unregistered venues could amount to 50% and 25% of the total production.

In the past, considerable efforts and expense have been devoted to improving the outputs of the country's tanning industry. Given the value and volume of this sector, and the scope for improvements, such activities are easily justified. However, to date relatively little work has been devoted to the inputs of raw material, prior to its receipt at the tannery. Experience and observations suggests that greater attention to the raw material should improve its availability improve its quality and relieve many of the processing problems currently experienced in tanneries.

Immediate Objective 1

Improvements in the hides and skins available to the tanning industry from the smaller public slaughterhouses and from other unofficial sites. Improvements to include increased collection and better quality of production. Improvement activities to be orientated and confirmed be means of surveys and other appropriate devices.

Output 1.1

A survey to determine the scope for improved supply of hides and skins to the tanning industry. The results should indicate where losses currently occur, their magnitude which are priority issues. The results should also establish standards against which subsequent

¹¹ Produced in response to a request by Messrs. Niklas-Salminen, Robyn and Schmel (UNIDO) during the course of their visit to Pakistan in May,1993.

improvement activities could be compared. Surrey to include attention to slaughtering during the festival of Eid-ul-Azha.

Activity 1.1.1

Review of existing data and institutions to determine where surveys should be conducted and by what means.

Activity 1.1.2

Elaboration of survey procedures, execution and analysis of results. Presentation of results to relevant organization and institutions.

Activity 1.1.3

Continuation of monitoring activities to determine changes in the quantity and quality of hides and skins collected.

Output 1.2

Increased quantity of hides and skins provided to the tanning industry.

Activity 1.2.1

Construction of preservation facilities and provision of support facilities including materials (chemicals) and information.

Activity 1.2.2

Assistance to hides and skins merchants. Provision (or repair) of collection and storage facilities.

Activity 1.2.2

Preparation of a standard specification for hides and skins based (in part) on existing legislation. Introduction of specification.

Output 1.3

Improved quality of hides and skins provided to the tanning industry.

Activity 1.3.1

Establishment of teaching and training institutions responsible for disseminating information and skills to people involved in the preparation of hides and skins. Introduction of facilities described in 1.2.1

Activity 1.3.2

Establishment of incentives to promote the production of better quality hides and skins.

I. B. Leach

<u>Annex 9</u> <u>Training institutes - training conducted</u>

HYDERABAD LEATHER FOOTWEAR CENTRE (HLFC), Hyderabad

Footwear industry training conducted 1989 -92:

-

-

- 5 Seminars with 54 participants

- 22 courses in various shoe manufacturing fields,
 - 272 students participated, 209 passed.

Following courses and seminars are also offered to the footwear or shoe upper industry:

		<u>vveeks</u> :	<u>conducted:</u>
Courses at	HLFC:		
-	Introductory Design and Pattern Cutting Course;	4	5
-	Basic Design and Pattern Cutting Course;	6	4
-	Advanced Design and		
	Pattern Cutting Course;	0	2
	Part I	0	2
	Part II	4	1
-	Introductory Sewing Course;	5-10	2
-	Introductory Shoe Upper Manufacturing Course;	4	1
-	Shoe Lasting,Bottoming, Finishing Course;	8	1
-	Quality Control Course for Shoe Manufacturing Part I Part II	10 10	1 1
-	Introductory Work Study Course;	4	1
-	Basic Work Study Course;	3	1
-	Footwear product development workshop.	6	1
-	Introduction to CAD in Shoe Manufacturing.	26	1

Seminars at H	LFC:	<u>Days</u> :	<u>Seminars</u> conducted:
-	Work programme scheduling seminar	8	1
-	Payment by results seminar	3	1
-	Footwear range building seminar	3	1
-	Capital expenditures evaluation seminar	3	1
-	Marketing planning seminar	2	1

INSTITUTE OF LEATHER TECHNOLOGY (ILT), Gurjanwala

Regular (yearly) courses of ILT:12

<u>Course</u>	<u>Duration</u>	<u>Total over period 1989-19</u> No. of applicants No. ad	
DAE ¹³ , diploma in leather technology	3 years	1,010	127
Short course leather technology	8-24 weeks	110	43
Skill development leather technology	6 months	26	26
Shoe modelling	1 year	251	62

¹² From 1972-73 to Dec'92 the institute has passed out in three year diploma courses in Leather Technology 459 students, in two year diploma courses 25 students and in one year 23 students. The last two year course was conducted 1976-77 to 1977-78, and last one year course 1978-79.

¹³ DAE, diploma in associated engineering

Incidental courses of ILT during last 3 years:

Course	<u>Duration</u>	Period	<u>No. of No.</u> applicants	<u>admitted</u>
Leather course for Export Promotion Bureau	3 months	1991-92	28	10
Pattern making shoe components	6 months	1990-91	3	3
Pattern cutting for Export Promotion Bureau	3 months	1991-92	98	10
Special course shoe making	6 months	1991-92	6	6

LEATHER PRODUCTS DEVELOPMENT CENTRE (LPDC), KARACHI

Existing sanctioned capacity:

	Name of the course	Duration	<u>Capacity</u> <u>Per Year</u>
1.	Leather Garments Manufacturing Technology Course	1 Year	30
2.	Leather Goods Manufacturing Technology Course	1 Year	30

	Statement of total no. of persons trained from 1979-80 to 1992-93					
SL. NO.	YEAR	LEATHER GARMENTS	LEATHER GOODS	TOTAL		
01.	1979-80	58	-	58		
0 2 .	1980-81	22		22		
03.	1981-82	24	11	35		
04.	1982-83	69	62	131		
05.	1983-84	80	79	159		
06.	1984-85	%	36	132		
07.	1985-86	96	32	128		
08.	1986-87	36	36	72		

			4	
09.	1987-88	58	36	94
10.	1988-89	67	34	101
11.	1989-90	28	20	48
12.	1 99 0-91	25	20	45
13.	1 99 1-92	31	52	83
14.	1 992 -93	66	86	152
		756	504	1260

List of short training programmes offered by the centre from 1979-80 to May, 1993

SL. NO.	NAME OF THE COURSES	NO. OF PERSONS TRAINED	
01.	Leather Goods Special Course	6	
02.	Leather Goods Sample Making Course	12	
03.	Leather Garments Sewing Course	17	
04.	Leather Goods Stitching Course	13	
05.	Leather Garments Stitching Course	16	
06 .	Leather Garments Stitching Course	7	
07.	Leather Goods Pattern Making Course	4	
08.	Leather Garments Fashion & Designing Course	11	
09.	Leather Goods Pattern Cutting Course (UNIDO FELLOWSHIP)	1	
10.	Leather Garments Cutting Course	4	
11.	Leather Garments Fashion & Designing Course	9	
12.	Leather Goods Design & Pattern Making (UNIDO FELLOWSHIP)	1	
13.	Leather Garments Short Course	13	
14.	E.E.C. Leather Goods Manufacturing Short Course	2 9	
15.	E.E.C. Leather Footwear Short Course	17	
1 6 .	E.P.B. Leather Garment Short Course	31	
--------------	--	-----------	
17.	E.E.C. Leather Gloves Designing Short Course	20	
18.	E.P.B. Leather Goods Course	48	
19.	E.E.C. Leather Goods Designing Course	18	
20.	E.E.C. Leather Garments Designing Course	16	
21.	E.E.C. Leather Garments Manufacturing Course	19	
		TOTAL 292	

LEATHER PRODUCTS DEVELOPMENT CENTRE (LPDC), Sialkot

The centre is conducting separate courses for men and women.

Name of the course	<u>Duration</u>	on <u>Capacity</u> <u>Per Year</u>	
Leather Gloves Cutting Course (for men)	3 months	150 students	
Sewing Machine Maintenance Course (for men)	2 months	150 students	
Leather Gloves Sewing Course (for wome	n) 3 mo	onths 12-20	students ¹⁴
Leather Goods Manufacture (for women)	3 months	12-20 students	

LEATHER RESEARCH CENTRE (PCSIR), Karachi

The centre is conducting following courses:

;

Course	Duration
Course on Leather Garment Leather	3 months
Advanced Course on Garment and Footwear Leather	6 months
Condensed Course in Leather Processing	2-4 weeks

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¹⁴ Only 4-5 female students can be in a course because there is only one vehicle availabale, to transport from/to homes, at the centre.





UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

NC/PAK/92/040

THE LEATHER INDUSTRY OF PAKISTAN

Vienna, July 1993

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Basic indicators¹

Demography

Population size:	117.3 millions in 1991-92
Population growth:	3.2 per cent per year (average over 1986-87 to 1991-92)
Children under 15 years:	44.5 per cent of total population (1981 census)
Urban population of at least 15 years:	16.1 per cent of total population (1981 census)

Labour force

Labour force:	33.8 million in 1991-92
Employed labour force:	32.8 million in 1991-92
Self-employment in rural areas:	64 per cent
Self-employment in urban areas:	42 per cent

Per capita income

Level in rupees:	10,358 rupees in 1991-92
Level in US dollars:	414 US dollars in 1991-92
Growth rate of GNP at constant prices:	4.5 per cent (average 1986-87 to 1991-92)
Growth rate of per capita national	•
product at constant prices:	1.3 per cent (average 1986-87 to 1991-92)

Monthly income for household

Measured average monthly income per household in Pakistan:	2,131 rupees (1987-86)	
Measured average monthly income per household in urban areas:	2,956 rupees (1987-88)	
Measured average monthly income per household in rural area:	1,815 rupees (1987-88)	
Estimated average monthly income per household in Pakistan:	3,320 rupees (1991-92)	
Estimated average monthly income per household in urban areas:	4,480 rupees (1991-92)	
Estimated average monthly income per household in rural areas:	2,090 rupees (1991-92)	

Monthly consumption expenditure per household

Measured average monthly expenditure per household in Pakistan:	2,029 (1987-88)
Measured average monthly expenditure per household in urban areas:	2,736 (1987-88)
Measured average monthly expenditure per household in rural areas:	1,759 (1987-88)

¹ Sources: Federal Bureau of Statistics, Pakistan Statistical Yearbook, ---1991, Karachi Government of Pakistan, Finance Division, Economic Survey, 1991-

- --
- 92, Islamabad
- Estimates by UNIDO. -

Estimated average monthly expenditure per household in Pakistan: 2,920 (1991-92) Estimated average monthly expenditure per household in urban areas: 3,940 (1991-92) Estimated average monthly expenditure per household in rural areas: 2,530 (1991-92)

Share of household consumption expenditure spent on textile, garment, footwear

Average household:	7.72 per cent (1987-88)
Average rural household:	8.24 per cent (1987-88)
Average urban household:	6.84 per cent (1987-88)

Estimated expenditure on textile, garment and footwear per household

Average household:	225 rupees (1991-92)
Urban household:	270 rupees (1991-92)
Rural household:	208 rupees (1991-92)

GNP at current prices

		1987-88	1988-89 (million	1989-90 rupees)	1990-91	1991-92
Market pr	rices	704,484	797,750	853,538	1,053,091	1,215,000
Factor co	osts	630,120	711,143	744,600	940,865	1,085,613

Manufacturing value added at current factor costs

1987-88	1988-89	1989-90	1990-91	1991-92			
(million rupees)							
100,917	113,517	132,329	158,947	199,828			

Share of manufacturing in GNP

Share of manufacturing in GNP at current factor cost:

1980-81	1985-86	1991-92	
13.8 %	14.9 %	18.4 \$	

Share of manufacturing

in gross fixed capital formations (GFCF)

Ratio of GFCF in manufacturing to total GFCF:	22 per cent (1991-92)
Ratio of GFCF in manufacturing to GFCF in the private sector:	40 per cent (1991-92)

Manufacturing Growth

Average growth rate of manufacturing at constant prices:	6.7 % (1987-1992)
······································	

Employment in manufacturing

Size of labour force employed in manufacturing: Share of manufacturing in total employment: 4.2 million (1991-92) 12.8 per cent (1991-92)

Introduction

Transcending the diversity of particular circumstances, a crucial difference in the way the leather industry² is rooted in the economic structure divides the leather countries in two broad categories. One is comprised of countries where the industry is essentially leather-making, the other comprises essentially leather-transforming industries.

In *leather-transforming* countries the leather industry has been "imported" in response to changing condition in the international markets for final products. Initially leather-transforming countries had no special vocation to enter the leather industry. Their forte was not leather resources or leather skills but a work force whose skills and salaries combined to confer an advantage to any kind of labour-intensive form of manufacturing. This advantage attracted the footloose stage of the internationalized leather industry. Footwear, garments, and leathergoods factories rallied from places where labour costs were becoming uncompetitive. Initially, these factories were supplied with imported finished leather and inputs but as sales went expanding finishing units and, later, semi-finishing units were created locally - Thus, so to speak, manufacturing induced leather.

In *leather-making* countries, it is on the contrary leather which generates manufacturing. A large livestock is the hub of traditional activities which typically include flaying, trading, tanning and manufacturing footwear and leathergoods. These activities cater to the traditional needs of the population and, therefore, are not fit to access the international markets which requires standardized products. Accordingly, the basic problem of leather-making countries is to elicit a capability to make exportable products. It will not always be as easy as the success stories of some leather-transforming countries suggest.

In leather-transforming countries, manufacturing can develop at breathtaking speed. Indeed, there are several examples of countries without any experience in leather which in less than a decade have become world champions of exports of leather-made items such as footwear or garments. The speed and scale of these success stories have much to do with the fact that the interested countries have been elected by the international leather business as bases for its manufacturing operations. It is the international market itself, with all the power of production and distribution networks in industrialized countries, that brings the wind of change in the host country. The corollary is massive and brisk development. But the other side of the medal is a certain precariousness of the achievements. Consequently, success is volatile.

In *leather-making* countries it is not so easy to establish a modern export-oriented manufacturing capability. The problem, this time, is not to attract a footloose segment of the global leather industry. It is rather a problem of modernizing the domestic traditional leather activities. The sheer mass of the traditional sector, its adherence to pre-industrial ways, its lack of means preclude an all-pervasive modernization. Willy-nilly a differentiation will have to take

³ In this report the terms "leather industry" embraces all the leather activities from first tanning of hides and skins to manufacturing of leather products. Leather products include: footwear, garments, gloves and leather goods (wallets, luggage, belts, and other small items). In the case of Pakistan one item of leathergoods, namely sports goods, is of relatively great importance. Accordingly this item will be sometimes detached from the leathergoods category to form an independent category.

place between an inert mass of activities confined to the traditional mode and a dynamic nucleus aspiring to the industrial mode. For the nucleus to establish itself and grow will require a source of dynamism, but cross-border cooperation with the international leather industry - which is the major modernizing agent - will not readily obtain. From the point of view of international firms, the entrepreneurs emerging from the traditional leather sector are not necessarily the best partners to set-up large-scale manufacturing operations.³ The local entrepreneurs will therefore have to establish their productive and delivery credentials largely by themselves and this process can only be progressive. Furthermore, the development of a modern nucleus leads to a partition of the domestic leather sector. As the nucleus will grow it is bound to compete more and more with the rest of the industry for the hides and skins and for the domestic market. Both rivals will call for State help, one in the name of the numbers of people it employs, the other in the name of its export performance. Thus, points of friction will appear that may well slow down the modernization process.

Pakistan is a leather-making country and, obviously, one at the beginning of industrialization. The leather activities still are deeply embedded in traditional rural and urban life. Innumerable tanners and cobblers continue as in the past to cater to the needs of village and poor urban consumers. In addition, large number of home workers, artisans and micro cottage industries are under contract for the organized sector.

