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LEATHER PRODUCTS DEVELOPMENT CENTRE ,

DP/PAK/79/022

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

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Explanatory notes

| | |
|------|--|
| LIDO | Leather Industry Development Organization |
| LPDC | Leather Products Development Centre |
| ITC | International Trade Centre |
| EPB | Export Promotion Bureau |
| WB | WORLD BANK |
| CDG | Carl Duisberg Gesellschaft - Federal Republic of Germany |
| GTZ | Deutsche Gessellschaft fur Tech. Zusammenarbeit German Agency for Tech.Co-opeation, Ltd. |
| IIC | Instructor in charge |
| US\$ | 1 equals approximately 16 Rupees (June 1986) |

Abstract

The project DP/PAK/79/022 Leather Products Development Centre started in June 1981 with an objective to develop a leather garment training centre into an operation of wider scope for development of leather goods and was further extended to leather gloves and sports goods. The total duration of the project is five years and the high level objective was to increase the contribution of finished leather products with higher added value to the country's exports.

The project has established a Centre in Karachi and started a Centre in Sialkot with good linkages with the industry target groups. A number of regular long courses are being carried out mainly by the national cadre who received on-the-job training. Considerable volume of consultancy services to the industry was conducted as well as common facility services - both are growing. The project started some short courses for the industry staff which are in demand to support the industry growth. Promotional activities have been initiated for technical support to national and international exhibitions with the industry.

The report has reviewed and analyzed the project activities with abstracted documentary of the project experts output since its start. It contains analysis of the institutional building output as well as development results and brief industry-cum-economic structure.

In the report, the expert recommends - in order to sustain the arrived at results - the LPDC should be brought to the next phase of its development by modernizing its training, advisory and information services into an integrated approach of a permanent institute. Recommendations were also made on future actions which might be taken and on providing suitable environment for developments.

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I N T R O D U C T I O N

Technical assistance to the leather industry sector has started through the project DP/PAK/73/027 to establish Gujranwala Institute for improvements in leather tanning and finishing in addition to continued training of tanning and shoe industry middle-level technicians. Last decade (1970) showed marked progress in leather tanning towards finishing, making the situation ripe for development of leather products with higher added value. Through the same project, the first approach to develop leather products has started in Karachi Leather Garment Centre and this approach has produced significant achievements.

This project has started in May 1981 as succeeding the earlier one where the leather garment centre was expanded into a Leather Products Development Centre (LPDC). The project was originally approved for US\$.366,220 over two years operation and through revisions was extended to 5 years with total UNDP inputs US\$.1,014,904. The main reason for adjustment was due to insufficient original budget and short planned duration in addition to a substantial growth which has taken place in the industry target groups.

The development objective of the project, as given in the original project document as follows:

"The higher level objective of the project consists of contributing to the development of the country's industrial economy through improving its leather products industry, particularly in view of upgrading technology, design, production methods and quality and thereby, increasing the added value of locally-produced finished leather and making the country's leather products competitive on the large potential export markets".

The immediate objectives as given in the project document are:

1. To expand Garment Training Centre facilities established under project DP/PAK/73/027 to widen the Centre's scope and activities to include training and demonstration in leather goods and other leather products manufacturing. The Centre is to be re-named "Leather Products Development Centre".
2. To create a fully-qualified group of instructors to take over the technical management and activities of the Centre.
3. To establish a well-equipped unit for extension and common facility services for the leather garment and leather products manufacture.

4. To design syllabi for courses, arrange seminars and workshops, in accordance with the needs of the leather products industry sector.
5. To assist and follow up the activities and performance of participants in the various courses conducted.
6. To render direct, on-the-spot technical advice in troubleshooting, processing technology and quality improvement for the leather garment and leather products manufacturers in order to improve their export potential.
7. To assist the shop floor to improve the technical practices and performance.

The project main revisions were to provide assistance to more sub-sectors of leather gloves and sports goods in addition to reinforcement of the assistance to leather garments and leather goods as well as to establish a new Centre at Sialkot.

Training and on-the-job training have been the project main activities with a result of well trained instructors staff who had no previous experience with the industry (Annex.III). This training was further supported by overseas training through fellowships (Annex.IV).

All equipment ordered by the project have been received with the exception of some minor equipment and spare parts of the following Field Purchase Orders:

| | | | |
|-------------------------|---|---|------------------------|
| - 004245, dated 25.5.86 | - | - | Aloys Dettki, FRG |
| - 004246, dated 25.5.86 | - | - | BUSM Co.Ltd. England |
| - 004247, dated 18.6.86 | - | - | WSK Intermarking, FRG. |

It is expected that the Instructor-in-Charge at the LPDC Karachi will be in a position to arrange the clearance and receive these equipment upon arrival.

All equipment received at the LPDC Karachi are installed and in constant use. Several equipment at the LPDC Sialkot are awaiting 3-phase connection in order to start operations.

Equipment with an approximate total value of US\$.67,000 have been delivered at stages after the year-end inventory which has been verified in December 1985. Therefore they are not included in this inventory and attached to Annex.IV. Action to initiate "Transfer of Title Document" has been sought. Machines and equipment delivered by the project are all in good working condition with sufficient spare parts.

As reported by the evaluation team and in the findings, the project has achieved its immediate objectives and provided a lot of catalytic services to the development objective. The project has established working communication and close co-operation with ITC/EPB/WB PAK/51/01 & 2 export promotion projects.

The purpose of this report as subsequent to an-indepth Evaluation report is to wrap-up the overall project activities at its end with recommendations on future actions which might be taken and in preparation for a Terminal Tripartite Review meeting which would take place.

RECOMMENDATIONS

Based on the overall project findings and achievements and for optimum utilization of the project results, the following is recommended:

A. On the LFDC and future technical co-operation:

1. The Government of Pakistan, UNDP and UNIDO should continue supporting the development of leather products industry sub-sectors in a new integrated project to keep the momentum gained and further increase the contribution of this industry to the national economy. The new project should be centered around a systematic and co-ordinated system of training, systematic consultancy services, intensified promotion and modern information/dissimination system. In the new project, special consideration should be given to the institution building task with permanent modern physical facilities and capable human infrastructure. The programme should be oriented to secure the development of all leather based industry sectors in an even pattern with close co-ordination with the industry and the export promotion functions.
2. A preparatory assistance phase of the integrated development of leather products industry should be processed with main objectives to; preparing a new project document, train leather garments pattern makers, train dressing gloves makers, provide technology on gloves leather making and train leather goods owners/managers. The main inputs for preparatory assistance phase are; 6 m/m CTA/leather goods expert (split mission), 3 m/m leather gloves expert, 3 m/m garments pattern making/grading expert and 3 m/m tanning expert in addition to supplementary equipment.

B. On the LFDC current activities:

The Government should;

3. Complete necessary fixtures, electric and water connections at the LFDC Sialkot.
4. Complete the initial staffing of LFDC Sialkot by recruiting a leather gloves instructor, tannery technician, full time mechanic/electrician and a full time typist.
5. Assign two Assistant Directors for direct leading of LFDC Karachi and Sialkot.

6. Establish specialization among the instructors staff as recommended in Annex.III.
7. Establish the Advisory Committee for the LPDC with major role of the newly-formed industry associations in directing the services to the target groups.

C. General recommendations to the Government and the industry:

8. Every effort should be made for the conversion of the country's wealth of leather into finished products through technical know-how, managerial and manufacturing skills, promotions and marketing strategy. Here it should be remembered that finished goods represent only 36 per cent of the total leather and leather products exports.
9. Provide additional space to the current LPDC Karachi in order to accommodate the planned immediate activities and in the meantime proceed with establishing a permanent premises in a suitable location and appropriate size for the complete future institute.
10. Provide a suitable climate for achieving the development task through;
 - i) review fiscal measures in order to avoid equal incentive treatment to all leather products sub-sectors. The incentives should be based on value added and labour component which is characteristic to each group of products made by the industry sub-sectors.
 - ii) reduced the incentives on the export of crust leather and at a later stage on finished leather with a view to encourage more production of finished leather especially to the domestic market.
 - iii) elaborate a scheme to set-up a commercial body in order to undertake the importation of various types of accessories and auxiliaries in order to make these items available to the small manufacturers off-the-shelf at a reasonable price with no differentiation between export and domestic market production. The image of quality should be established first in the domestic market especially for footwear and leather goods before massive penetration of export market could be achieved.

iv) encourage the establishment of small-scale wholesale shops for sale of top quality finished leather in varied colours and types in order to make these leathers available to the small manufacturers according to their daily needs.

v) discourage the establishment of additional tanning capacities for wet operations and encourage the set up of finishing operations.

11. Continue with promotional and marketing activities and to consider increasing the role of industry associations in these activities. Give local exhibitions the same importance as international exhibitions with direct role in preparation of supply capacities.

Chapter I: Activities and outputs

A. General account

The project has established a Centre in Karachi for development of leather garments and leather goods industry sub-sectors with various functions for direct support to the industry. The activity has set up a new Centre in Sialkot for development of leather gloves and sports goods sub-sectors, which started to function.

The Centre(s) and the project have to a large extent concentrated on training activities with two main yearly courses for one-year duration at the LPDC Karachi. The courses as designed by the international experts are given in co-operation with the national counterparts who by now would be able to run the major parts of these courses. Learning elements and curriculum has been established to support this training.

Additional number of short courses in specialized fields were started in Karachi as well as in Sialkot. The short courses were developed to meet specific needs of the industry. These courses were mainly given by the experts in co-operation with the instructors.

While the long courses secured continued supply of trained people to the industry and have laid the foundation for training activities they could not meet the industry growing demands due to limitations on capacity and long duration. The industry demand for short courses is gradually increasing and the entrants are directly sponsored by respective factories. The main output of the training activities remains in on-the-job training of the instructors who had no previous experience with the industry.

The project with its equipment has established a well organized common facility services which is administered by the national staff at LPDC Karachi. The demand for common facility has shown substantial increase in the last two years reflecting marked growth in the industrial base and generating a regular income to the project. At Sialkot Centre the facilities are set-up for gloves and sports goods however not yet in function due to the embryonic stage of the Centre.

Promotional activities have concentrated on technical support to the industry participation in national and international exhibitions. The activity was extended to the organization of national exhibitions with a view to catalyze the domestic market base in addition to export market as well as to attract new entrants to the business.

Various types of advisory and extension services were provided by the project to different industry target groups. This function in addition to the promotional activities were instrumental in strengthening linkages between the project and its industry clients. This has further catalyzed the organization of the industry into formal associations especially for leather garments and leather goods.

B. Experts and documentary output

Eight international experts with a total m/m of 115.6 were assigned to the project in different disciplines at several stages of the project development. Manifestation of the experts' output is recorded in the project documentation list (Annex VII) where the main findings and recommendations are abstracted in the following sequence as listed in the referred to annex.

a) Overall activities:

1. Terminal report:

Leather Products Development Centre -
Karachi and Sialkot (June 1986)

This refers to the current wrap-up document prepared for possible Terminal Tripartite Review and contains overall review of the project activities and results from its start at June 1981 uptill ending.

2. Evaluation Report: (January 1986)

An in-depth evaluation was carried out by an evaluation team consisted of representatives from UNDP, UNIDO as well as the Government and industry associations. The report reflects analysis of the project formulation against its implementation and achievement of results. The project has been assessed successful as achieved its immediate objectives and contributed to the development objectives stated in the project document. However, the report stressed that the original budget and planned duration of the project were clearly insufficient for the objectives set and the objectives were met by several revisions of the project.

The evaluation concluded that the Centre is well organized, its premises are kept carefully in order. All activities are well planned and kept under control. The LPDC earns nearly 15 per cent of its running costs. The premises are simple but functional. However, they are going to become too small once all activities that the industry asks for and needs are fully developed and running.

The presently running one-year courses in manufacturing leather garments and leather goods in Karachi are necessary to give the instructors more experience in teaching and to develop training materials for more advanced short-term courses. The industry, however, finds it difficult to send skilled employees to courses of such a duration and courses of a more specialized kind and of a duration from two to six weeks seem to be better suited to industry staff.

The Centre's machines are regularly used for training and by the industry as the demand for these services is growing rapidly. The services are not free of charge, but paid for on the basis of units processed.

The national instructors of the LPDC have been trained well under the project and are able to run the basic training courses for new comers to the industry. They are not, however, yet able to provide all required extension and advisory services. The same applied to the running of advance short courses and training of foremen and owners as sought by the industry.

The sub-Centre of LPDC in Sialkot for the glove and sports goods industry has already started equipment and operation. The experts input is, however, much too short to expect substantial results. Industry has to be convinced and be sure of further international support before they can decide to invest in a new activity.

The project has successfully helped to prepare exhibitions in Pakistan and abroad, which was highly appreciated by the industry. This could partly be done by the national staff but probably their credibility in the eyes of the industry is still insufficient to be able to play a guiding and driving role based on their limited experience in international exhibitions and commercial knowledge.

The project has mainly through the international staff, provided a lot of ad hoc advisory and extension services. These are very much appreciated by the industry and most advice is actually applied and implemented. Charges are made for a number

of these activities. There is no staff dedicated to these services, most are being provided by the experts in association with the national instructors. The national staff at present still lack the experience for the specialized technical services which are not systematically organized but provided case by case. Without experts, this service will only continue at a low level.