From that base, a modern sector is emerging. It comprises tanneries, and also leatherproducts factories. The word "modern" is however to be understood in a very broad sense. While several tanneries of the "modern" sector are really state-of-the-art units, most of the so-called modern units in the downstream stage where leather is transformed into all kinds of products are merely cottage-type of units with very little in terms of equipments, inputs or products that can be regarded as industrial. Ignoring homeworkers, individual cobblers and micro family enterprises with no employees, it is estimated that the "organized" industry counts 1550 establishments and employs 50,000 persons.

The objectives of this report are, first, to describe the "organized" reguent and estimate the contribution it makes to the Pakistani economy and, second, to sketch its potential for development. \$. 4. S

³ They may be skilled at making leather but they would not have any special competence in laying-out factories, supervising a large work-force, digging out inefficiencies and building-up productivity. Furthermore, the domestic entrepreneurs engage in downstream stages which are often tied to upstream sources of leather thereby creating a rigidity which is not necessarily agreeable to foreign partners.

1. A picture of the organized industry

1.1 Historical Development

At the root of the leather industry in Pakistan is the livestock. The leather industry was born because the use of working animals for farming and the consumption of meat generated an array of rural leather activities around the three main components of flaying the carcasses, vegetable tanning and shoe cobbling.

The first contact of the leather sector with the international market started with exports of raw hides and skins. From there unfolded a three-stage modernization sequence. First, the hides and skins were progressively semi-processed to pickled and wet-blue. Then, crust and finished leather were introduced. The second phase reached maturity at the beginning of the 1980s when 80 per cent of leather exports were in the form of finished and semi-finished leather. Finally came the stage of leather products. Except for a few manufacturers of leather sportsgoods there were no exportable leather products in the beginning of the 1980s. The only other leather-made goods industrially produced in Pakistan at that time were footwear for domestic consumption. In those days international demand for leather and leather made-ups was guite strong. The local supply of hides and skins was fully used and the Pakistani tanneries were lacking the technological means to finish to upscale specifications. Tanners accordingly decided to go for downstream diversification. The focus was initially set on garments, specifically leather jackets, because these items use large quantities of leather, can be made in the most labour-intensive way, require no other design capability than the ability to copy an imported pattern and are not subject to rapid fashion changes. Thanks to a supportive policy obtained from the government, the field was soon encumbered by a host of micro-enterprises - often but not always linked to the tanneries - and by the mid 80s, a breakthrough was achieved. Following this success, a comprehensive programme of incentives was set up to promote the export of these processed products. Industrial gloves and small leathergoods were developed in view of making use of the small-size skins and the wastes from garments. More recently, an attempt to build on the breakthrough is made in direction of footwear which role will be to use the hide leather. The main thrust is done by two large-scale manufacturers which dominate the domestic markets, and therefore have the necessary technological and financial resources, but a few new enterprises exclusively export-oriented are presently entering the footwear-export area.

The downstream drive is an undeniable success. The share of leather products is now preponderant in the composition of exports. Since the mid 80s exports are growing at more than 20 per cent yearly and penetrate an increasing diversity of destinations. Most of the firms are exporting to importers but a few have signed agreements with distributors and manufacturers.

The success of leather products exports in turn increasingly involves an internationalization of the supplies of the Pakistani leather industry. In order to match the quality demanded in world markets, the inputs available domestically are not sufficient. Furthermore, additional hides and skins must be imported to supplement local supply. Accordingly, the government has established a liberal policy of imports which allows the industry to insert in its processes raw materials, machinery, parts and inputs from anywhere in the world.

Domestically oriented cottage and small-sized firms have not fared well in the current policy environment and their prospects are not bright. The focus on local consumers where market size and product prices are constrained by low income, confines these firms to rudimentary techniques and deprives them of government support (for example, duty drawbacks, sales and income tax exemptions). Furthermore, they are squeezed as expansion in the modern, exportoriented sector pushes up the prices of local hides and skins and attracts skilled labour. If the modern sector continues to grow as it has in recent years, this is likely to be at the expense of the traditional inward-oriented sector.

1.2 A few facts and figures pertinent to the whole leather industry

1.2.1 The industry's sales can only be guessed because there is no statistical survey on which to base a measurement. The guess, as is perhaps adequate for the leather industry, sustains itself in the air by pulling its own bootstrings.⁴ Nevertheless, by virtue of coherence with indicators concerning the livestock and the domestic consumption of footwear, it is thought to have a good chance not to be much off target. The industry's sales to final users are reported at 600 million dollars of exports and estimated at 200 million dollars of domestic sales of footwear; the intermediate sales - from a tanning unit to a finishing unit or from a finishing unit to a leather products unit - represent perhaps 200 million dollars. The total is thus one billion dollars.

1.2.2 Using a ratio value added to value of production of 27 per cent,⁵ a value added of 270 million dollars, or 11 billion rupees is found for 1991-92. As a contribution to total manufacturing value added 11 billion represent 5.5 per cent. It is to be noted that this proportion is the highest reported for any country in the world. In other words there is no other country where the leather industry contributes as much to industry as in Pakistan.

1.2.3 The total labour engaged in the organized sector of the industry is estimated at 50.500 persons in 1991-92; an inter-branches distribution of this manpower is given in Table 1.

Table 1 Persons engaged in the branches of the leather industries, 1991-92

Leather branch	Persons engaged
Tanning	6,300
Garments	20,300
Gloves	5,000
Leather goods	1,400
Footwear	14,200
Shoe uppers	3,300
Total	50,500

Source: UNIDO estimate based on Exports Promotion Bureau and Pakistan Tanners Association, op.cit., Section 2-3, p.16.

In addition to the "organized" sector, the informal sector is known to occupy a large number of artisans. In total, the leather industry would employ around 210,000 persons, which is 5.0 per cent of the total labour force employed in the manufacturing sector.

⁴ The production of the tanneries is estimated on the basis of an assumption concerning the number of hides and skins processed.

⁵ See Exports Promotion Bureau and Pakistan Tanners Association, Five Year Development Plan for the Leather Industry in Pakistan, 1992-1996, National Management Consultants, December 1991, Section 3.72, p.33.

1.2.4 The industry is located all over the country but especially in Punjab where cattle is relatively abundant. The Leather Industrial Development Organization has drawn a chart of factories which is reproduced in Table 2. The information in the table is a still picture of a fast-changing reality. Indeed, the demographic rate of growth of establishments is very high in the leather industry. Yet, the main features do not change that easily. It can be seen that there are concentrations of tanneries in Kasur, Karachi and Sialkot. The garment units are mostly installed in Karachi and Sialkot. The footwear units are in Lahore and Karachi. Most of the gloves and leather sports goods units are in Sialkot. The leathergoods units are in Karachi and, to a less extent, in Sialkot.

1.2.5 The firms' sizes are small with very few exceptions among which, BATA, classified 14th largest firm of Pakistan, figures prominently. Out of a total of 1,550 units in the formal leather and leather products industry, 4 have more than 1,000 persons engaged, 4 have between 1,000 and 500 persons engaged, 160 have between 500 and 25 persons engaged and 1392 have less than 25 persons engaged.

The 170 largest firms are considered mechanized, the others - those with less than 25 persons engaged - have hardly any fixed capital and practically none in the form of machinery.

Name of City	89. 67 Tannor.co	No.of Lastner Garlingeta Galta	No.of Foncymen Willo	No.of Lanther Eleves Units	No. of Loother dondo Unito	No, of impther Sports Guede	No.of Nodelary/ Nornada Losther
Abbottabad		-		<u> </u>			
Bahawalpur	1	-	-	-	-	-	-
Chakwal	-	-	1	-	-	-	-
Faisalabad	7	-	22	-	-	-	-
Gujranwala	39	4	6	1	2	1	-
Gujrat	2	-	2	-	1	-	-
Byderabad	4	-	4	-	-	-	-
Islamabad	-	2	-	-	2	-	-
Jhelum	2	-	-	-	-	-	-
Karachi	114	138	32	28	78	-	-
Kotri/Dadu	2	-	-	-	-	-	-
Kasur	163	2	-	-	-	-	-
Khairpur	1	-	-	-	-	-	-
Rhusthab	1	-	-	-	-	-	-
Lahore	11	15	180	2	2	-	2
Lasbella	1	-	-	-	-	-	_
Multan	23	-	4	2	-	-	-
Mir Pur (AJK)	2	1	i	-	-	-	-
Noushera	4	-	2	-	-	-	-
Peshawar	11	-	6	-	1	-	-
Quetta	1	-	ĩ	-	-	-	-
Ravelpindi	-	2	22	-	-	-	-
Ravalkot (AJK)	-	-	ĩ	-	-	-	-
Sahiwal	9	2	-	2	-	-	-
Sargodha	5	-	11	-	-	-	-
Sheikhupura	26	-		-	-	-	-
Sialkot	94	130	16	208	29	44	6
So. Waziristan	i		ĩ			-	-
Sukkur	2	-	ī	-	-	-	-
Bhimber(AJK)	-	-	-	-	-	-	-
Total	524	297	316	243	115	45	

Table 2 Geographical distribution of factories

Source: Leather Industry Development Organization, Leather Directory 1993, Islamabad, p.vil.

1.2.6 The labour is comprised essentially of male workers of very low qualifications (some analysts estimate the illiterate at 90 per cent of the leather workers). A rough guess is that only 5 to 10 per cent of the work force in the establishments is female, not because the industry would

not employ female, but because tradition refrains female labour supply⁶. Among homeworkers, however, the percentage of female is very likely to be higher. Children are commonly employed to do light tasks requiring minimum skills. The seasonality of domestic demand and the precariousness of foreign demand favours a system of production in which a large portion of the manpower is released when the order books are emptying. Therefore, homeworkers and seasonal workers are common features of the leather labour market.

1.2.7 The salaries vary regionally and according to qualifications but a monthly pay equivalent to 100 US\$ is often cited as a representative average for basic workers.

1.2.8 Being a leather-making country as defined in the introduction, not a leather-transforming one, Pakistan must to a large extent count on her own forces to acquire technology. In this respect, remarkable achievements have to be credited to the tanneries. From wet-blue, to crust, then to finished leather, the industry learned to perform all the processing operations to the standards required by exacting international markets. Recently, the tanneries demonstrated a great deal of technological autonomy by adjusting successfully its processes to the use of imported raw hides and skins. Yet, much remains to be done to master the technology of such processes as finishing, buffing and polishing where the quality of finished leather is at stake. At the manufacturing stage the industry is well in command of the cutting and stitching techniques but in pattern design as well as in operations management much know-how is still missing.

The channels of technology acquisition differ according to the segment of the industry which is considered. Old and successful tanneries usually send sons or relatives to be trained abroad in the arts of tanning and manufacturing of leather-products. The large units can hire foreign experts or obtain technological information from suppliers of machines or chemicals. The small units, though, have to rely on learning-by-doing. If they sell abroad, the foreign clients would contribute to product innovation by setting design, styling, packaging and technical specifications. If the client is itself manufacturer, he may contribute to production technology by setting programmes to improve quality. In one instance technology is transferred by means of a joint-venture between a Spanish and Pakistani firm.

As leather firms are eager and capable to learn but find that access to international technology is limited, sporadic and focused by the interest of the donor, there is a strong case for public sector assistance to the building-up of know-how. But technical knowledge is not the only problem, the industry also faces difficulties in perceiving new market opportunities and in obtaining technicians and training.

In response to these problems and needs, the government, supported by the international technical assistance, has created a network of public sector services institutions. There is a Leather Research Centre in Karachi, a Hyderabad Leather Footwear Center which trains and provides consultancy, an Institute of Leather and Footwear Technology in Gujranwala, a Leather Product Development Center in Karachi and one in Sialkot and a Facility-cum-Training Center in Kasur.

Several of these services are undergoing sustainability problems. Some of them have builtin deficiencies: ill-located, ill-equipped or insufficiently staffed. But a more general source of trouble lies in the interaction that develops between the institution and the environment. As long as supported by foreign technical assistance, the public sector institutions are capable of offering state-of-the-art technology. But then their services are heavily solicited by the modern factories of the private sector which need more and assimilate faster that kind of technology. When the

⁶ Evidence that the industry encourages female employment is that a producers association gives stipendiums to women willing to attend training courses in the Leather Products Development Centre of Sialkot and subsidizes the transport to urban establishments of female workers living in rural areas.

foreign assistance withdraws the public sector institutions become ineffective as far as technology transfer is concerned. As a result, the institutions tend to loose track of their initial mission - which is to assist primarily the cottage and small scale industries since they are the most technologically deprived segment of the industry - and are at trouble finding a new role. Furthermore, working capital becomes very scarce. Missing the wherewithals for buying training material (leather and others) or for sending instructors to machinery material or products fairs, the Centers are left helpless to face a slow but certain erosion of their capability.

1.2.9 The yearly supply of **raw material** is estimated at 6 million hides (with a predominance of buffalo) and 35 million skins (two thirds of which goats). Room for improvement exists, not only in flaying (a UNIDO project followed by a FAO project have demonstrated the concrete possibility of improvement that exists in flaying, salting and curing) but also in the basic condition of the hides and skins. The livestock itself is excellent. The buffalos and cows of Punjab, the goats and sheep of Sind are world-reputed races. But, because of the climate and the parasites and because the hides come from animals that are used to work in the fields, the hides and skins are not in optimum condition. Furthermore, flaying is not done properly not due to a lack of care, but because the slaughterhouse infrastructure is not adequate for optimal flaying (the slaughterhouses are old, congested, badly maintained, poorly supplied with water and electricity, under-equipped); or, simply, because butchering in the countryside or in preparation of Eid-ul Azha, a religious feast, does not necessarily take place in slaughterhouses. Finally, curing and salting - so important in the high temperatures of Pakistan - still leave a lot to be desired particularly in distant rural areas where salt is expensive. On the whole, notwithstanding the deficiencies, the raw material of local origin is considered by the experts as reasonably good.

It is certain that improvement will take place even if only at slow pace. In the long run, mechanization will replace animal work and meat consumption will generate feedlots. But, the normal course of events can be accelerated and this is precisely what the government is trying to do by providing incentives for the development of cattle and sheep breeding farms. Moreover, as scarcity of hides and skins sets in, traders and tanners are offering price premiums for material in good condition and the butchers are starting to react to the price signals by flaying, curing and salting more carefully.

Thus, both the quantity (more yield) and the quality of the raw material have the long-run potential to grow. Since 1988 the supply of domestic hides and skins has become insufficient to meet the demand of the tanneries. The deficit of domestic supply is estimated at 50 per cent in 1993 and is bound to increase because there is no way that int he short run the supply of raw material could increase as fast as he production of leather. There is, however, no risk of bottleneck because imports of hides and skins are allowed in Pakistan free of duty.

Imported raw material is more expensive than domestic on the one hand because larger inventories have to be maintained and, on the other, because an adjustment of the processing techniques of the tanneries is needed to adjust to the characteristics of imported hides and skins.

1.2.10 It is a banality to differentiate **domestic and foreign market**; however, in the case of the Pakistani leather industry, the difference is very significative.

In Pakistan the only leather products bought on the *domestic market* are footwear (including of course the traditional sandals) and, in very small proportion, leathergoods, such as belts, wallets and sportsgoods.

The consumption of these items is based on a large population of 117 million (1991-92) but quality and prices are constrained by a low level of average income. LIDO, the Leather Industry Development Organization of the Ministry of Industries, estimates that this population buys 53

million pairs of leather shoes per year, approximately half a pair per person. There is some evidence to corroborate that estimate. Based on household budget survey of 1987-88 it is estimated that in 1991-92 an average household would spend 225 rupees on textile, garment and footwear.⁷ Supposing that a fifth on this sum goes to leather footwear and that an average pair costs 200 rupees, an household of 5 persons would buy 2.7 pairs per year or about half a pair per person as estimated by LIDO.