The report stated that the LPDC is at a critical stage in its development and needs further phase of technical co-operation assistance to develop into a more complete organization. It is recommended that any further assistance should be even more "institution - building" oriented rather than the previous activities. All attention should be aimed at strengthening the national staff and the LPDC capabilities. It is considered by all parties that the present momentum should not be lost and recommended a "bridging project" of external assistance prior to the design and appraisal at the project next phase. The new project is recommended for three years with an immediate objective to strengthen the LPDC, specifically by building up its capacity to provide services to the industry on improved design and manufacturing of leather garments and other leather products through training, advisory, extension, promotion and information services.

3. Terminal Report:

Leather Products Development Centre,
Karachi (Dec.1982)

The document covered the initial stages of starting the project from a leather garment centre of the project DP/PAK/73/027 to the present Leather Products Development Centre - DE/PAK/79/022, its transfer to the present premises and start of operation as from June 1981. The activities planned for leather garments and leather goods were further amended by a tri-partite review meeting of April 1982 to include leather gloves. The activities during reporting period included preparatory work carried by the experts and a number of research activities carried out in the field related to the status of the leather industry in Pakistan.

The report assessed that a sizable tanning industry has been built up with increasing quantities while qualities are very disappointing and a great deal has to be accomplished to achieve a prime finished leather for the leather garments and leather goods industry. The report stated some scope for expansion in the leather goods industry as it is - during the reporting period - virtually non-existent in Pakistan at an industrial level and the number of small firms is three in the whole country could hardly reach required quality standards.

In leather clothing the factories are found to be based on workers responsible for making a garment from start to finish with inevitably slow production per manhour. The industry relied in its designs on copying garments or patterns from prototypes provided by the customers. The report assessed the serious lack of trained personnel and the impact of the LPDC programme on the improvement of the products and better export performance.

Status of leather gloves industry was reviewed as basically concentrating on working gloves and sporting gloves facing strong competition in the export market and putting more emphasis on quality products. This opened up the possibilities of introducing normal or dress gloves and stressed the need for more technical skills.

The report reviewed the start up of the project set-up, equipping and machines installation including proper electrical connections. Training activities for the start up of one-year leather goods manufacturing and leather garments manufacturing were reviewed in addition to start of short courses on leather gloves and sewing machines maintenance - including syllabus outline, as prepared by the project experts.

Report recommendations centered around reinforcing the LPDC courses and strengthening its staff. Also to intensify public relations activities as well as advertising the services through seminars and symposia.

b) Leather Garments:

4. Technical Report:

Leather garment design and production
(Aug.1985)

The report contains summary of the situation of the leather garments industry in Pakistan. The training programmes held at the LPDC on design, pattern making, processing and production of leather garments are described, together with consultancy services carried out by the expert for various firms.

In the report, the expert recommends that additional space, equipment and staff be made available at the LPDC, that a research unit be established and a methodology of training be given.

At the industrial level, he makes recommendations on personnel, production processing and design, material and accessories, international contacts, and incentives that could be made to the leather garments manufacturing industry.

The report also contains factory layout plans and designs for leather garments.

c) Leather Goods:

5. Technical Report:

Leather goods development, training and consultancy (June 1986)

The report reviews the development status of leather goods industry in Pakistan. It elaborates on upgrading training activities at the LPDC on design/pattern making, cutting operations, assembling and sewing operations as well as production planning and control. Types of consultancy to the industries are described including product development, new product lines and guidance to established new factories as well as organization of the LPDC facilities. The report describes the staff development activities at the LPDC and potential growth in the industry needs.

In the report, the expert recommends that future activities of LPDC should focus on high level short specialized courses at basic skills and management levels. It also recommends a systematic information and advisory system to the industry.

The report also contains recommendations to the Government and the industry on future steps needed to foster the development of leather goods industry for export.

6. Technical Report:

Leather Goods Industry participation in the 17th International Show, New York (Aug. 1985)

The report serves the purpose of guidelines to the industry participation in international exhibition based on collective efforts. It consists of marketing-cum-development strategy and describes detailed steps of preparations. This includes stall arrangements, product lines, collection building and product development as well as product costing. The participation was preceded by a preparatory eight sessions workshops for the participants and other co-operating agencies - and demonstrated the co-ordination of technical and promotional activities. The report also contains designs of ten collections prepared at the LPDC for the exhibition as well as extensive exhibition review and analysis. Annexed to the report two papers on leather goods classification and costing of leather goods prepared by the expert for the preparatory workshops.

Findings of the report emphasized proven possibilities of the market and recommends building up the manufacturing capacities on the basis of specialized leather goods concerns.

7. Technical Report:

Exhibition/Seminar on the development of
Leather Goods Industry for Export (Dec.1984)

The report analyses the industry situation and the factors leading to the organization of the exhibition as well as the seminar. The exhibition has 21 participants including machinery and auxiliaries suppliers. The exhibition served as a catalyst for promoting the image of the industry and has provided a forum for a dialogue among concerned bodies. An important result was to crystalize the concept of leather goods as a specialized business and demonstrate the possibilities of co-operation in technology transfer.

The seminar was participated in by 45 bodies and discussed the experience of the industry, training and manpower development, marketing and promotional aspects, situation of leather supply, design aspects and financial constraints. The seminar recommendations centered around the organization of the industry in an association, expanding the LPDC training facilities, as well as integration of marketing and product development activities. The recommendations covered policy measures needed to foster the development of the industry for export.

8. Technical Report:

Reinforcing services of LPDC (Jan.1984)

The report carries out an in-depth analysis of the LPDC training and extension services functions and recommended improvements in the Centre's modus operandi for effective role in the development of leather goods industry. The report contains analytical training programme based on improved modular approach. The expert recommended splitting the training into major subjects toward systematic training approach and introduced additional topics to the syllabi to strengthen the programme.

In the report the expert recommended the institutionalization of extension service function and elaborated a system for consultancy to further involve the counterpart in this activity. The report contained recommendations on additional machines required for improving the LPDC training and common services facilities.

9. Technical Report:

Development and demonstration of patterns and samples for high quality small leather goods and ladies bags (September 1985)

During the expert's mission, a full time training was given to four national counterparts in the LPDC on pattern and sample making of high quality leather goods. This training was followed by conducting three weeks extensive training which was received by 14 trainees sponsored by the industry. The counterpart training was reinforced by a production of video training films and completed prototypes as well as comprehensive learning elements illustrating modern systematic training methodologies.

The expert's recommendations put emphasis on further specialization in the training scheme and running of intensified short courses for the industry in each area. The report highlights the importance of modernized training approach to introduce systematic development of production techniques to the industry. The report also includes a set of recommendations and guidelines on upgrading the effectiveness of the LPDC to the leather goods manufacturers.

d) Sewing:

10. Technical Report:

Special training on sewing operations for leather goods and leather garments (Dec.1985)

During the expert's mission two specialized courses were conducted for 17 trainees on leather garments and 15 trainees on leather goods. The courses were preceded by preparations of the training material including on-the-job training of the counterpart. The report includes extensive material on theoretical information as well as series of practical exercises and methods of evaluating training results. The course was reinforced by preparation of a video tape serving as reference to the instructors.

The expert recommended in the report additional fittings to the sewing machines as well as system for improving machines running and maintenance.

e) Leather Gloves:

11. Technical Report:

Training and development of fancy leather gloves (Feb. 1986)

The mission activities were to set-up machines and equipment for leather gloves section of LPDC Sialkot, run a refresher

course for 12 owners and managers of the industry as well as conduct theoretical and practical training on pattern and leather cutting of fancy leather gloves to 48 industry participants. The report includes the details of training programme on patterns, cutting and sizing with illustrations for measurements and embroidery. A number of consultancy services was extended to the industry particularly on preparations to start fancy gloves manufacturing. The expert recommended co-ordination with the tanning industry for manufacturing special skins suitable for gloves. The LPDC should intensify training to develop introducing this line to the industry by providing skilled cutters and stitchers. Additional machines, equipment and counterpart were specified for the gloves section.

12. Technical Report:

Design, pattern cutting, grading, packaging and marketing of leather gloves of different categories (June 1984)

The report covered two courses on gloves design pattern cutting and grading for 25 participants in Karachi and 16 participants in Sialkot. An analytical training in knife cutting and stitching was prepared and annexed with full illustrations on gloves parts for different types of sport gloves. In the report, the expert recommended a follow up recapitulation course and start up gloves centre in Sialkot to introduce exotic types of higher added value gloves.

Various types of extension services were provided to the industry in Sialkot including advice on factory organization, patterns and designs as well as marketing strategies. The expert recommendations stressed the possibility of promoting hand made gloves to be supported by Government assistance to provide the services of components preparation to the cottage industry.

13. Terminal Report:

Training for leather gloves manufacturing instructors and representatives from the industry (split mission) (Nov. 1982)

The report covers a survey of the leather gloves industry and detailed recommendation for the machinery and tools required to start up instructors training in Karachi and further equipment needed to set up Sialkot gloves section. An instructors short course was conducted to the LPDC staff and also attended by some manufacturers who has no previous experience with any types of gloves except industrial gloves. The report included an aide-memoire on glove making for teachers, instructors, manufacturers and designers covers basic gloves patterns and constructions.

f) Sports Goods:

Production of leather for balls, gloves and other leather items - establishment of advisory unit (May 1986)

The report provides an extensive survey on the production of various types of balls in Sialkot as well as the situation of manufacturing the leather material. It has analyzed the major drawbacks in the tanning process for balls leathers. A seminar was conducted to owners and managers on equipment, processing and quality control of balls leathers as well as gloves leather. The report contains a comprehensive seminar paper as background information for further distribution to the industry. The paper includes details formulas, process control methods and quality requirement. The expert has conducted extension services to various tanneries with identification of process deficiencies and remedies. Setting up of equipment for an advisory unit at the LPDC Sialkot was completed and ready for operation. The report furnished detailed layout of the advisory unit and recommended details of additional fixtures and electrical connections.

The expert recommendations covered improved production methods, additional equipment for the advisory unit as well as qualified counterpart staff. The recommendations are extended to the future role and functions of the advisory unit in the development of leathers for sports goods in Sialkot.

C. Institution Building Outputs

a) Physical facilities:

The LPDC Karachi, occupies a rented building with a limited space, however up-till-now, it has been adequate, well organized and functional. Equipping the Centre by imported machines and local equipment has been a product of series of improvements and adjustments until it has reached the present status. Now it is adequate and well equipped to accommodate the two regular long courses on leather garments and leather goods. Annex VIII illustrates the LPDC layout and its several sections. In this respect, the workshops, particularly for leather goods are organized as a model factory and serves as a living catalogue for demonstration to the industry clients. The same concept applied to the storage facilities. Due space limitations, it was not possible to apply the same concept to the leather garment workshops. Visual aids training equipment have improved the

set-up however, space limitation hinders full utilization of these equipment. Often, especially in the last year of operation, the increased demand for common facilities is contradicting the training functions. This makes it also difficult to conduct short skills courses and managers seminars simultaneously on regular basis. Generally speaking, the space facilities are putting new limitations on the asked for Centre's functions. This applies only to space rather than additional basic equipment.

At present, the main sections of the LPDC are based on differentiation in trade areas and consist mainly of leather goods workshop, leather garment processing workshop, garments design and pattern making hall. These sections are supported by die making and pattern binding hall where machine maintenance staff operates as well as simple lecture room, products show room and material store. For the LPDC to function more effectively, a certain amount of integration need to be introduced both in the physical facilities and the functions as well. This goes to the creation of design and pattern making studio, cutting department, stitching department as well as product development and machines services. This would be in addition to space area for information unit on machines, equipment, material and designs as relevant to support a systematic consultation service. Only with such type of arrangements, it will be possible to run a modular modern type of training with effective industry service.

At Sialkot the LPDC sub-Centre (Annex.IX) occupies a school building which is quite suitable for its present and foreseen functions in the not very distant future. It has two main sections for leather gloves manufacturing and sports goods advisory services - supported by lecture room and store room. The gloves section occupies three rooms for cutting, stitching and finishing. The advisory unit on leather consists of an experimental tanning hall as well as small physical testing laboratory. With these sections, the premises is considered adequate for the purpose. However, it should be inferred that both gloves section as well as the advisory unit - although equipped with basic facilities - the need is felt for supplementary equipment in order to secure effective training, common facility and advisory function. At this stage, appropriate electrical connections and additional fixtures are needed for the full operation of all machines and equipment.

b) Staffing Infrastructure

This represents the backbone of the project as so far institution creation and building output are concerned as it will - in the long term - determine independent functioning ability. For all project operations of the experts inputs, the function of training counterparts has been spelled out in the experts' duties.

At the earlier stages of the project implementation, the size of operation did not justify the creation of the present staff structure. At this stage, the newly assigned instructors had no previous experience with the trade while it is early to come-up with detailed sectional structure and narrow areas of specialization. Therefore, the on-the-job training for the national cadre has taken a general nature at the beginning bearing in mind the limited number of instructors. This has been followed by gradual additions to the counterpart staff in parallel to the injected various types of expertise, a matter which has secured gradual growth in this output.

An important factor in analyzing the impact of this output should be the varied degrees of interest and absorbing ability. Here, it should also be considered that five main qualities in the instructors determine the effectiveness of this output - these are, i) natural talent for the trade, ii) interest and patience, iii) personal instructing qualities, iv) educational background, v) level of payment. Towards the end of the project operations, experience showed certain degree of variance among the instructors in the foregoing qualities, and this has been considered by the management in screening and selection of newly appointed staff. Another factor has been that the newly appointed staff were selected from the best of the project trainees and therefore it was easier to adapt to a systematic level of operation.