The average monthly income of an household will probably increase by 40 per cent between 1991-92 and 2000. Footwear consumption is not likely to increase proportionately⁸ but it can be conservatively estimated to increase by 10 per cent, and at the same time the population will grow by 30 per cent if a slight decrease of the demographic rate is assumed. The combined influences of economic growth and demography is likely to bring about an increase of expenditure of footwear equivalent to 43 of the 1991-1992 level. At constant real price consumption would accordingly reach 76 million pairs, but the real price is likely to increase thereby limiting consumption to some 70 million pairs.

Demand on the domestic market is governed by the seasonality of rural activities and the calendar of religious feasts. Since working capital is extremely scarce both at the production and distribution stage, inventories are kept to a strict minimum. It is consequently on the production level that the task of coping with demand fluctuations is placed. This is simply done by hiring and releasing homeworkers or by subcontracting part of the orders to cottage industries.

The export market. In 1991-92, the exports of leather and leather products reached 591 million dollars amounting to 8.6 per cent of all the exports of merchandises of the country. Within the narrow export basket of Pakistan⁹, leather garments with 257 million US\$, leather with 241 million US\$ and leather gloves with 66 million US\$, figure prominently. What is more, the composition of exports changes rapidly in favour of manufactured goods. Table 3 clearly shows the rise of leather manufactures. The permutation between tanned leather and leather products is quite marked. Tanned leather was almost twice as important as leather products in 1987-88 but four years later it made just 41 per cent.

Table 3 Exports of leather and leather products, 1985-86 to 1991-92

Export category	1987-88	1988-89	1989-90	1990-91	1991-92
Tanned leather	285	244	279	276	241
Leather products	148	156	198	281	340
of which garments	94	102	159	220	257
gloves	39	39	36	43	66
footwear	7	6	4	10	16
other	8	9	4	8	11
Total	433	400	483	557	591

Source: Government of Pakistan, Export Promotion Bureau, Review on Pakistan's Exports, several issues, Karachi.

* The proportion on income spent on footwear is known to decrease when income increase (see basic indicators).

⁹ Only 12 items already account for 85 per cent of the exports of the country: cotton yarns, cotton fabrics, cotton garments, cotton made-ups, raw cotton hosiery, synthetic textiles, rice, leather garments, leather, carpets and rugs, sportsgoods.

^{&#}x27; See basic indicators.

Two sets of factors have played a role in the reorientation towards manufactured exports. One the one hand, the government came with incentives and restrictions to foster more processing. On the other hand, the private sector found ways and means to seize the new opportunities. New products were developed and put on the market in a very short time. It can be seen, in Table 1, that the exports of garments accelerated in 1988-89, and those of gloves and footwear in 1989-90.

It is too early to be sure that this acceleration announces a new trend. Yet, the fact that the exports of leather products have more than doubled in three years seems more than episodic. Moreover, markets or rather niches, have been created in practically all the countries open to leather products -Europe, Japan, the USA, Middle-Eastern countries, Eastern European countries - thus indicating that acceptance is general and based on the very competitiveness of the Pakistani products.

Pakistan's exports of finished leather and leather products are emerging in the arena of international trade in a tune of intense competition. The internationalization of the world leather industry has gone already a long way. The well-known successes of Brazil, South Korea and Taiwan province are being relayed by China, India, Indonesia, Malaysia, Thailand and Turkey. At the same time as Pakistan, countries like Mexico, Colombia, Morocco, Venezuela are appearing and some Eastern European countries are preparing to enter. The fact that Pakistan make a break-through in this intensely competitive atmosphere and at a time of world economic depression, can be taken as a very serious indication of competitiveness. To understand the source of this competitiveness it is now needed to give a closer look at the industry itself.

1.2.11 The policy of the government towards the leather industry is quite liberal. It started in 1989 when a ban was imposed on the exports of raw hides and skins followed, later, on wet-blue from cow; at the same time a duty of 20 per cent was imposed on exports of wet-blue from mutton and buffalo. Whatever the effect of losing foreign markets was on the value and quality of raw material and semi-processed leather, the restriction on exports oriented the industry towards finishing and manufacturing of leather products.

In tune with the general privatization policy, the government fostered an investment-prone atmosphere by releasing investors from the requirement to disclose the origin of the invested funds, authorized to import second-hand machinery without producing a surveyor's certificate and offered loans at concessional rates of interest for the purchase of local machinery. In order to attract foreign know-how, joint-ventures were made unproblematic and repatriation of capital and dividends fully authorized.

The above measures are intended to foster investment in the leather industry and, more specifically, in the downstream stage of the industry. In order that this investment will as much as possible be export-oriented, two sets of dispositions complete the above measures. On the one hand, the Pakistani leather industry is placed on par with its international rivals when it comes to access to the world markets of raw materials, machinery and parts, by freeing imports from duty (or offering duty draw-backs paid within one week) and red tape. On the other hand, incentives in the form of a rebate of 75 per cent on the income tax, an exemption of sales tax and an export finance scheme for footwear - should draw the industry to take advantage of the competitive position in which it is placed.

1.3 The two stages of leather industry in 1993

The leather industry comprises two broad stages: tanning and the manufacture of leather products. The first one involves the transformation of raw hides and skins to semi-finished leather and semi-leather into finished leather while the second entails the fabrication of leather-made products including garments, gloves, leathergoods, footwear, etc.

Firms can either specialize in one of these operations, or integrate various steps in leather making with the manufacture of leather products. In general, however, firms, or at least establishments, may be clearly assigned to either one of the two broad stages. Accordingly, the picture of the leather industry will be presented in two steps.

1.3.1 The tanning industry

According to the Leather Industrial Development Organization (LIDO), there were 526 tanneries with a capacity of 60 million square meters of chrome leather in 1993. Production reaches 45 million square meters of which 50 per cent skin leather. This production is absorbed directly by the export market to the extent of 16 million square meters incorporated in exports of garments, 5 million square meters in export of gloves, 2 million in exports of leather goods and 2 million in exports of footwear. Only 8 million square meters are absorbed by the domestic market in order to make the footwear sold to local customers. In addition to chrome tanning, the leather industry counts with half a dozen units making leather by vegetable tanning in order to obtain sole and saddlery material or to improve the standing of the material. The sole leather is both exported and sold locally while all the production of harness and saddlery is exported.

The vast majority of these tanneries - say 350 units - still retain the characteristics of cottage industries. Typically, all the equipment consists of a couple of drums animated by a small motor and the leather is sold either to small cobblers making shoes for the domestic or to finishing units which themselves work for the modern segment of the leather industry. Kasur, for instance, which counts the highest number of units located in a single district, ships wet-blue to finishing tanneries in Sialkot, Lahore and Karachi but has only four or five units (one of which relatively large) with the technology and the equipment to reach the final processing stage.

By sheer numbers the small tanneries may be overwhelming but in terms of production their share is modest, probably in the region of 10 to 15 per cent. Therefore, the bulk of production takes place in medium- and large-scale tanneries. The latter are found principally in Karachi which offers the most developed export facilities. After Karachi, it is Sialkot which hosts the largest number, a score, of relatively large tanneries capable of performing all the stages of leather-making from soaking to finishing.

The largest tanneries have modern machinery and easy access to global suppliers of chemicals. They can thus produce soft, tightly-grained leather. A large part of the material must be corrected to cover the cuts, scratches, stings. This often introduces buffing, heavy pigmentation, and embossing. However, full grain soft aniline leather is also made. The material processed is both bovine and ovine. The Pakistani tanneries have the technology, the skills, the equipments to deal with the problems of tanning both sorts of materials and this explains the large diversity of end-produce that will be observed later in this report.

The tanneries are located in 24 different sites of the country, however, there are concentrations in Karachi with 14 units, Kasur with 163 units and Sialkot with 94 units. Between these centres there is a certain degree of specialization in the kind of raw material processed. Buffalo and cow hides are principally processed in Kasur and Lahore, mutton skins in Sialkot and goat skins in Karachi.