The most positive point is that no instructor has left the project so far, mainly due to a relatively high Government civil service classification. On the other hand - the limitations on staff number as well as involvements in some administration work had a slight negative effect on this output. At the present stage, specially for the LPDC Karachi which is rather understaffed and also for the LPDC Sialkot where staff skeleton has not been completed - a need is felt for full time administrator at a rank of Deputy Project Director for each Centre in order to handle overall administrative and management matters in addition to further undertake intensive promotional functions with the industry.

Annex III shows the organizational structure of the project technical staff. This is also supported by recommendations for detailed job descriptions in order to further assist in running smooth and efficient operation. It should be clarified that the prescribed functions still seems to be overloaded and and further splitting of these activities among more staff is necessary for upgrading the level of operation.

Educational background and previous experience of the national instructors have brought the staff to the ability of running the two one-year courses in Karachi as well as - to some extent - the number of courses in Sialkot. Reasonable ability to develop documentations of training material has been attained. Should the project respond to the industry growing needs for running more specialized courses, conducting higher level managerial or supervisory courses, providing systematic extension services and/or leading promotional activities - the need for additional and suitable trained staff is apparent. The number of common services facility is increasing reflecting substantial growth in the industry base, however this function is will organized against charges of nominal fees. It is also noticed that this increase in the demand for this facility is balanced by factories expansions and acquiring of machines - leaving the common facility available to the new entrants. Therefore, further needs for additional staff to carry-on this function does not seem to be required at least for the short-term.

Among the instructors, the designing and sketching ability is limited to one designer and this point need to be considered in the future selection of additional instructors. Further training will be also required on instructing methodology for upgrading the level of training. A mechanism for continued exposure to changes in fashion equipment and material trends will be essential before considering the withdrawal of external assistance which has secured the flow of these varied information up-till-now - although on ad-hoc basis.

Notwithstanding the national management occupation with other functions of the LIDO, the maintenance of staff performance was secured and the project activities have been well under control.

c) Project Target Group(s):

Four distinct industry target groups have formulated the project clientele. Being an industrial development project, the organization of the industry institutions has been a

secondary output of the project activities. This was promoted firstly by clear identification of the project functions with the industry coupled with a series of industry seminars as well as organization of exhibitions. To a great extent these activities have created and strengthened the interaction between the project and its clients. In the meantime, the project has been instrumental in formulating two industry associations for leather garments and leather goods where activities were centred at the LPDC Karachi. Creation of the LPDC Sialkot was a product of demand of the already organized industry associations for leather gloves and sports goods.

Among the leather products, it is only the footwear sub-sector which has not been included in the industry target groups despite it represents the largest industrial base. This has been primarily due to the difficult nature of the footwear business - a matter which required building up the institution capability before inclusion of this operation. Absence of industry representation in an organized association has been another factor of deleterious effect.

A newly founded Shoe Manufacturers Association had now 300 members in Karachi, all small scale shoe manufacturers employing about 10-40 people each. The Association represented therefore about 6,000 people and its members produced mainly ladies fashion shoes and sandals.

The Pakistani shoe industry originated mainly from India and the Muslim shoe makers moved after the partition to various areas of Pakistan. The men shoe manufacturers from Kanpur area moved mainly to Hyderabad. The lady shoe manufacturers from Agra area moved to Karachi. Therefore the shoe making tradition is concentrated in Karachi, this is mainly due to the fact that the shoe makers from Agra had generation of shoemaking tradition of fine quality ladies shoes, which they brought with them to Karachi.

It is viewed that the shoe industry in Karachi has a good potential to develop to viable export industry provided help was given to them in their weaker points, namely designing, pattern size grading, and possible with the component manufacture (mainly manufacture of leather unit soles for ladies shoes).

It seems therefore that the project concept for further assistance need to include a shoe design studio and inputs for leather unit sole manufacture mainly for ladies footwear in the future operation of the LPDC Karachi.

Chapter II : Achievements of immediate objectives

A. Industry and economic structure

a) Industry structure:

The leather and leather based industries represent one of the most important sectors of industry in Pakistan. It contributes approximately 4 per cent to the GDP and ranks at present as the third export earning sector. The industry activities are dispersed within five leather based sub-sector: Footwear manufacture - Garments manufacture - Gloves manufacture - Leather sports goods manufacture - Leather goods manufacture. The project operations catered to the last four industry sub-sectors.

Tanning industry represents the largest activity in the sector and provides the basic material for the leather products manufacture. It is the interest of the Government and the industry to further increase the sector's capacity towards pre-finishing and finishing operations. This interest has been realized by constant increase in the export of finished leather to various countries and the availability of good quality finished leather to the domestic market. The ultimate target is to develop the leather based industry sub-sectors in order to reach a level of manufacturing the costly finished leather into high quality finished products.

Leather garments are manufactured on small or medium scales and all production is oriented for export and is concentrated mainly in Karachi. There are some 40 factories manufacturing leather jackets, coats and other fashion articles and some of the units are annexed to large skin tanneries. Due to extensive promotional activities and the marked increase in the demand for leather garments, the sub-sector has shown remarkable growth in production facilities and exports over the last five years where the export value has increased by 1200 per cent and the number of factories has shown ten times increase. The manufacturing pattern has switched from a tailor type operation with absence of division of labour into a process line. This new situation invites an urgent need for intensified technical assistance on management, production planning and production control aspects, in order to enable the industry to cope with the new developments which also mark the need for highly specialized skilled workers and supervisors. Among various skills required, a crucial shortage is experienced by the industry for pattern makers and graders in order to meet the current and future developments.

The leather goods sub-sector is presently the smallest with a minimal share of only 1.5 per cent of the country's export of leather and leather products. To the LPDC developmental activities, the industry has shown positive response. Promotional and marketing activities have brought promising results with proven export potential and generation of export orders. This has encouraged the industry to expand its facilities and a number of new factories are coming up creating a market for various types of skills in order to match with the new developments. The industry growth from few cottage level factories to small and medium size units has been encountered by acute shortage in specialized skills and professional supervisors. Keeping in mind the complex nature of required skills, time required for manpower development is much longer than that needed for other sectors a matter which represents additional load on the current LPDC function.

Leather gloves are manufactured mainly for export and consisting of industrial gloves and sports gloves where the production is concentrated in Sialkot which makes 70-80 per cent of the country's output. Production of fashion or dress gloves as well as high quality golf gloves are not yet developed in Pakistan despite attractive marketing prospects and available local material. Greater skills are also needed for this particular line and this is not available in the country where the sub-sector involves 250 factories only in Sialkot.

The manufacture of leather sports goods as soccer balls, footballs, volleyballs, hand-balls etc., is entirely located in Sialkot which involves about 200 small and medium size units totally oriented to the export market. The sub-sector operates applying manual techniques with successful sub-contracting arrangements.

Its main problem lies in the manufacture of specific types of leather suitable for the very specific needs of manufacturing the goods. More than 50 per cent of leather supply for sports goods is manufactured with the absence of technology and testing facilities needed for the specific quality requirements in tanning and finishing.

Organization of the production and lack of production planning and simple quality control is another area of constraint in the sub-sector's activity. Eventually, the industry tends to manufacture and export low priced products mainly because of raw material constraints and lack of process control while workmanship skills are available.

Development activities for sports goods and gloves sub-sectors have been initiated by starting up LPDC in Sialkot which should catalyse further industry growth and requires further reinforcement.

The footwear sub-sector is the main consumer of leather material channeled to the domestic market. Export figures reflected a minimal share of leather footwear despite its wide base of production facilities. Approximately 80 per cent or more of the country's footwear is manufactured at the cottage level and is almost using leather material in all components. The rest of footwear manufactured by the recognized sector shares about 20 per cent of the production capacity and is using leather as well as man-made material.

Footwear manufacture at a large scale level is undertaken by three major companies and their situation does not encounter serious problems as far as production, marketing or materials are concerned.

Some 20 factories are operating on a medium scale level and their production is mainly oriented towards cheap grades of footwear using locally made components of modest quality. Managerial capability as well as shortage of trained production supervisors and foremen are the main factors affecting the performance in this part of the sector.

Eighty per cent of the leather footwear are made by the small scale and cottage type units which are widely scattered all over the country and oriented to manufacture fashion-like shoes applying hand making techniques. Their performance is seriously affected by low output and usage of unsuitable material and components in making shoes whether these components are being leather or other auxiliaries. Manufacturing follows traditional methods where all components are made by the factories with no specialization and lack of standardization. Design aspects starting from lasts making, pattern-making and pattern grading is another drawback reflects its impact on the form and construction of shoes.

The industry is mainly concentrated around Lahore, where Gujranwala Institute is located, in Hyderabad, where a new Centre assisted by UNIDO is coming up and around Karachi where no assistance is available so far.

In Karachi area, a new footwear association is formulated with 300 members of cottage factories and employing approximately 4,000-6,000 workers. Production is oriented to ladies fashion shoes with reasonable level of skills. Assistance in design, pattern making and grading in addition to further developments in the manufacture of shoes components especially leather unit soles would bring marked improvements in quality and productivity.

Over the last five years, the industrial base in leather products sub-sector excluding footwear has shown substantial growth as reflected in the following table.

Development of the Leather Products Industrial Base
(except footwear industry)
1979-1985

| | <u>1979-80</u> units | <u>1984-85</u> units | <u>Increase</u> units |
|------------------|-------------------------|-------------------------|--------------------------|
| Leather garments | 4 | 90 | 86 |
| Leather goods | 15 | 50 | 35 |
| Leather gloves | 82 | 250 | 168 |

b) Economic Structure:

Export value of semi processed and finished products from 1980 to 1985 reflect an increase of 175 per cent which is mainly due to the gradual increase in finished leather production (i.e. from Rs.1317M to 2350M). Over the same duration, total exports of different leather products has made a higher increased rate of 300 per cent which is explained by the higher rate of value added (i.e. from Rs.388M to Rs.1265M.). Annex. X reflects the growth rate of export value in the existing sub-sectors which shows a modest share of the footwear and leather goods and indicates the future prospects.

Export figures for May 1984-June 1985 shows that leather and leather products rank the third export earning sector (Rs.3,593.1M) after cotton and rice with the following breakdown:

Export Value of Leather and Leather Products May 1984-June 1985

| Sub-sector | Tanned Leather | Leather Sports Goods | Leather Gloves | Leather Garments | Leather Footwear | Leather Goods |
|-------------|------------------------------------|----------------------|----------------|------------------|------------------|---------------|
| Value M.Rs. | 2325.2 | 329.6 | 396.2 | 342.8 | 139.4 | 59.9 |
| Share % | 64 | 9 | 11 | 10 | 4 | 2 |
| Source: FBS | Total Share of leather products 36 | | | | | |

In addition to the technical assistance provided by the project, the Government and the industry relied to a great extent on fiscal measures in order to provide a better economic climate to the sectors with a view to foster its development. In order to stimulate exports of finished leather and discourage the export of wet-blue and/or raw hides/skins, the Government has provided a rebate (approx. 12 per cent) to the tanneries of the value of exported crust and finished leather. Also, the tanneries get a duty-free allowance for imports of machines and spare parts related to the value of exports. Here, there are two factors affecting seriously the flow of good quality finished leather to the domestic market for further conversion into leather products. First, the equal treatment for crust and finished leather as so far incentives are concerned, hinders to some extent the concentrated efforts on finished leather production. Second factor is that channeling the finished leather which is intended for export (usually of the best quality) - to the domestic market will result in tanneries losing other benefits generated from the export as free importation of spare parts. To compensate for such benefits, the fair price of top quality leather would exceed the international price-making the commodity beyond the reach of leather products manufacturers.

Another important factor represents an additional draw-back to the availability of good quality leather to the leather based industries. Keeping in mind that the sub-sectors - except leather garments - are basically of small or medium size, their requirements for specific colour or type of leather are limited. On the other hand, good quality finished leather could be only obtained from large scale tanneries where high technology is available. It is rather difficult from economy of scale point of view for such large scale operation to cater to small size and varied requirements. Despite the fairly large industrial base of the tanning sector in the country, retail shops

for good quality leather are practically not existent and it seems rather difficult to small or cottage manufacturers to approach directly the producers due to their limited requirements.

Throughout the development of tanning industry, the earlier stages were directed to the export of pickled or wet-blues as products of wet operations. Due to lower investment needed for this stage of manufacture versus higher investment required for finishing operations, it seems that much excess capacity for the wet process has been installed. View the fixed and inelastic supply of indigenous raw hides and skins, the tanning industry is experiencing shortage in the supply of raw material in order to fill up its installed capacity. This has brought competition in the market of raw hides and skins with a result of either increased price of raw material or importation of raw hides or skins which is only afforded by large scale tanneries.

Due unsettled market channels for the finished leather, some leather products manufacturers especially for leather garments find it easier to overcome this difficulty by putting up their own tanneries starting from wet operations up till finishing. The obvious result is increasing the competition in the raw hides and skins market while levels of finishing quality would be questionable due to lack of experience in the business - finished leather becomes more expensive.

In order to ascertain this situation, a comprehensive study would be required in order to assess the situation of existing capacities for wet operations vis-a-vis leather finishing operation. Apparently, the result of this study would lead to discouraging new installation of wet tanning process and concentrating efforts on finishing operation together with certain measures to ensure channeling of part of the top quality finished leathers to the domestic market at no loss to the tanning industry and at a reasonable cost to the end user.