In principle, the concentration of tanneries offers two main advantages. One is production flexibility based on a distribution of tasks among specialized units. The other is a repartition of the infrastructure burden among various users. In practice, however, these advantages are not really effective in Pakistan. It is true that small tanneries have a

certain access to the facilities of the larger ones when they need to perform certain processing tasks for which they are not equipped. Yet, there is little indination to distribute the work load, for instance in the form of subcontracting, in cases of peak demand.¹⁰ Again, when it comes to the sharing of common infrastructure, it is clear that the potential advantage is not operative. Growth has been so brisk in the recent past that all the infrastructures are congested. The supply of water, the distribution of electricity, the sewage systems, the roads and communications are all overburdened and, therefore, subject to frequent breakdowns. The current practice is simply to discharge all the effluents without any treatment. As a tannery would normally be located close to a river in order to draw on the large quantities of water needed for processing, the discharge goes into the river or flows into the sewage and from there spills over the land (especially in times of flood) and percolates down the subterranean waters.

1.3.2 The manufacturing of leather products

The *leather products stage*. In the second stage, the leather product industry transforms the finished leather into final consumption products.¹¹ As in the case of tanning, this second stage can also be divided into a inward-oriented segment and an outward oriented one.

The *inwards-oriented segment* comprises only footwear firms because the Pakistani market does not consume garments, gloves or any other leather product in any significant quantity. The footwear firms oriented to the domestic market are dominated by two firms which make 10,000 pairs a day each, and subcontract short runs to a great number of small producers (cottage industries, individual cobblers or homeworkers). The power of these two firms resides not so much in the scale of their production than in their command of extensive distribution networks and on the image of durability they managed to associate to their products. Against the dedicated retail shops of the two giants, the small producers have nothing to oppose. All they can do is sell their shoes to small retailers - which themselves painfully compete with dedicated shops - or the bazaars. Under the two large firms, there is half a dozen firms which make 1,000 pairs a day and about 300 firms making 500 pairs a day. The total production of leather shoes is estimated at 53 million pairs. Out of these 316 footwear firms recensed by LIDO, 180 were in Lahore, where access to cow and buffalo hides is immediate and 32 in Karachi, the largest urban market.

Except for the two largest firms which benefit from international know-how through international business links, the inwards-oriented segment is confined within a fairly rudimentary technological level. With short series selling at very low prices (100 to 500 rupees a pair would probably be a representative price range), the small firms cannot afford modern equipment or decent quality components. Accordingly, innovation is precluded and expansion possible through the general expansion of the domestic footwear market but without gain of market share. In annex the reader will find a detailed report on this subject written by Tariq Usman Sheikh, UNIDO's Project Director of the Hyderabad Leather Footwear Center.

Design is poor, adequate perhaps to the modest needs of the mass of domestic consumers but not to the demanding upper fringe nor for foreign consumers.

¹⁰ See National Development Finance Corporation, the Leather Tanning Industry in Pakistan, 1933, p.44.

¹¹ With the exception of footwear uppers which are not final consumption but intermediate products.

The technological misery of the small inwards-oriented footwear firms authorizes a few units supplying very low quality lasts and cutting knives to live in a niche that has nothing to fear from foreign competitors because the quality is so low that it allows prices under the reach of the international market.

The outwards-oriented segment comprises five branches: footwear, garments, gloves, leathergoods and leather sportsgoods.

(i) The outwards-oriented footwear branch is at a very incipient stage. It is being developed to make local use of hide leather which is the last item of finished leather still exported in large quantities. It counts less than 30 units, none older than 1988.¹² In total 3 million pairs were exported in 1991-92, three times as many as in 1989-1990. The huge increase primarily reflects how young the branch is but it also indicates that the industry is taking off.

The take-off is due to an encounter between an opportunity given by the policy of the government and the initiative of the private sector in promptly grabbing the opportunity. What the government did was to allow the market to determine the value of the rupee in terms of dollars, to offer incentives to exports and, more importantly perhaps, to implement all the requisites for a frictionless access of the footwear exporters to foreign sources of components (such as soles), production items (such as lasts) and equipments (such as machines).

The entrepreneurs seized the opportunity with decision but also with due care. They knew from precedents in finished leather and garments - which penetrated the international markets before footwear - that the initial contracts would be decisive for their enterprises. They also knew that shoe factories have less flexibility scope (the machines are committed to certain types of production lines) and require more sizeable capital immobilization than other leather products. They, therefore, were very careful in selecting the production lines and the suppliers that would give the best chances of return. Once the first samples were submitted to the clients (visited directly or met through fairs), they saw to it that production indeed matched the samples. It ensued that the first orders were repeated for larger quantities and that the business developed. Thus, a dynamism was engaged between clients and The clients contributed valuable help in the form of detailed producers. specifications (including origin of components) when they were traders. The Pakistani entrepreneurs fine-tuned their process and products and broadened their marketing. This dynamism is presently gathering momentum, what the outcome will be in terms of sustained expansion cannot be seen but the odds seem good.

Besides complete footwear, Pakistan produces shoe-uppers for exports. This branch of the industry adds less value to the leather than does the making of complete footwear but, then, consumes less imported inputs and is less dependent on design. Although technically simple, the production of shoe-uppers has not yet assumed much importance. Only a handful of establishments, totalling exports of about 5 million dollars, are in activity.

¹³ The two large firms of the inwards-oriented segment of the footwear industry also have exporting units. These are exceptionally "old" exporters.

(ii) The garment branch

Garments, mostly jackets, are by far the most important export item of the Pakistani leather industry. This prominence results from the barrier imposed on exports of semi-finished leather and the corollary obligation to finish in Pakistan. At the finishing stage leather is already quite committed to specific final uses and, therefore, the number of potential buyers decreases at the same time as the value of the product and the corresponding cost to finance stocks increase. In such a situation, it is tempting for the seller to integrate the processing stage between finished leather and the final product. The export-oriented tanneries made that step by setting-up garment factories.

Ex-post analysis confirms that the option was right. Technically, garment units are well adapted to the risks involved in pioneering a market. Such units can be equipped with very little in the way of premises, machines, tools. Minimal capital immobilization means that on the one hand, the cost of idleness - in case demands doesn't materialize quickly - is easy to bear and, on the other, capacity can be expanded swiftly in case of unexpected demand buoyancy.

Also as product, garments proved to be a good choice. Garments are an obvious outlet for goat and sheep skins of which Pakistan is particularly well endowed. Furthermore, garments are articles that incorporate a large quantity of leather per unit: the value of leather, relative to other elements of cost - such as labour or equipment - is higher than in footwear or other leather goods. Accordingly, a country which has leather but no skilled workers and no capital - as Pakistan was when she initiated the conversion of leather into garments - is well advised to start with garments.

Finally, garments are also a good prime move choice from a marketing point-ofview. First, the market for standard garments is relatively stable. Since average households cannot be expected to buy more than one item per year, fashion is not changing very fast and the shelf-life of products is long enough to authorize relatively long lead times. Second, styling is no barrier to entry, in so far as standard garments are considered (countryside, motorbike, freetime jackets), because it is based on easy-to-copy features. Last, but not least, the cost of transport, in relation to the value of the good, is much more favourable in the case of garments than, for instance, in the case of footwear.

Since the Pakistani tanners were used to sell leather to garment makers the former already had acquired a certain acquaintance with the garment business even before starting production. The cost of first market exposure was not prohibitive because the garments could be exhibited at the very fairs where the tanners would anyway rent space to show their finished leathers.

Taken together, all these considerations explain why garments were selected to make a breakthrough in final products exports. Recalling further that the tanners obtained ample support from the State for their new undertaking (see 1.2.11), the success achieved becomes fully understandable.

In 1993, the government industry comprises about 300 establishments (against 10 in 1980) employing about 20,000 persons. Initially, the industry was located exclusively in Karachi - because Karachi is a port and because its hinterland is well endowed with goats and sheep skins. More recently, a new center developed in Sialkot - with some ramifications in Lahore - on the base mostly of cow hides.

(iii) The glove branch

Gloves supplement garment as users of leather in offering an outlet for small pieces of leather that - because of size or quality - found no application in garments. Considering that there is no alternative cost, since the leather would be wasted if not transformed into gloves, the raw material for gloves is complementary to that available for garment-making.

Accordingly, the glove industry developed without interfering with the garmentindustry. In a first stage production concentrated on industrial gloves - which demand less refinement in execution, then it diversified into sports gloves and, finally, when Romania stopped buying the soft sheepskin leather which she used to make gloves, in fancy gloves. In 1993 the exports of fancy gloves had overtaken both other categories.

There are about 250 units making gloves, more than 200 are concentrated in Sialkot.

(iv) Leathergoods

Wallets, belts, handbags, suitcases and so on are made in about 120 small-scale or cottage establishments principally located in Karachi. In this branch the leather represents no more than one quarter of the production cost. Accessories and mostly labour, including highly-skilled design labour, are more important cost components than in other branches. Possibly for this reason, the leathergood branch, while growing, does not exhibit as much dynamism as the other leather branches.

(v) The sportsgoods branch

The sportsgoods branch is perhaps the oldest final products branch of the Pakistani leather industry. It makes goods on order from international companies. All the production requires is non-qualified labour and leather. No design, no pattern cutting are required. About 40 units in Sialkot are engaged in this kind of activity.

2. The importance of the leather industry in the economy of Pakistan

The economic importance of the leather industry must be gauged from several sides: its contribution to production, to employment, to exports; its linkages with other sectors; its contribution to national objectives.

2.1 The contribution of the leather industry to production, employment and exports

The pertinent estimates are reported above (see 1.2.1 to 1.2.3 and table 3), here follows a recapitulation of the main findings:

- The value added in the leather industry is 11 billion rupees or 270 million dollars in 1991-92. It is 5.5 per cent of the value added in the whole manufacturing sector (a proportion which is higher than in any other country in the world).
- Employment in the leather industry is 210 000 persons. It is 5 per cent of the labour force employed by the whole manufacturing sector.
- The exports of leather and leather products amounted to 591 million dollars in 1991 92. It is 9 per cent of the total exports of the country.

The current account of the balance of payments is structurally in deficit in Pakistan and the economic turn towards liberalization is presently adding a surge of imports to the pressure already exerted by the external sector. In such circumstances, it is clear that leather, being responsible for 9 per cent of all merchandise exports, is an important contributor to outwards-oriented growth. It is, however, also true that leather exports are generated by processes which are dependent on imports. Perhaps as much as 40 per cent of the raw hides and skins and certainly close to 100 per cent of chemicals, machinery, accessories used in exported leather are of foreign origin. Accordingly, the net contribution of the leather sector to foreign exchange is not quite as large as suggested by the mere export figure. It remains that there is a net contribution and that is invaluable in an economy on its way to internationalization.

2.2 The linkages effects of the leather sector

The sales of the leather sector have been estimated to be around one billion dollars or 25 million rupees in 1991-92 (see 1.2.1 above). Part of it, estimated at 11 billion rupees, becomes the income of the factors connected to the activity: salaries of workers, profits of owners, dividends of stockholders, interests and so on. The rest, 14 billion rupees, is spent within the sector itself (as when a garment maker buys finished leather) but also outside the sector. The expenditures of the leather sector on goods and services supplied by other sectors are here called links.

Probably the strongest of those links are the purchases of hides and skins from butchers and traders. The industry buys locally 6 million hides and 35 million skins; assuming that the respective prices are 600 and 100 rupees, the total expenditure amounts to 7.45 billion rupees. The order of magnitude of the income thus generated in rural areas is more easily grasped when realizing that 7.45 billion rupees is equivalent to the yearly income of 300,000 rural households. Besides raw material, the only supplies domestically bought are items purchased by the inwardsoriented footwear branch: synthetic soles, shoe tacks, fitting, glues, chemicals, accessories and some machinery purchased by the tanning industry.

The tanning machinery sector of Pakistan is quite small, half-a-dozen units, but in some areas of equipment, it plays an important role. For instance, about 90 per cent of the drums in operation in the tannery industry are made in Pakistan; also the tunnel dryers are mostly made locally. In other areas, the role of the local machinery is much less important and, anyway, confined to the inwards-oriented sector of the tanneries. This machinery includes small mechanical shaving, buffing, setting-out, splitting machines, togging units; simple hydraulic presses, etc.

It is noteworthy that the Pakistani industry has already recorded some exports: drums to Dubai and Kenya, shaving machines to Bangladesh and Saudi Arabia are examples.

2.3 The contribution to national objectives

Privatisation and indigenizition are two themes of the present policy orientation of Pakistan that the leather industry serves particularly well. The sector is totally in private hands and totally in Pakistani hands.

Also in line with the country's objectives is the contribution the leather industry makes to the modernization of economic activities. Counting almost exclusively on their own forces, the tanners have extracted a large segment of industry from what used to be a pre-industrial mode of production and have convincingly transformed that segment into a serious contributor to the international economy.

Contrasting with these positive assessments, the pollution inflicted by tanning should not be overlooked. In Karachi, Kasur, Sialkot, society pays a heavy tribute to the success of the tanners and, surely, it may expect to see a prompt end to the ongoing damage.

3. The future of the leather industry in Pakistan

The introduction to this report proposed a distinction between leather-transforming and leather-making countries. Pakistan belongs to the latter category but could envisage to pass into the former one. To a large extent the future of the leather industry depends on which path will be taken.

3.1 The path towards leather-transforming

The reason why a country like Pakistan would wish to move towards the condition of leather-transforming country is simply to create room for quantitative expansion. The tanning sector having reached a stage where it can transform imported skins into finished leather, is no longer limited by the domestic supply of raw material. The new limit set to tanning in the present liberal context of the Pakistani economy (in which raw materials and inputs can be freely imported) is measured by the ability to sell Pakistani products incorporating leather. The constraint therefore shifts from production to sales.

It is tempting to leave it to multinational firms to relax that constraint. Marketing has become the crucial function in contemporary leather economics. It is a function difficult to penetrate for a latecomer because it is defended by huge investments sunk in distribution networks during the last 3 decades by multinational or large national firms¹³. Today a newcomer in marketing would not only have to build up its own differentiated advantage (in cost, organization, technology, brand, and so forth) but would also have to manoeuvre in order to counter the defensive measures of incumbents.

The Pakistani tanners are resourceful leather-makers but in world-wide distribution of final products they have no experience and no means to establish a global marketing network. One alternative is to leave marketing to multinational specialists and to work as subcontractors to produce designs provided by these specialists.

This is the formula of a leather-transforming country. Sales are expanded via marketing agents and firms concentrate on production. What then are the requirements to qualify as a leather-transforming country?

First, firms of the candidate country have to specialize on standard products. Standard products can easily be made to orders because they do not include sophisticated design, do not demand high grade finition and incorporate standard leather. Of course this requirement can be satisfied in Pakistan.

Second, the standard products in question have to be made at low cost. There are many competitors in India, China, Indonesia, Thailand, Philippines, South America, North Africa, Eastern

¹³ Three types of agents dominate the marketing of leather-made products: large retailers with several thousand of outlets; manufacturers who commission subcontractors; large importers who sell on to retailers.

All these marketing agents have networks of buyers keeping a global watch on actual and potential production sites, design houses with forecasting units to anticipate fashion trends, and, of course, distribution networks.

Europe, Turkey with market share ambitions in standard products. Between these competitors the salient form of rivalry is price-cutting because the products, being standard, are equivalent in terms of characteristics^H. Here, it cannot be taken for granted that Pakistan would reach global competitiveness.

The cost of leather being the same everywhere - since all competitors do import or can import leather from the international market -, the distribution network being the same - those of the marketing agents placing the order -, the cost of capital being negligible - factories making standardized products tend to use little durable capital - low cost can result only from low profit margins and low labour cost.