The Government has been providing 22 per cent rebate on the export value of finished leather products. In the meantime, the leather products manufacturers could also import duty-free accessories and auxiliaries providing the same are being re-exported - otherwise the customs duties should be paid which are fairly of a high percentage (30-150%). Small scale manufacturers find it difficult to recourse accessories or auxiliaries as linings, zippers, locks, fittings etc., as they are neither

in a position to import in sufficient quantity nor to purchase from the market as the items could not be available off the shelf due to very high import duties.

Recent development in fiscal measures has reduced the rebate incentive on the export of leather products by 10 per cent. The only available alternative for the industry to balance or compensate for this substantial reduction in the export incentive while keeping the same rate of exports growth is extensive efforts for higher productivity and better quality. This means at the first place, effective professional management, qualified middle management and highly specialized skills in addition to the other factors as proper planning, organized production, proper costing as well as keeping up with updated fashion trends and technology. At this stage of industry development, such tasks make the external technical assistance essential as will be discussed in Chapter III.

It is realized that the incentives scheme is providing an equal percentage to all the exported leather products sub-sectors while the cost structure of and value added to the various products are subject to great variation. It seems that a formula needs to be worked out in order to differentiate in the incentives grant on a less general basis keeping in mind the economic impact.

As so far marketing strategy is concerned, the leather products sub-sectors for garments, gloves and sports goods are totally oriented to exports since the demand in domestic market is almost nil with the exception of purchases made by visiting foreigners. It is the leather goods and footwear sub-sectors which have strong possibilities in the domestic market a matter which provides more security to the manufacturers. Being regular consumer goods, the importance of domestic market base should not be underestimated as a starting point for overseas market. This is encouraged by a fairly large population and a noticeable growth in purchasing power.

B. Development activities and results

Throughout its operations, the project has finally reached a stage of clear and well defined development avenues for its varied activities. While the main function has concentrated on training, initiated activities in other avenues for common facility services, advisory and consultancy services as well as promotional activities has to a great extent supported the training output with manifestation of the development results.

a) Training:

To a great extent, the training has been the main development avenue of the project. Five different courses were originally planned and further consolidated in two courses of one year duration each. Till 1982, several courses were held for six months duration to start this activity. As from October 1982 at Karachi, two 1-year courses for leather garments and leather goods were held on regular basis. Interest in admission and training effectiveness have reflected constant improvements up till this stage. Continued development of training material or learning elements has been to a great extent the main factor for quality improvement. At a later stage and with additional equipment it was possible to start the development of training visual aids in the form of sketches, slides and video-films. It has been realized by the project that the training is conducted on general basis with not much consideration to the destination of the trainee in the industry. This was necessary to put the foundation of the training and it suited the industry at its earlier stages of development. The following table shows the number of trainees who completed these courses:

| | <u>82/83</u> | <u>83/84</u> | <u>84/85</u> | <u>85/86</u> |
|-------------------------------|--------------|--------------|--------------|--------------|
| Leather garment manufacturing | 28 (17) | 37 (20) | 27 (22) | 37 |
| Leather goods manufacturing | 22 (9) | 36 (19) | 18 (11) | 22 |

(The number of students who successfully passed the standards set by the LPDC is indicated in the brackets).

The methodology of training has been subject to further improvements by splitting the programme into different specific topics while each topic represents a specific occupational area

in the industry as a step towards the modular training approach. This has made it possible to conduct on regular basis an evaluation of the training results and setting up of standards for evaluation. This is also in preparation for a set of short-term courses to be conducted by the Centre in future.

An interesting feature of development should note that at the earlier stages, the project has allocated funds for granting stipends to all the trainees in order to encourage the entrants rate. This has been followed by putting limitations on the stipend to be granted only to those attaining more than 80 per cent in the quarterly evaluation. At present, no stipend is granted and the applications for admission are three to four times the Centre's capacity. It should be also noted, that the ratio of trainees sponsored by the industry has been subject to marked increase while the current trainees are all employed by the industry on part-time basis.

As the industry found it difficult to participate with its people in the long courses, and in addition to these two main courses, a number of shorter training courses were held, partly on specific elements of the above mentioned courses, but also on other subjects such as leather gloves manufacturing, industrial sewing machine maintenance, pattern-making, stitching, etc. The total number trained in each area (including the above mentioned one-year courses) uptill end of June 1986 is as follows:

| | <u>80/81*</u> | <u>81/82</u> | <u>82/83</u> | <u>83/84</u> | <u>84/85</u> | <u>85/86</u> | <u>Total</u> |
|--|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Leather garments manufacturing | 80 | 89 | 80 | 96 | 96 | 37 | 478 |
| Leather goods manufacturing | 10 | 61 | 19 | 36 | 82 | 35 | 243 |
| Leather gloves manufacturing | - | - | 14 | 50 | - | - | 64 |
| Industrial sewing machine maintenance. | - | - | 3 | 24 | 15 | - | 42 |
| Sewing operations | - | - | - | - | - | - | 30 |
| Fancy gloves | - | - | - | - | - | 30 | 30 |
| Sports goods | - | - | - | - | - | 9 | 9 |
| TOTAL | 90 | 150 | 116 | 206 | 193 | 143 | 893 |

Annex. V outlines the curriculum of the various training courses conducted by the project. In response to the industry growing demand several, short courses have been also organized. While the 2 long courses are still being run, the curriculum has been organized in different topics suitable to come up with additional short courses for specific areas asked for by the industry. At the LPDC Sialkot, the curriculum and the courses have been conducted directly in the form of modules for special industry needs. At the LPDC Karachi, special package of crash course training has been organized for an overseas trainee for six weeks on leather goods. A great demand for this type of training has been expressed by several new entrants to the business and several requests are pending approval mainly due to the limited training capacity and shortage of staff.

Very specific areas of training are also in great demand by the industry due to acute shortage in the manpower. In the leather garments; supervisors, foremen, and pattern makers. In the leather goods; wallets makers, bags makers and stitchers in addition to professional managers and supervisors. In both sectors leather cutters and sewing operators are badly needed. Should the industry continue to grow at the same rate of development the need for the foregoing employable skills will increase manifold which will induce great pressure on the training with a demanding quantity and quality. The only solution in sight is to modernize, upgrade and increase the training capacity with several short courses with merging of those ones who could serve more than one sub-sector in integrated subjects. Training at LPDC Sialkot for dressing gloves and advice on sports goods need to be further reinforced.

b) Common facility services:

In order to facilitate the flow of technology at an industry cottage level, the Centre is making its equipment available to the industry when not in use for the courses. This mainly for splitting, folding, skiving, embossing, cutting and die making machines. The volume of industry demand for these services, mainly from small-scale manufacturers, continues to grow, although the Centre charges for these services. During service, LPDC staff sets the machine and supervises the use of the equipment, while for large volume the clients are being trained to use the machines by themselves as guided by the experts or the LPDC staff. Following figures show the number of clients for the common facility services:

| | <u>32/83</u> | <u>83/84</u> | <u>84/85</u> | <u>*85/86</u> | <u>Total</u> |
|-----------------------------|--------------|--------------|--------------|---------------|--------------|
| Number of jobs done (bills) | 38 | 209 | 242 | 350 | 839 |

*till June only

This activity is being organized by the national cadre and running quite effectively even with 200 per cent increase in this year.

c) Advisory and consultancy services:

This has been the third development avenue which has brought substantial results and positive impact on the development of the target group. Due expansion in the industrial base, a growing number of consultancy are sought and provided. As the instructors are not yet very experienced in this job and did not yet gain the confidence of the industry, this task was performed mainly by the experts with direct involvement of the instructors. The understaffing of the LPDC has reduced to some extent the participation of the instructors due to their engagements in training and other related functions as product development or preparations.

At the earlier stages of project implementation, this service was provided to "walk-in" clients and was subject to considerable variation according to the client wishes with a flavour of promotional activity. With collected experience, it was possible to classify the type of service according to the demand. Specific fees were allocated for each type of consultancy giving the service an industry clinic flavour to some extent as the promotional side is still valid.

A list of consultancy services covers; feasibility studies, technical project study, development of patterns, adjustment of patterns, pattern grading, development of collections for the fairs, sourcing tools, production organization, product costing, etc.

An application and reporting system for consultancy has been initiated where the service rendered is recorded for future reference and follow-up. Often copies of these reports are given to the clients with prescription for the diagnosed weakness. This methodology, although not in full application, was of great help in organizing the service.

However, two main factors have affected this function; first the lack of special staff within the LPDC for this task. Secondly, lack of an existing system and facility to collect the information on all relevant matters to support the efficient delivery - keeping in mind the wide diverse of information and continued innovations. A special staff with specific qualifications need to be assigned and further trained for this function in order to secure an effective continuation of this service at a reasonable level.

Annex. VI shows the companies visited for major assistance in different industry target groups and the following table shows the number of provided consultancy services.

| <u>80/81</u> | <u>81/82</u> | <u>82/83</u> | <u>83/84</u> | <u>84/85</u> | <u>85/86</u> | <u>Total</u> |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 30 | 4 | 33 | 98 | 106 | 78 | 409 |

d) Promotional activities:

This activity was the main catalyst for establishing industry linkages. First attempt was for the LPDC and the project to participate in Pakistan leather show organized by the tanners association - with a range of products. This participation has been improved by professional display of functions in order to establish the institution image. Well designed brochures were prepared, documentary video film on various functions, display of above average new designs and products - all these preparations have taken place and brought positive results.

Another sub-activity was for the project to organize local exhibitions, seminars and support participation in international exhibitions. In this respect, the project has hosted promotional projects by CDG of FRG on bilateral basis and ITC/EPB of the World Bank. Further assistance projects by other agencies as GTZ are being considered for export development and the project is expected to host the operation as the only equipped institute.

The leading role for these activities was undertaken by the international experts - as assisted by the LPDC staff. It seems doubtful that the instructors would carry on this function without further technical support and intensive experience - keeping in mind the limited duration of exposure to the business and the need to build up this capability over a longer period. It should be also noted that the industry associations are increasing their participation in organizing these activities, however some time and further guidance are still required to reach a substantial lead by the industry. As it is rather difficult to separate the technical matters from the promotional and marketing activities, this need to be granted special consideration for future planning of the project role.

Chapter III: Utilization of project results

The Government of Pakistan aims at a development strategy to maximize the value added of the abundant resources of leather material. In order to realize this objective, the industry is consequently reoriented towards the manufacture of finished goods to meet the domestic market demand and to increase the sector's contribution to the export volume and value. This applies to the leather tanning/finishing industry as well as other leather based sub-sectors.

Exports of finished leather products against leather material still constitutes 36 per cent against 64 per cent of leather exports. By converting this amount into finished goods, a calculated 200 per cent or even more could be the added value giving a justification for development prospects (Annex. I). It should also lead to substantial increase in investment and employment opportunities in order to reach the optimum level for means of production.

Being labour intensive in the manufacture of all leather products, industry expansion will rely on training and high skills. Aspects of modernization in the manufacturing process are met by introduction of specialization where specialized training has a vital role. Certain areas of specialization are commonly shared by different industry sub-sectors as cutting and sewing skills where extensive specialized training could supply the industry requirements in an integrated training approach. Modernization of the training approach should enable the institute to supply the required types of skills more effectively, and will give necessary flexibility to meet various needs in a short time to support the industry development process.

On technology and long term courses, the LPDC has acquired certain experience in running this type of training which is planned to meet higher level requirements for professional management and technologists. In order to achieve this task more effectively, up-grading and modernization of the courses as well as training methodology is required to secure the expertise needed and increase the local know-how.

By doing this, the standard of training courses and scope of syllabi will eventually qualify the institute to provide a local substitute for sending candidates on overseas training. This should also contribute to establish co-operation and co-ordination in the field of training among several centres of similar function in the region where the LPDC can play a certain role towards the aim for reaching greater uniformity of the scopes, contents and standard of training courses among countries in the region of Asia.

The modern footwear manufacturer uses a large number of components, auxiliaries, patterns and tools which are pre-manufactured for different footwear. The industry in Pakistan has generally not made use of such organization and co-ordination of production, which has hampered the progress of the industry especially at small scale and cottage levels. The main reason is that components manufacturing business for making patterns, cutting dies, shoe lasts, shoe uppers, insoles, stiffeners, welts, heels

and top pieces, unit soles and a range of fittings - is not well established on a modern basis. The introduction and promotion of quality components needs technical backing on design, pattern making - and grading in order to establish necessary co-ordination for components standards. This should lead to restructuring the foot-wear manufacturing pattern from non-specialized outfits manufacturing all components in-house into an assembling industry applying standardized high quality components made by a group of specialized suppliers.

Technical progress in finished goods is a product of a continuous evolution in material, suppliers, machinery, technology, etc. This goes to numerous items of leather and non-leather material as well as components and auxiliaries where dynamic innovations are made to supply the market with new products of various functions and characteristics. Collection and classification of this complex of information could be only undertaken by an institutionalized information/dissimination system with a basic technical function specifically geared to this task. This system is providing a strong backing to the extension services programme where informations are easily accessible by small and medium manufacturers in different sub-sectors. It is therefore, suggested that the integrated centre should be backed by a computerized information system.

Within five years of operation, the LPDC has built up a good rapport with some of the leather products industry sub-sectors, which encourage the integration of development activities for additional sub-sectors.