Low profit margins are feasible because the long production runs authorized by the standardization of the product and because the immobilized capital to be remunerated is not large. Low labour-costs involve low salary rates in relation to productivity. In Pakistan salaries (100 US\$ per month) are not particularly low compared to those of the competitors and, considering the culturally restricted supply of female labour, there is no reason to believe that they might undergo a relative decrease in the next future. Therefore, the only key to low labour cost relative to the competitors, is a high level of productivity relative to the competitors. Productivity in made-to-order standard goods is a matter of rational work organization, a task incumbent upon the management, and of a disciplined labour force willing to lend itself to taylorist work procedures.

Whether appropriate management and labour-force profiles are actually available to give the Pakistani leather industry a productivity edge over its competitors cannot be ascertained at this stage. The made-ups segment of the industry is too new and too small to serve as a gauge.

The essential question, anyway, is elsewhere. Even if Pakistan could become a leathertransforming country, would it be to her advantage? In dealing with this question, four caveats must be considered. First, market shares built on low labour-cost are always exposed to competition from even lower labour-cost production sites. The technology of standardized products is accessible to all potential producers and the marketing agents, through assistance in process engineering, are always ready to help disseminating this technology in order to draw from as many suppliers as possible. Capital, too, is available to any site wishing to be inserted in the global production system because the small durable capital involved consists mostly of footloose equipment. Under these conditions any country unfolding a pool of cheap labour can enter the market. When it comes to standard products, even a small price difference will suffice to lose the client to some other supplier. Thus a currency devaluation in another economy, for instance, can lead to a sudden crowding out of firms located in a stable currency economy.

Second, leather-transforming countries are not only vulnerable to price but also to demand fluctuations. If, for instance, consumer tastes shift from one design to another, the marketing agent can simply drop one production site and promote a new one.

Third, the industrial base created in leather transforming countries is quite shallow. As the downstream units are eminently precarious, it is risky to invest upstream in supplier industries exposed to loose their clients at any time. Moreover, the specifications set by the marketing agents may go to the point of designating the suppliers of parts and accessories. If such is the case, a potential investor in a domestic upstream line may see no chance to insert itself in the market. Thus, the technical links remain essentially with foreign firms.

¹⁴ In a market where all the suppliers offer equivalent products the only way for one of them to increase its market share is to sell at lower price than the others.

Fourth, a leather-transforming industry would be totally alien to the inwards-oriented industry. It has been seen that in the case of Pakistan, the only inwards-oriented industry is shoemaking and that, except for two firms, shoe-making for the domestic market has no perspective of progress. In order to open such a perspective, it would be desirable to take a development path involving the whole leather industry including the domestic market segment. In this respect the creation of a leather transforming economy would be of little help. It would make products designed abroad for foreign customers and would be linked to foreign counterparts for technology and material transfer. The new firms would compete for the leather available domestically - thus hindering the domestic sector without exerting any positive influence to compensate.

None of the inconvenients that have just been mentioned are bound to happen, their occurrence is possible, not certain. Furthermore, no country is a pure case of leather-transforming country, entirely passive in the hands of marketing agents. Yet, the features stylized above do colour the actual experience of certain subcontractor countries and can therefore not be ignored. When a country has no potential for leather-making, simply because it has no raw material and no leather tradition, then it may be indicated to take the leather-transforming path. However, when an alternative exists, as it does in the case of Pakistan, the leather-making option may be worth an effort.

3.2. The path towards leather-making

In the preceding case firms would be typically concerned with production. In the present one firms would strive to become product-oriented as a first step and, later, to become marketoriented.

Product-oriented firms are not designed for mass-production but for craftsmanship. Their product are characterized by design and quality. When quality and design assume importance price no longer commands market shares. Product-oriented firms, paying 30 times the salaries paid in Pakistan, can profitably hold their stand in the market not because their physical productivity is 30 times greater but because they sell products that buyers want to have no matter the price.

Can Pakistan come up with product-oriented firms? What it takes is craftsmanship, which is certainly available in the traditional sector, first-class inputs, which can be obtained from imports and from the domestic industry, and design capability. Domestic design capabilities, however, are not to the level required. There are few designers in Pakistan, they are not trained and there is no access to design intelligence. Furthermore, there is lack of management to combine inputs and factors into efficient production processes.

It follows that efficient firms, making top scale products based on high-grade leather, cannot be established instantaneously. A transsition phase to build-up domestic design capabilities, pattern-cutting capabilities, adequate tooling, and so forth, is necessary and will take time and money. Investors may hesitate to do the effort in view of hypothetic and distant markets. But there are ways to alleviate the learning cost. For instance, the development of prototype lines could be shared between firms and State; training of designers and cutters could be supported by the Institutes; more importantly, the domestic market, however small, could serve as test. For product-oriented firms to sell on the domestic market, it is important that such firms be given access to international inputs and ports without having to pay taxes or custom-duty exactly as do export firms in the present commercial regime. It may be argued that without protection there much. First, let a base of product-oriented firm emerge and develop. Once this happens, there will be a domestic market for inputs and parts. If the domestic market will be a flourishing one, parts and inputs firms will be induced; if domestic demand fails to flourish, there won't be a

derived industry but then it will be an advantage for the economy at large not to have to drag the burden of useless protected firms.

If and when a certain number of product-oriented firms would be established in Pakistan, the leather industry could move to a second development stage characterized by the emergence of market-oriented firms. This type of firm is eminently market-responsive. It has the intelligence network and the technical flexibility for quick response to market demands. It keeps very close contact with distributors at the output end and with clusters of high quality suppliers at the other end.

Market-oriented firms is not an option but a must in today's competitive world. The differentiation and variability of consumer tastes are such in consumption societies that retailers are demanding deliveries in small batches in order to minimize risks of commercial flops and working capital (the implication is that retailers must be able to quickly repeat orders for items selling well). Faced to this requirement, the r yriads of firms from all over the world which want to sell to open consumption societies have simply no other choice than to deliver faster wider varieties of products of higher quality at lower cost.

Raising performance to such standards is not so much a matter of computerization, as is often thought, than a matter of factory layout and work organization. The experience of other countries shows that just-in-time and total quality control attributes can be acquired by such organizational factors as introduction of cellular production and total systemic commitment to quality.

Moreover, the efforts made within the firms have to be supplemented by inter-firm cooperation. Where firms do cooperate, three benefits can be expected. First, where firms produce for each other at successive processing stages it is clear that the quality of the final product is determined by the quality obtained at every level and that quality will result from user-supplier cooperation to define with precision the specifications needed at every processing stage. Second, cooperation among small rival firms, that is among firms doing similar things, brings in the benefits of cost-sharing of sizable investments. The domain of cost-sharing is wide: marketing, joint-purchasing of inputs or expensive equipment, design and design information, machinery maintenance, training.

Third, inter-firm cooperation allows for flexible specialization, a system in which every firm specializes in its own range of varieties. Specialization at firm level narrows the output range in order to provide tor quality but all the firms taken together offer a fairly diversified range of articles. A cluster effect thus develops that confers to the whole industry an image of important actor on the international scene.

All the images of successful exporting nations are built on cluster effects: Italy is probably the best known example but Brazil, Korea, Spain, Taiwan can be mentioned too. The vision of synergistic clusters providing global competitiveness is of course far-fetched as far as Pakistan is concerned. The Pakistani industry of leather-made-ups is just being born. Its first exporting units are just production-oriented firms, it is not yet envisaged to move into a product-oriented stage and much less to enter a market-oriented one. Nevertheless, if the vision is adopted, a sense of awareness of what is implied should be initiated promptly. What is required of a market-oriented system is that every element of the cluster-system must be congruent with the whole and the system must work for the benefit of every part. Yet, there is no trace of any shared vision in the Pakistani leather industry of today. On the contrary, a radical split can be observed between domestic and export-oriented sectors whereas the supporting institutes are not really in tune with the productive units. These individualistic symptoms must be taken seriously and some cure must be designed at once if at all a cluster system is envisaged. It would be rash indeed to think that such a system would impose itself simply by virtue of its own dispositions. In Italy the cluster was built on strong sociological cohesion among its members, in Korea it was enforced by very large consortium working hand in hand with the State, in Taiwan it was built on family links. It remains to be seen what catalyst will be used in Pakistan.

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