Overall analysis of actual project effectiveness reflects direct impact of the main activities on development of the industry in real terms. Industry current and potential rate of growth is demanding much more specific types of services in training and consultation which raises the question on how capable is; LPDC Karachi and LPDC Sialkot - of functioning by itself (without international assistance) in the not-too-distant future. The clear answer to this question is that LPDC Karachi would be capable of functioning independently providing no active growth is taking place on the industry side, which is not the case. As so far LPDC Sialkot is concerned, the assistance provided through this project to Sialkot operation seems limited to bring it to a self reliance level.

Based on experience within the project activities, the industry status of development has been analyzed vis-a-vis the project achievements focusing on the follow-up approach to sustain

and increase the project results by the overall leather products sub-sectors. Results achieved by this project are quite encouraging to proceed with further integrated activities to maximize the industry potential.

A concept for a new project "Integrated Development of Leather Products Industries" has been developed as basis for a subsequent operation. Keeping in mind duration required for this process and in order to retain the present momentum as well as provide answer to the crucial needs of the industry and the Centre in certain areas - a preparatory assistance document has been formulated. The main outputs are; a new project document with detailed work-plan, training for leather goods managers, training for leather garments pattern makers, training on dressing gloves, and advisory services to sports goods. Implementation of this preparatory phase would sustain the project results to a great extent.

Project Budget Covering UNDP Contribution
(in US Dollars)

Country : Pakistan

Project Title : Leather Products Development Centre

Project Code : DP/PAK/79/022/W/01/37

| | Total | | Prior Years | | 1982-1984 | | 1985 | | 1986 | |
|----------------------------------|-------|-----------|-------------|---------|-----------|---------|------|---------|------|--------|
| | m/m | \$ | m/m | \$ | m/m | \$ | m/m | \$ | m/m | \$ |
| 10. PROJECT PERSONNEL | | | | | | | | | | |
| 11. EXPERTS | | | | | | | | | | |
| 11-01 Chief Technical Adviser | 30.0 | 187,810 | - | - | 12.0 | 73,544 | 12.0 | 77,366 | 6.0 | 36,900 |
| 11-02 Leather Goods Technologist | 24.0 | 145,305 | 6.6 | 39,232 | 17.4 | 106,073 | - | - | - | - |
| 11-03 Leather Garment Expert | 31.0 | 155,567 | - | - | 28.0 | 139,846 | 3.0 | 15,721 | - | - |
| 11-04 Leather Goods Expert | 9.5 | 49,672 | - | - | 9.5 | 49,672 | - | - | - | - |
| 11-50 Short-Term Consultants | 21.1 | 129,568 | 1.9 | 12,622 | 8.7 | 49,440 | 5.5 | 36,756 | 5.0 | 30,750 |
| 11-99 Sub-Total | 115.6 | 667,922 | 8.5 | 51,854 | 75.6 | 418,575 | 20.5 | 129,843 | 11.0 | 67,650 |
| 13-00 Adm. Support Personnel | | 54,811 | | 4,327 | | 35,572 | | 10,712 | | 4,200 |
| 15-00 Project Travel | | 11,720 | | 346 | | 4,123 | | 5,951 | | 1,300 |
| 16-00 Other Personnel Costs | | 9,518 | | - | | 2,190 | | 7,182 | | 146 |
| 18-00 Adjustment | | 1,238- | | - | | - | | 1,238- | | - |
| 19-99 Component Total | | 742,733 | | 56,527 | | 460,460 | | 152,450 | | 73,296 |
| 30. TRAINING | | | | | | | | | | |
| 31-00 Individual Fellowships | | 10,853 | | - | | 230 | | 10,623 | | - |
| 32-00 Study Tours/Group Training | | 6,709 | | - | | 6,709 | | - | | - |
| 33-00 In-Service Training | | 14,065 | | - | | 13,534 | | 531 | | - |
| 38-00 Adjustment | | 3,146- | | - | | - | | 3,146- | | - |
| 39-99 Component Total | | 28,481 | | - | | 20,473 | | 8,008 | | - |
| 40. EQUIPMENT | | | | | | | | | | |
| 41-00 Expendable Equipment | | 8,047- | | - | | 6,338 | | 1,209 | | 500 |
| 42-00 Non-Expendable Equipment | | 216,106 | | 84,030 | | 31,338 | | 96,797 | | 3,941 |
| 48-00 Adjustment | | 8,451- | | - | | 3,917- | | 4,534- | | - |
| 49-99 Component Total | | 215,702 | | 84,030 | | 33,759 | | 93,472 | | 4,441 |
| 50. MISCELLANEOUS | | | | | | | | | | |
| 51-00 Sundries | | 27,988 | | 76 | | 17,004 | | 7,808 | | 1,000 |
| 59-99 Component Total | | 27,988 | | 2,176 | | 17,004 | | 7,808 | | 1,000 |
| 99-99 PROJECT TOTAL | | 1,014,904 | | 142,733 | | 531,696 | | 261,738 | | 78,737 |
| 999. UNDP TOTAL | | 1,014,904 | | 142,733 | | 531,696 | | 261,738 | | 78,737 |

Annex . IIInternational Staff

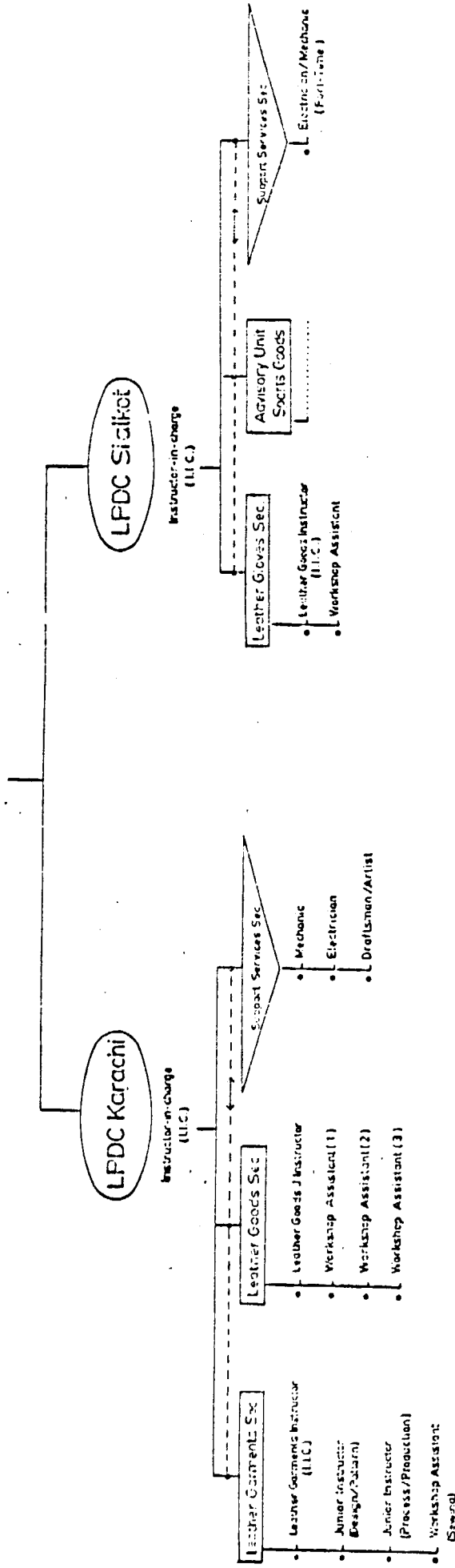
| Post No. | Post Title | Name of Incumbent (& Nationality) | Arrived | Departed |
|----------|---|--|---------|----------|
| 11-01 | Chief Tech.Adviser/ Leather Goods Expert | M.M.Abou El-Khair (Egypt) | Nov'83 | June'86 |
| 11-64 | Sports Goods Consultant | M.G. Haecker (F.R.G.) | Jan'86 | May'86 |
| 11-62 | Leather Gloves Consultant | V. Zimmermann (CSSR) | Nov'85 | Feb'86 |
| 11-65 | Sewing Operations Tech- nician | P. Sinturel (France) | Oct'85 | Dec'85 |
| 11-66 | Leather Goods Sample Making | D. Tracy (U.K.) | July'85 | Sept'85 |
| 11-03 | Leather Garment Expert | E. Chehwan (Lebanon) | Aug'82 | Mar'85 |
| 11-53 | Leather Gloves Expert | R.W. Beeby (U.K.) | Apr'84 | June'84 |
| | split mission | " | Nov'81 | Dec'81 |
| | split mission | " | Sept'82 | Oct'82 |
| 11-01 | Chief Tech.Adviser | K. Hellemaa (Finland) | Jan'82 | Dec'82 |
| | Marketing consultant | " | July'81 | July'81 |
| 11-02 | Leather Goods Technologist | B.V. Poelgeest (Holland) | June'81 | June'83 |

Annex.III

National Staff & Recommended Instructors Duties

| Post No. | Post Title | Name of Incumbent | Assumed Duty (Mo/Yr) |
|---------------------|---|------------------------------|----------------------|
| 1 | Project Director | Mr. M.T. Warsi | 1981 |
| <u>LPDC Karachi</u> | | | |
| 2 | Instructor Incharge | Mr. Khalid Mahmood Khan | 8/79 |
| 3 | Jr. Instructor Leather Goods | Mr. Masood Suroor Qidwai | 4/82 |
| 4 | Jr. Instructor Leather Garments | Mr. Abdul Habib Khan | 5/82 |
| 5 | Jr. Instructor Leather Goods/Leather Garments, Design | Miss Tasneem Sultana | 4/82 |
| 6 | Workshop Assistant | Mr. M. Tariq Khan | 7/85 |
| 7 | Workshop Assistant | Mr. Rashid Muhammad Khan | 7/85 |
| 8 | Workshop Assistant | Mr. M.Mahboob Ali Suharwardy | 7/85 |
| 9 | Mechanic | Mr. Mirza Mahmood Bai | 8/80 |
| 10 | Electrician | Mr. Mohammad Shujauddin | 8/84 |
| 11 | Workshop Assistant | Miss Wakila Serwat | 5/80 |
| 12 | Store Assistant | Mr. Mazhar Ahmed | 12/81 |
| 13 | Store Assistant | Mr. Mohammad Sabir | 12/82 |
| 14 | Draftsman | Mr. Salimuddin Wahiduddin | 2/84 |
| 15 | Field Inspector | Mr. Shahid Zafar Ansari | 7/83 |
| 16 | Cashier | Mr. Abdul Khaliq | 8/83 |
| 17 | Clerk/typist | Miss Seema Waheed | 12/83 |
| 18 | Driver | Mr. Riasat Ali | 6/83 |
| 19 | Messenger | Mr. Abdul Waheed | 8/79 |
| 20 | Messenger | Mr. Abdul Ghani | 9/81 |
| 21 | Guard | Mr. Nagina | |
| 22 | Utilityman | Mr. Murad Masih | 10/84 |
| 23 | Utilityman | Mr. Abdullah | 3/84 |
| <u>LPDC Sialkot</u> | | | |
| 24 | Instructor Incharge | Mr. S.A.R. Zaidi | 8/79 |
| 25 | Workshop Assistant (sewing) | Miss Ghazala | 1986 |

LIDO Director General
(National Project Director)



Recommended
Job Description and Duties of Current
National Counterpart Staff at L.P.D.C.
Karachi & Sialkot

LPDC Karachi

Instructor Incharge:

In addition to specified duties as Leather Garment Instructor he should also undertake administrative functions with regard to implementation of the Head Office directions, supervision of support services and administration staff as well as other overall matters of the LPDC within his prescribed powers and duties for this task.

I. Leather Garments Section

A) Leather Garment Instructor:

- Liaison industry consultation services with the LPDC activities on leather garments.
- Designs and develops curriculum materials, manuals, modules, course syllabi on training aspects for design and pattern making, sample making, machines operation and maintenance, material specification and characteristics, sewing operations as well as leather garments fabrications.
- Conduct training for regular trainees and potential supervisors and middle management personnel on leather properties and characteristics, factory lay-out, production planning, production management, quality control, costing and pricing including results evaluation.
- Work with the international expert on the foregoing aspects in the Centre and with the industry.
- Co-ordinate and supervise the work of the other instructors in the section on design/pattern making, sample making, fabrication and sewing operations.
- Conduct direct demonstration, training and product development on pattern making and grading as well as sample making of men's leather garments.

B) Leather Garment Junior Instructor
(Designer/Pattern Maker)

- Designs and develops curriculum material, manuals, modules, course syllabi on training aspects for fashion, designing, pattern making and grading including material specifications and characteristics.
- Conduct direct demonstration and training on sketching, designing, pattern making and grading specifically for ladies leather garments.

- Undertake product development and sample making for ladies garments.
- Assist in running drawing and sketching training in both leather garments and leather goods sections.

C) Leather Garment Junior Instructor:
(Production process/fabrication)

- Designs and develops curriculum materials, manuals, modules, course syllabi on training aspects for all process operations from cutting to finishing and quality control.
- Conduct direct demonstration and training on skills upgrading for all manufacturing operations and finishing.
- Conduct in co-operation with design instructor practical training on pilot production.
- Performs industry services on product fabrication.

D) Workshop Assistant:
(Sewing Operations)

- Conduct training and demonstration on;
 - Types of sewing machines operation and maintenance.
 - Sewing material
 - Types of sewing technologies, seams and assembling.
 - Timing.
 - Prepare training material and audio-visual aids
 - Assist other instructors in matters of sewing operations.

II. Leather Goods Section

A) Leather Goods Instructor:

- Liaison industry consultation services with the LPDC activities on leather goods.
- Designs and develops curriculum materials, manuals, modules, course syllabi on training aspects for design and pattern making, sample making, machines operation and maintenance, material specification and characteristics, sewing operations as well as leather goods fabrication.
- Conduct training for potential supervisors and middle management personnel on factory lay-out, production planning, production management, quality control, costing and pricing including results evaluation.

- Work with the international expert on the foregoing aspects in the Centre and with the industry.
- Co-ordinate and supervise the work of the workshop assistance on pattern making, sample making, fabrication and sewing operations as well as product development.
- Demonstrates sample making and product development of briefcases.

B) Workshop Assistant (1):
(Small leather goods)

- Conduct training and demonstration on the following aspects:
 - * Sample making and product development of small leather goods articles.
 - * Types of sewing machines, operation and maintenance
 - * Sewing material
 - * Types of sewing technologies and assembling
 - * Timing
 - * Prepare training material and audio-visual aids.

C) Workshop Assistant (2): (handbags)

- Conduct training and demonstration on the following aspects:
 - * Sample making and product development of ladies handbags.
 - * Leather goods machines and tools operation and maintenance.
 - * Material components and characteristics.
 - * Cutting techniques, manual and machines.
 - * Preparatory processes, manual and machines.
 - * Assembling processes, manual and machines.
 - * Finishing processes.
- Prepare training material and audio-visual aids.

D) Workshop Assistant (3):
(Gift articles & Box work)

- Conduct training and demonstration on the following aspects:

- Sample making and product development of gift articles, boxwork and folios.
- * Leather goods machines and tools operation and maintenance.
- * Material components and characteristics
- * Cutting techniques, manual and machines.
- * Preparatory processes, manual and machines.
- * Assembling processes, manual and machines.
- * Finishing processes.
- * Prepare training material and audio-visual aids.

III. Support Services Section

A) Mechanic:

- Keeps complete records on all operation manuals and catalogues of the Centre's machines.
- Undertakes regular and periodic maintenance of all machines particularly mechanical, hydraulic and pneumatic parts.
- Installs all new machines and start their operation.
- Support smooth running of training and common services by carrying-out machines adjustments and repair.
- Keeps machines maintenance record of all machines including spare parts, tools and attachments as well as history of damage and repair.
- Undertakes jobs of machines common facility services to the LPDC industry clients.
- Fabricates cutting dies including welding for the LPDC use and industry clients.
- Co-ordinates his work under the supervision of the Instructor-in-Charge as well as the LPDC instructors and workshop assistants.

B) Electrician:

- Works in co-ordination with and under supervision of the LPDC mechanic.
- Undertakes regular and periodic maintenance and repair of all electrical parts of the Centre's machines.
- Supports smooth running of training and common facilities for electrical parts and connection.
- Undertakes other jobs on electrical connections and safety as required.
- Assist in the jobs of machines common facility services as required.
- Co-ordinates his work with the LPDC instructors and workshop assistants.

LPDC Sialkot

Instructor Incharge:

In addition to specified duties as Leather Gloves Instructor he should also undertake administrative functions with regard to implementation of the Head Office directions, supervision of support services and administration staff as well as other overall matters of the LPDC within his prescribed powers and duties for this task.

I. Leather Gloves Section

A) Leather Gloves Instructor:

- Liaison industry consultation services with the LPDC activities on leather gloves.
- Designs and develops curriculum materials, manuals, modules, course syllabi on training aspects for design and pattern making, sample making, machines operation and maintenance, material specification and characteristics, sewing operations as well as leather gloves fabrications.
- Conduct training for regular trainees and potential supervisors and middle management personnel on leather properties and characteristics, factory lay-out, production planning, production management, quality control, costing and pricing including results evaluation.
- Co-ordinate and supervise the work of the other instructors in the section on design/pattern making, sample making, fabrication and sewing operations.
- Conduct direct demonstration, training and product development on leather cutting, sizing, pattern making as well as sample making of leather gloves.

B) Workshop Assistant:(Sewing)

- Conduct training and demonstration on the following aspects:
 - Sample making and product development of dressing gloves.
 - Types of sewing machines, operation and maintenance.
 - Sewing material.
 - Types of sewing technologies and assembling
 - Timing
 - Demonstration and training on hand sewing and embroidery of dressing gloves
 - Prepare training material and audio-visual aids.

Annex. IV

 UNITED NATIONS  NATIONS UNIES
 UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Country PAKISTANProject No. DP/PAK/73/022Page 1of 7Project Title LEATHER PRODUCTS DEVELOPMENT CENTREPeriod ending Dec 1955

NON - EXPENDABLE PROPERTY CONTROL RECORD

| HQ Req. Ref. | Item No. | Qty. | Unit | Description | US Dollar Equivalent | P.O. Shipping Advice Ref. | Received | | | Condi- tion | Qty. on hand | Remarks |
|--------------------|-------------|------|------|--|-------------------------|------------------------------|----------|-----|------|----------------|--------------------|--|
| | | | | | | | Qty. | M | Y | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 79/6 | 1 | 1 | EA | VEHICLE: TOYOTA CRESSIDA 2000 STANDARD CHASSIS NO.: FX-30-107261 ENGINE NO.: 18R 1347948 REG.NO.: UN-63-426 | 4,050.- | 15-9-00374 | 1 | 10 | 79 | | | Retained by UNIDO/UNEP of Islamabad transferred from DP/PAK/73/027 |
| 80/6 | 1 | 1 | EA | VEHICLE: TOYOTA COROLLA STATION WAGON WITH COOLER CHASSIS NO.: KE70-0120440 ENGINE NO.: 4K 1198764 REG.NO.: UN-68-40 | 3,950.- | 15-0-00083 | 1 | 7 | 81 | F | | |
| 80/1 | | | | PPAFF INDUSTRIAL SEWING MACHINES: | | | | | | | | |
| | 1 | 1 | EA | PPAFF CL. 331-6/27-940/01 BL | 1,456.- | 15-0-01079 | 1 | 4 | 81 | G | | |
| | 2 | 1 | EA | PPAFF CL. 34-705/03 BL | 763.- | - " - | 1 | 4 | 81 | G | | transferred to Sialkot Centre |
| | 3 | 1 | EA | PPAFF CL. 138-6/21 BS X 4,5 | 828.- | - " - | 1 | 4 | 81 | G | | |
| | 4 | 1 | EA | PPAFF CL. 1243-944/01 DLMJ | 1,186.- | - " - | 1 | 4 | 81 | G | | |
| | 5 | 1 | EA | PPAFF CL. 1245-706/05-40/01 CSMJ | 1,474.- | - " - | 1 | 4 | 81 | G | | |
| 81/1 | 1 | 1 | EA | NO. 1652 OPEN-ENDED FOLDING MACHINE COMPL. | 4,820.- | 15-1-00688 | 1 | 10 | 81 | G | | |
| 81/1 | 2 | 1 | EA | PLANING DEVICE COMPLETE WITH CUTTER FOR PLASTICS AND EJD GRAINED WOOD | 980.- | 15-1-00689 | 1 | 6 | 82 | G | | |
| 81/1 | 3 | 1 | EA | MODEL 167 AUTOMATIC RIVETING MACHINE COMPL. WITH ACCESSORIES | 2,209.- | 15-1-00690 | 1 | 8 | 82 | G | | |
| 81/1 | 7 | 1 | EA | CL. 205-6 INDUSTRIAL SEWING MACHINE WITH ACCESSORIES | 1,790.- | 15-1-00692 | 1 | 10 | 81 | G | | |
| 81/1 | 6 | 1 | EA | MODEL 101 NO. 81051 EMBOSsing MACHINE (PRESS COMPLETE) | 1,195.- | 15-1-00691 | 1 | 10 | 81 | G | | |
| | 11 | 1 | EA | MODEL 100A (A 100) NO. 311800 CUTTING PRESS | 437.- | - " - | 1 | 10 | 81 | G | | |
| | | 1 | EA | MODEL A 53 NO. 309300 BUTTOM MAKING-MACHINE | 543.- | - " - | 1 | 10 | 81 | G | | |

PAKISTAN

DP/PAY/76/022

Country PAKISTAN Project No. LEATHER PRODUCTS DEVELOPMENT CENTRE

Page 4 of 7
Period ending Dec 1985

NON - EXPENDABLE PROPERTY CONTROL RECORD

| ID No. | Item No. | Qty. | Unit | Description | US Dollar Equivalent | P.O./Shipping Advice Ref. | Received | | | Condition | Qty. on hand | Remarks |
|--------|----------|------|------|---|----------------------|---------------------------|----------|-----|------|-----------|--------------|--|
| | | | | | | | Qty. | M | Y | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| /1 | 1 | 6 | EA | PPAFF CL.463-944/01 BL INDUSTRIAL SEWING MACHINES SINGLE-NEEDLE TYPE COMPLETE WITH STAND, TREADLE AND MOTOR | 4,124.- | 15-2-00298 | 6 | 8 | 82 | G | | 4 transferred to Sialkot Cen |
| /1 | 2 | 1 | EA | SFA 10 GLOVE LINING KNITTING MACHINE | 3,056.- | 15-2-00308 | 1 | 11 | 82 | G | | transferred to Sialkot Centre |
| | 3 | 2 | EA | SOLID STEEL PRESS CUTTERS AF4217C | 685.- | FPO. 002676 | 1 | 6 | 82 | G | | missing (see remark on returned year end 1983)-Check |
| | 1 | 1 | EA | POLYPROPYLENE MASTER SHEET CUTTING BOARD 305 x 120 x 12 MM | 163.- | FPO.002680 | 1 | 3 | 83 | G | | & transferred Sialkot Centre |
| | | 1 | EA | BERNINA SEWING MACHINE | 1,130.- | FPO.002678 | 1 | 6 | 82 | G | | |
| | 1 | 12 | EA | SECND TIMERS MODEL NS/22G | 331.- | FPO.002681 | 1 | 8 | 82 | G | | 2 transferred Sialkot Centre |

PAKISTAN

DP/PAK/79/022

Project No.

DP/PAK/79/022

Page 5

of

7

UNITED NATIONS DEVELOPMENT PROGRAMME

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

LEATHER PRODUCTS DEVELOPMENT CENTRE

Period ending

Dec 1985

NON-EXPENDABLE PROPERTY CONTROL RECORD

| Item No. | Qty. | Unit | Description | US Dollar Equivalent | P.O./Shipping Advice Ref. | Received | | | Condition | Qty. on hand | Remarks |
|----------|------|------|--|----------------------|---------------------------|----------|-----|------|-----------|--------------|---|
| | | | | | | Qty. | M | Y | | | |
| (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| | | | LEATHER WORKING MACHINES: | | | | | | | | |
| 1 | 1 | EA | MODEL 110 NO. 1200, SMALL STRAP CUTTING MACHINE COMPLETE WITH ACCESSORIES | 508.- | 15TC-01078 | 1 | 9 | 81 | G | | |
| 2 | 1 | EA | MODEL 64L - 110 CM CUTTING MACHINE FOR PASTEBORD (GUILLOTINE) | 2,512.- | - " - | 1 | 9 | 81 | G | | All equipment transferred to DP/PAK/79/022 |
| 5 | 1 | EA | MODEL 56 No. 803 SINGLE EDGE CREASING MACHINE COMPLETE | 969.- | - " - | 1 | 9 | 81 | G | | (SIDFA's letter 20.6.83 with 1982 year-end inventory) |
| 6 | 1 | EA | MODEL 138 TOGO PRESS | 135.- | - " - | 1 | 9 | 81 | G | | |
| 7 | 1 | EA | MODEL 45 NO. 3019 SMALL FOLDING MACHINE | 629.- | - " - | 1 | 9 | 81 | G | | |
| 13 | 1 | EA | GLAZING-PRESS MACHINE orig. "DEMATIC" TYPE 3000 FOR PLATING AND IRONING LEATHER HYDRAULIC WITH ELECTRIC MOTOR PS 2 (HP) COMPLETE | 3,645.- | 15-1-00826 | 1 | 3 | 82 | G | | |
| | | EA | LEATHER THICKNESS GAUGE DIAL 30 MM DIAMETER SCALE 1/10 ⁰ MM, POCKET MODEL | 243.- | FPO. 003340 | | | | G | | |
| | | EA | LEATHER THICKNESS GAUGE DIAL 30 MM DIAMETER SCALE 1/10 ⁰ MM, MEASURING 300MM LENGTH REF NB 3 | 106.- | - " - | | | | G | | |
| | 1 | EA | PAIR ELECTRICALLY HEATED IRONERS TYPE DF 20/2 FOR GLOVE PIQUE STITCH LINED AND UNLINED, IN PAIRS SIZE 9/84 | 434.- | FPO. 03344 | | | | G | | transferred Sialkot Centre |
| | 1 | PCE | MODEL 39N FIXED KNIFE SPLITTING MACHINE | 3,723.- | 15-5-0888 | | | | G | | transferred to Sialkot Centre |
| | 1 | PCE | WORK-BENCH WITH 3-PHASE MOTOR ODENWALD NO. 02057055 | 704.- | - " - | | | | G | | - " - |
| | 1 | PCE | BERNINA INDUSTRIAL SEWING MACHINE 217-20 Z WITH MOTOR, STAND, CPL AND ACCESSORIES | 1,137.- | 15-5-1061 | | | | G | | - " - |
| | 3 | EA | FORTUNA BAND KNIFE SPLITTING MACHINE MODEL AV 320 | 8,135.- | 15-5-1062 | | | | G | | |

Country PAKISTAN Project No. DP/PAK/79/022
 Project Title LEATHER PRODUCTS DEVELOPMENT CENTRE

Page 6 of 7
 Period ending Dec 1985

| HQ Req. Ref. | Item No. | Qty. | Unit | Description | US Dollar Equivalent | P.O./Shipping Advice Ref. | Received | | | Condi- tion | Qty. on hand | Remarks |
|--------------------|-------------|------|------|--|-------------------------|------------------------------|----------|-----|------|----------------|--------------------|-------------------------------|
| | | | | | | | Qty. | M | Y | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 85/4 | 1 | 1 | SET | CABIN PORTABLE OVERHEAD PROJECTOR, MODEL OHP 24F | 313.- | 15-5-1066 | | | | G | | transferred to Sialkot Centre |
| 85/4 | 3 | 2 | EA | TOSHIBA RAC-60UE AIR CONDITIONER | 1,058.- | 15-5-1067 | | | | G | | --- " --- |
| | 4 | 1 | EA | JVC AV-26ME 26" COLOUR TELEVISION WITH PAL | 709.- | - " - | | | | G | | |
| | 5-6 | | | JVC HR-S100E COMPONENT VIDEO SYSTEM COMPL. | 1,559.- | - " - | | | | G | | |
| | | 1 | EA | MACHINE MOD. RHO, MANUAL PATTERN HEMING MACHINE FOR BINDING PATTERNS WITH METAL STRAPS | 384.- | FPO 003352 | | | | G | | |
| | | 1 | EA | MACHINE MOD. MILANO, MANUAL PATTERN SHEAR HEAVY TYPE (LENGHT OF ARM 450 MM) | 243.- | - " - | | | | G | | |
| | | 1 | EA | PFAFF CL. 345-H3-6/01-CLN SINGLE-NEEDLE, LOCKSTITCH, CYLINDERBED SEWING MACHINE COMPLETE WITH ACCESSORIES | 1,748.- | FPO 003356 | | | | G | | |
| | | 1 | EA | PFAFF CL. 1295-706/35-17/01 CLMN EQUIPPED WITH BINDING ATTACHMENT NO.91-040533-23X20 X ² SINGLE-NEEDLE LOCKSTITCH, POSTBED SEWING MACHINE COMPLETE WITH ACCESSORIES | 1,680.- | - " - | | | | G | | |
| | | 1 | EA | NOBO OVERHEAD PROJECTOR MODEL 90, A4 COMPLETE WITH ACCESSORIES | 354.- | FPO 003364 | | | | G | | |
| | | 1 | EA | NOBO DRY WIPE WHITE MAGNETIC BOARD 6X4 | 241.- | - " - | | | | G | | |
| | | 1 | EA | NOBO TRIPOD TYPE PROJECTION SCREEN | 185.- | - " - | | | | G | | |
| | | 1 | EA | PATTERN GRADING MACHINE FOR GARMENTS PATTERN | 330.- | FPO 003369 | | | | G | | |
| | | 1 | EA | TIME RECORDING DEVICE | 383.- | - " - | | | | G | | |

Project Record

LIST OF EQUIPMENT DELIVERED & NOT INCLUDED IN 1985 INVENTORY.

(Annex.IV) (cont'd)

PAKISTAN

DP/PAK/75/022

Country

Project No.

Page _____ of _____

LEATHER PRODUCTS DEVELOPMENT CENTRE

Project title

Period ending _____

| HQ Ref. (1) | Item No. (2) | Qty. (3) | Unit (4) | Description (5) | US Dollar Equivalent (6) | P.O./Shipping Advice Ref. (7) | Received | | | Condition (11) | Qty. on hand (12) | Remarks (13) |
|-------------|--------------|----------|----------|--|--------------------------|-------------------------------|----------|-------|--------|----------------|-------------------|------------------------|
| | | | | | | | Qty. (8) | M (9) | Y (10) | | | |
| | | 3 | PCS | PPAFF CL.34/6/01 BS, SINGLE NEEDLE, LOCKSTITCH, FLATBED SEWING MACHINE | 3339.- | 15-5-C1058 | | 1 | 86 | | | 2 Karachi 1 Sialkot |
| | | 2 | " | MODEL C217 UPPER LEATHER SKIVING MACHINE, COMPLETE | 2100.- | 15-5-C1059 | | 1 | 86 | | | 1 Karachi 1 Sialkot |
| | | 5 | " | ADLER INDUSTRIAL SEWING MACHINES 267-73, HEAD WITH NORMAL ACCESSORIES | 9752.- | 15-5-C1060 | | 3 | 86 | | | |
| | | 1 | " | ADLER INDUSTRIAL SEWING MACHINE 69-982, HEAD WITH NORMAL ACCESSORIES | 2539.- | " | | 3 | 86 | | | |
| | | 1 | " | STROBEL CLASS 142040 TWO THREAD OVERSEAM MACHINE K142-40-IFV3 MACHINE COMPLETE | 4426.- | 15-5-C1064 | | 5 | 86 | | | Sialkot |
| | | 1 | " | ELECTRICALLY HYDRAULIC SWINGRAM CUTTING PRESS WITH 10 TONS PRESSION | 5649.- | 15-5-C1063 | | 1 | 86 | | | Sialkot |
| | | 1 | " | GLOVE POLISHING MACHINE | 751.- | " | | 1 | 86 | | | " |
| | | 1 | " | GLOVE PIQUE STITCH MACHINE, PORKERT KL 55/1 | 2229.- | 15-5-C1065 | | | | | | " |
| | | 1 | " | GLOVE PRIXSEAM MACHINE, PORKERT KL65 | 2604.- | " | | | | | | " |
| | | 1 | " | SIMPLE TENSILE TESTER, STD.172 | 1040.- | 15-5-C1268 | | | | | | " |
| | | 1 | " | ADHESION QF FINISH TESTER STD.112 | 679.- | " | | | | | | " |
| | | 1 | " | PENETROMETER STANDARD WITH 4 SAMPLE CLAMPS | 4239.- | 15-5-C1269 | | 1 | 86 | | | " |

Project Record

PAKISTAN

DP/PAK/79/022

Country PAKISTAN Project No. LEATHER PRODUCTS DEVELOPMENT CENTRE

Page 2 of

Project Period ending

| NO Seq. Lot | Item No. | Qty. | Unit | Description | US Dollar Equivalent | P.O./Shipping Advice Ref. | Received | | | Condi- tion | Qty. on hand | Remarks |
|-------------------|-------------|------|------|---|-------------------------|------------------------------|----------|-----|------|----------------|--------------------|---------|
| | | | | | | | Qty. | M | Y | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| | | 1 | PCS | FEK-VESLIC RUBBING TESTER | 5269.- | 15-5-C1269 | | 1 | 86 | | | Sialkot |
| | | 1 | " | MINI-FLEXOMETER WITH 4 SAMPLE CLAMPS | 2965.- | " | | 1 | 86 | | | " |
| | | 1 | " | TEST TANNING DRUM TYPE 30509 VGI, STAINLESS STEEL COVER PLATE MADE OF PLEXI GLASS | 7595.- | " | | 1 | 86 | | | " |
| | | 1 | " | WATER DISTILLATION UNIT No.1029 | 308.- | " | | 1 | 86 | | | " |
| | | 1 | " | TOP-LOADING ELECTRONIC PRECISION BALANCE | 1191.- | " | | 1 | 86 | | | " |
| | | 1 | " | THERMOTESTER UNIT | 1891.- | " | | | | | | " |
| | | 1 | " | MODEL 71 EDGE STAINING APPARATUS | 2165.- | 15-5-C888 | | 12 | 85 | | | " |
| | | 1 | " | CALIBERS FOR MEN FOR LINED GLOVE | 393.- | 003366 and 003370 | | 1 | 86 | | | Sialkot |
| | | 1 | " | CALIBER FOR LADIES UNLINED GLOVES | 389.- | " | | | | | | " |
| | | 1 | " | STRIPE CALIBER, ADJUSTABLE | 304.- | " | | | | | | " |
| | | 1 | " | SEAM FOLDING APPARATUS | 319.- | " | | | | | | " |
| | | 1 | " | PERFORATION SET | 550.50 | 003535 | | | | | | " |
| | | 1 | " | XEROX 1035 REDUCTION/ENLARGEMENT PHOTOCOPIER WITH F-4 TRAY | 4534.- | 003350 | | 10 | 84 | | | " |

Annex. V

Fellowship

| Post No. | Training Field | Duration | Name | Started (Yr/Yr) | Completed (Mo/Yr) |
|----------|--|----------|-----------------|-----------------|-------------------|
| 31-01 | Management of Training Slough College (UK) | 3 months | S.A.R.Zaidi | Feb'85 | Apr'85 |
| 31-02 | Study Tour/Training Leather Garments (Italy) | 3 " | Khalid M.Khan | Mar'85 | June'85 |
| 31-03 | Training of Instruc- tors, Leather Goods, (PICIE, Italy) | 3 " | Masood S.Qidwai | Dec'85 | Mar'86 |

ANNEX VI

Training Courses and Curriculum

LPDC Karachi

A. Leather Garments Technology: (one year)

1. Design Programme:

- (a) Theory: Movement of fashion during the last century, analysis of the changes in the aesthetic due to social, economic and political factors, selection of materials.

Design related to industry, general idea about industrial design, industrialization of fashion, problems related to design for industrial production.

- (b) Design Practice:

Drawing exercises, object design, geometrical design, body anatomy, different ways of presenting a design, aspects of creativity.

Design techniques: graphitic, water colour, pastel colour, mixed technique.

2. Patterns:

- {a} Knowledge about sizes,
{b} Pattern construction:

Skirts: Classic, four panels, half circular, overlapping.

Men's trousers: Jeans, Classic.

Women's trousers: Jeans, classic, fashionable.

Men's jackets: Two-button, double-breasted, three buttons.

Men's overcoats: Normal, double-breasted, raglan.

Women's jackets: Single-breasted, double breasted, raglan.

Overcoats for women: Sample of textiles for important classic items, sizes for sportswear.

Men's sportswear: Basic short jacket, safari, different types of collars (application), variation of pattern according to design and fittings.

Classic upper.

Arm holes: normal, with gathering, raglan with dart.

3. Leather Exercises:

- {a} Knowledge about machines,
{b} Knife cutting exercises,
(c) Exercises on straight stitching. Inside seam, top stitching, length stitching.
(d) Folding straight: Curve, angles.

- (d) Folding straight: Curve, angles.
- (e) Leather stitching: button holes, various types.
Pocket lining, various types of pockets.
Pocket piping.
Cuff: with elastic, with opening, with strips.
Belts: with full elastic, with elastic on sides, with half elastic or down portion, with strips.

Production and Production Processes:

(1) Knowledge about machines:

- (a) Specifications of machine adjustment,
- (b) Specifications on length stitching quality,
- (c) Controlling the speed the machine.

2. Training in Round and Straight Stitching

3. Training in different processes on textiles:

- (a) Flaps, square, round, non-systematic, dart type.
- (b) Button holes: Front-finish type, with trimming, double finish.
- (c) Collars: Korean, double, with extension, classic, double-breasted type, banana, shirt, with piping.
- (d) Cuffs: Classic folded bottom, ending close, with opening, open, with extension, open, with leather finishing on opening side, doubled, with thread inside, with strips, with zip.
- (e) Pockets: Cut, piping, classic double bon, side box pleat, full box pleat, zip, classic upper.
- (f) Arm holes: normal with gathering, raglan with dart.
- (g) Pleats: Side: inside look, outside look, box, double.
- (h) Use of elastic: In belts, straps, in cuffs, and pockets.

4. Sewing 4 different jackets in textile using all the processes in 3:

5. Leather Quality: a) Different types of leather, b) selection of skins, c) colour matching and d) skin defects.

6. Knife cutting: a) Knife quality, b) sheets quality, c) knife sharpener, d) knife positions, e) consumption of leather, f) cutting practice.

7. Preparation Processes: a) Fusing - quality of fusing, use of fusing, b) Use of glue - seam opening, pockets, hems.

8. Production processes: a) Classic items - 2-button jacket for men, double-breasted jacket for men, overcoat for men, tailleur for women, single-breasted, tailleur for women, double-breasted, overcoat for women.

- b), Sportswear: Blouson for men - normal type, Blouson for women - normal type.

9. Production and Production Systems:

- a) Knowledge about systematic production, chain system - unitary system; b) Production: Establishment of production departments: cutting department, manufacturing department, co-ordination and timing department, sampling department.

B. Leather Goods Technology: (one year)

1. Design:

Leather goods classification - design material - design tools - drawing - pencil handling - point and line - vertical line - horizontal line - curves - mild curves - parallel curves - sharp curves - horizon - vanish points - actual prospect - plain - imaginative proportional drawing - cube drawing - angles of vision - circle drawing - cylinder drawing - cone drawing - source of light - shading - design analysis - product design - product function - measurements - small leather goods design - ladies bags design - gift items design - folios design - brief-cases - attache cases - ornamentation - accessories - concept of collection building.

2. Pattern Making:

From design to pattern - product size - product dimension - basic constructions - open edge - turned edge - cross sections - master pattern development - allowances - pattern accuracy and testing - cutting patterns - components - working pattern development - pattern binding.

3. Leather properties and characteristics:

Situation of leather production - raw material - market situation - leather origin - hides and skins production - original properties and quality consideration - leather tanning - beamhouse operations - chrome tanning - vegetable tanning - other types of tanning - leather dying - leather finishing - leather measuring - grain identification - tanning identification - finishing identification - quality assessment - defects - shape - size - grain state - part differences - thickness - feeling assessment - stretch - strength - relative substance - colour shades - sorting - leather buying - handling - wrapping - storage.

4. Cutting Operations:

Importance - cutting tools - use and maintenance - cutting exercises - straight - curved edge - circles - sharp corners - cutting-up - waste consideration - pattern area - first waste - leather waste - yield/waste calculation - job orders - basic costing technology - cutting machines - guillotine - strap cutting - cutting press - leather cutting - directions and substance - lining cutting directions - cardboard cutting/directions - cutting defects and control of cutting section.

5. Preparation and Assembling:

Hand skiving - tools use and maintenance - types of skiving - skiving allowance - folding and allowances - folding tools - folding machines - creasing tools and machines - embossing - glueing and glues - glazing - splitting - edge staining - edge finishing - eyeletting - rebitting - punching - gussets construction - bending allowances - application of masks - lining assembling - handles construction - flaps construction - piping - lapping - applications of assembling methods.

6. Sewing:

Machines types - machines parts and function - flat bed - cylinder bed - post bed - guides - needles - threads - sewing material - stitching exercises - stitching formation - stitching control - machine adjustment - trouble shooting - product stitching-types of seams - seams application - stitching quality - plain seams - lapped seams - folded seams - turned seams - turned over seams - binding seams - piped seams - organization of stitching/job orders.

7. Product development:

Small leather goods - ladies bags - men's bags - folios - moulded articles - box work - gift articles - briefcases - concept of collection - sample making.

8. Pilot Production:

Production planning - product costing - material consumption - design job orders - time factor - labour component - supervision duties - production control - assembly line - finishing - packaging.

9. Industrial Sewing Machines Maintenance: (3 months twice/week)

General knowledge of sewing machines - types of machines - parts - tools and application - organization of workshop - assembling - handling - operating procedure - threading - adjustments - trouble shooting - general maintenance.

D. Leather Goods Sample Making: (6 weeks)

Prototype preparation - testing pattern accuracy -
constructional details - suitability of material and machinery,
size and function - visual aids preparation - course plan -
role of sample maker - design conceiving - methods of construction -
material selection - fitting selection - machines and
tools selection - sample costing - sequence of operations -
development of turnover edge travel wallet - development of
butted edge raised base flopper h/bag - development of turned
seam zip handbag 'U' gusset.

E. Sewing Operations: (3 weeks)
(Leather Garments and Leather Goods)

Introduction hand stitching - machine stitching - chain stitch -
lockstitch - flat-bed machines - post bed - cylinder bed - major
machine parts - head parts - needle types and points - bobbin
winding - threading - bobbin case - rotary hooks - needle
threading - raising bobbin thread - thread tension adjustment -
lockstitch formation - types of shuttles and hooks - feed
mechanism - stitch regulator - presser foot types - roller foot -
hook timing - needle size - thread size - stitch length -
trouble shooting - basic seams - zigzag sewing - cards exercises -
applied seams - straight stitching - gusset seam - turned and
back stitch - curved stitch - parallel squares and corners -
trousers zipper seam-coin purse - piped seam - collar seam -
pocket seam - open zipper pocket seam - button hole seam -
hanging pocket seam - maintenance operations - basic stitching
quality.

F. Seminar on Development of Leather Goods Industry
for Export: (One day)

Manufacturing situation and constraints - training and manpower
development - marketing aspects and promotion - design aspects -
credit facilities - leather supply - policy measures.

G. Workshop on Preparation of Industry Participation
in New York International Fair: (3 sessions)

Objectives of participation - product lines - stall design and
display arrangements - collection building - sample preparation -
costing and pricing - market characteristics and channels -
marketing strategy - supply development.

LPFC Sialkot

A. Leather Gloves:

1) Refresher course for managers/supervisors: (1 week)

Trends for fancy gloves - market situation - advantages in domestic conditions - different types of fancy gloves - technology applied in making fancy gloves - type of raw material - leather - lining - threads - etc., hand measurements - pattern development - preparation and table cutting and calibers cutting - embroidery and ornamentation - finishing, inspection and packaging - machine and tools.

2) Pattern and cutting course:(2 months)

Introduction to fancy gloves - procedure of hand measurement - creation of pattern - basic difference between mens and ladies gloves - tools and equipment use and maintenance - cutting exercises - knife handling - preparation for table cutting - scissors - leather table cutting/cutting direction and manipulation - gloves workout - costing calculation - dies cutting - combination of colours and material - lined gloves - unlined gloves, difference in material cutting.

3) Stitching course:(2 months)

Sewing machines for gloves - machine parts and operation - needles - threads - machine control - stitching exercises - leather stitching - hand stitching for fancy gloves - machine stitching for fancy gloves - embroidery - finishing: polishing-ironing-packaging.

4) Common facilities and services for dressing gloves manufactures:

- a. demonstration of machines and equipment
- b. cutting and perforating dies (calibers) for men's and ladies gloves all sizes - lined and unlined.
- c. clicking by hydraulic press.
- d. ironing of gloves lined and unlined.

Machines services are provided against nominal charges.

B. Advisory Unit for Leather:

1) Leather Seminar for Sports Goods: (10 days)

Leathers for balls, sports gloves and dressing gloves - suitable material - equipment-machines - soaking-liming-reliming - bating - degreasing - pickling - chrometanning - shaving weight - retanning - neutralization - pefatliquor - retanning due - penetration - surface - dye temp.-fatliquor - fixation - rinse - wash - drying - condition - stake - toggle - stretching frames - finishing - sealing - water-proofing - yield - cost calculation - wet blue - material from Kasur - process control for standard quality - stretching frames - finishing with rubber-pigment solution - splitting of pannels at LPDC - product control - physical tests at LPDC - tensile strength - elongation - rubbing fastness - water absorbtion - flexometer - general splitting - adhesion of finish testing - general problems - export quality.

2) Advisory Unit Services and Facilities:

i) Testing facilities:

- a. tensile strength and elongation
- b. flexometer
- c. dry and wet rub (colour fastness)
- d. adhesion of finish
- e. water absorption resistance
- f. perspiration fastness
- g. acid in leather.

ii) Demonstration and common facilities:

- a. cutting of leather pannels
- b. splitting of leather pannels
- c. experimental tannery with demonstration facilities for balls leathers as well as fine leathers for dressing gloves - covering:
process from soaking to finishing - process control
quality control - colour matching - fastness of dye and finishing - tensile strength - stretch - water proofing and water repellancy - surface dyeing - fixation - pefatliquoring - overcoming - graincreasing and other common defects.

Services of the advisory unit are provided against nominal charges.

Annex.VII

Companies Visited for Major Assistance

Leather Garments:

Motif Leather - Skin Trends - Lyra Mode - S.M. Din - Haji Abdul Latif - Alliance Industries - Leather on - Shaikh Brothers - M.F. Corporation - Siddiqui - Al-Hassan Associates - Shaukat International - Ijaz Company - Leather Goods International - Pak Leather Craft - Hub Leather - Marriam Garments - Firhaj Company - Leather Garments Association.

Leather Goods:

Travel Kit - Luxury Links - Craft Co. - Irfan Co. - Pakistan Leather Industries - Arts & Crafts Co. - Pragma Industries - Asra Impex - Regal Leather Works - Trading Corporation of Pakistan - Aziz Industries - Unique Overseas - Sind Small Industries Corpn. - S.A. Leather Craft - Elegance Leather Works - Leather Lines - Marie Adelaide Centre - Leather Queen - Leather Goods Association.

Leather Gloves:

Dar Lines - Khas Traders - Hansa Enterprise - Sublime - Z.L.E. Huma Corporation - Nafisabad Billo Trading - Special Trading Co. - Phedra Industries - Rajax Industries - Acro Sports - Tajson Corporation - Billoo Trading - Barlas Company - Good Luck Traders - Leather Gloves Association.

Sports Goods: (Tanneries)

Phedra Industries - Saddlerie de Unique - Sublime - Tajson Corporation - Lotfy Sports - Ali Trading - Khas Traders - Hansa Enterprises - Grace Traders - Capital Sports Corpn. - Anwar Khawaja Ind. - Arco Sports Works - Grays of Cambridge Pak.Ltd. - Recto Sports - Chenab Sports Works - Peak Industries - Al-Farooq Export Centre - Abdul Rasheed - Ihsan Sports - Challenge Sports Works - Derby Sports/Mecca Tannery - Fircos - Jasco - Silver Star - Basco Co. - Nishat Industries - Punjab Small Industries Corpn. - Mancha Tannery - Seminar Traders - Pioneer International - Ittehad Impex - Karim's Export - Pak/German Industry - Zia-e-Huma Corpn. - Everest Ind. - Fraz Enterprises - Can Pak Trading Co. - Khan Spall - S.H. Abdul Sattar Tannery - Sports Goods Association.

Annex.VIIIProject Documentation

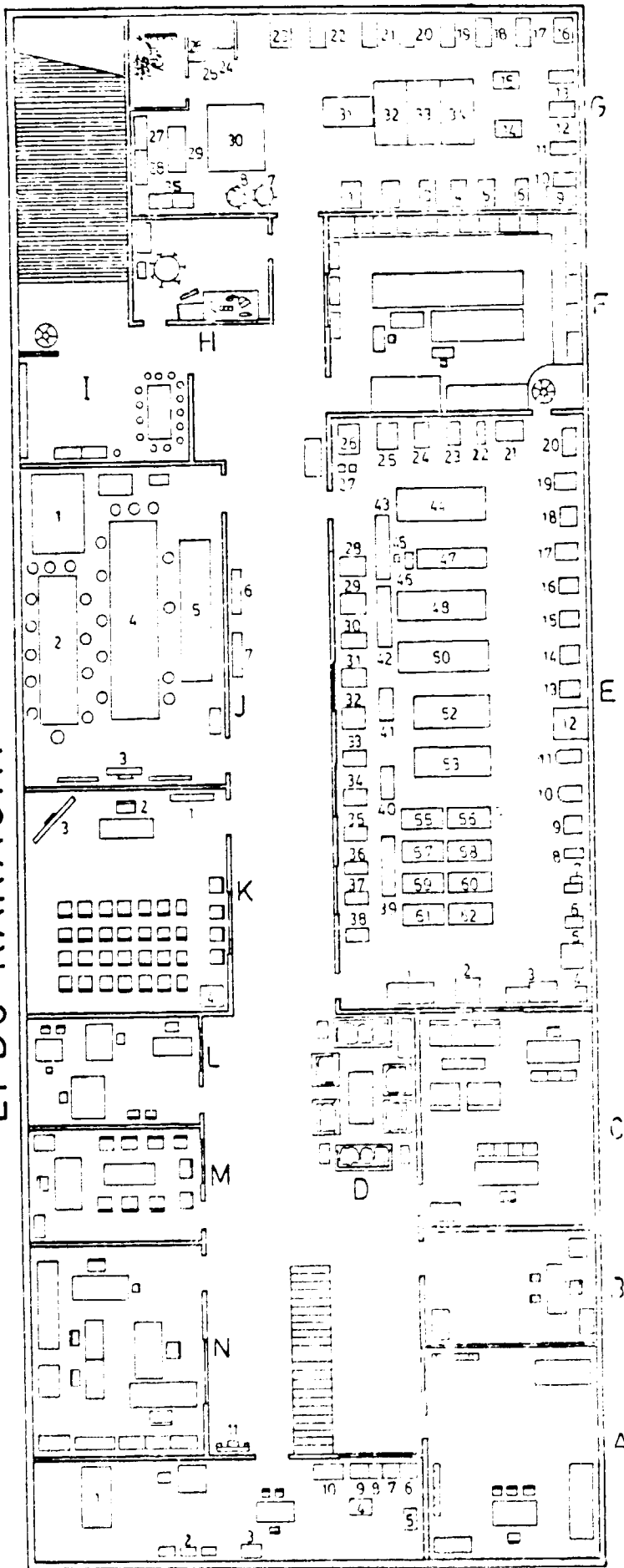
| S.No. | Document Title | Date | Duty Station | Author & Title |
|---------------------------|---|----------|---------------------|---|
| <u>Overall Activities</u> | | | | |
| 1 | Terminal Report | June '86 | Karachi/ Sialkot | M.M.Abou El-Khair CTA/Leathergoods expert. |
| 2 | Evaluation Report | Jan.'86 | Vienna | Evaluation mission |
| 3 | Terminal Report | Dec.'82 | Karachi | Karen Hellemaa CTA |
| <u>Leather Garments</u> | | | | |
| 4 | Technical Report Leather garment design and production | Aug.'85 | Karachi | E. Chehwan Leather Garment Expert. |
| <u>Leather Goods</u> | | | | |
| 5 | Technical Report Leather Goods Development- training consultancy | June '86 | Karachi | M.M. Abou El-Khair CTA/Leathergoods expert. |
| 6 | Technical Report Leather Goods Industry Parti- cipation in 17th International Show - New York | Aug.'85 | Karachi | -do- |
| 7 | Technical Report Exhibition/Seminar on develop- ment of leather goods industry for export | Dec.'84 | Karachi | -do- |
| 8 | Technical Report Reinforcing services of LPDC | Jan'84 | Karachi | -do- |
| 9 | Technical Report Development and demonstration of patterns and samples for high quality small leather goods and ladies handbags | Sept'85 | Karachi | D. Tracy Leather goods sample making expert. |
| <u>Sewing</u> | | | | |
| 10 | Technical Report Special training on sewing operations for leather goods and leather garments | Dec.'85 | Karachi | P. Sinturel Sewing expert |

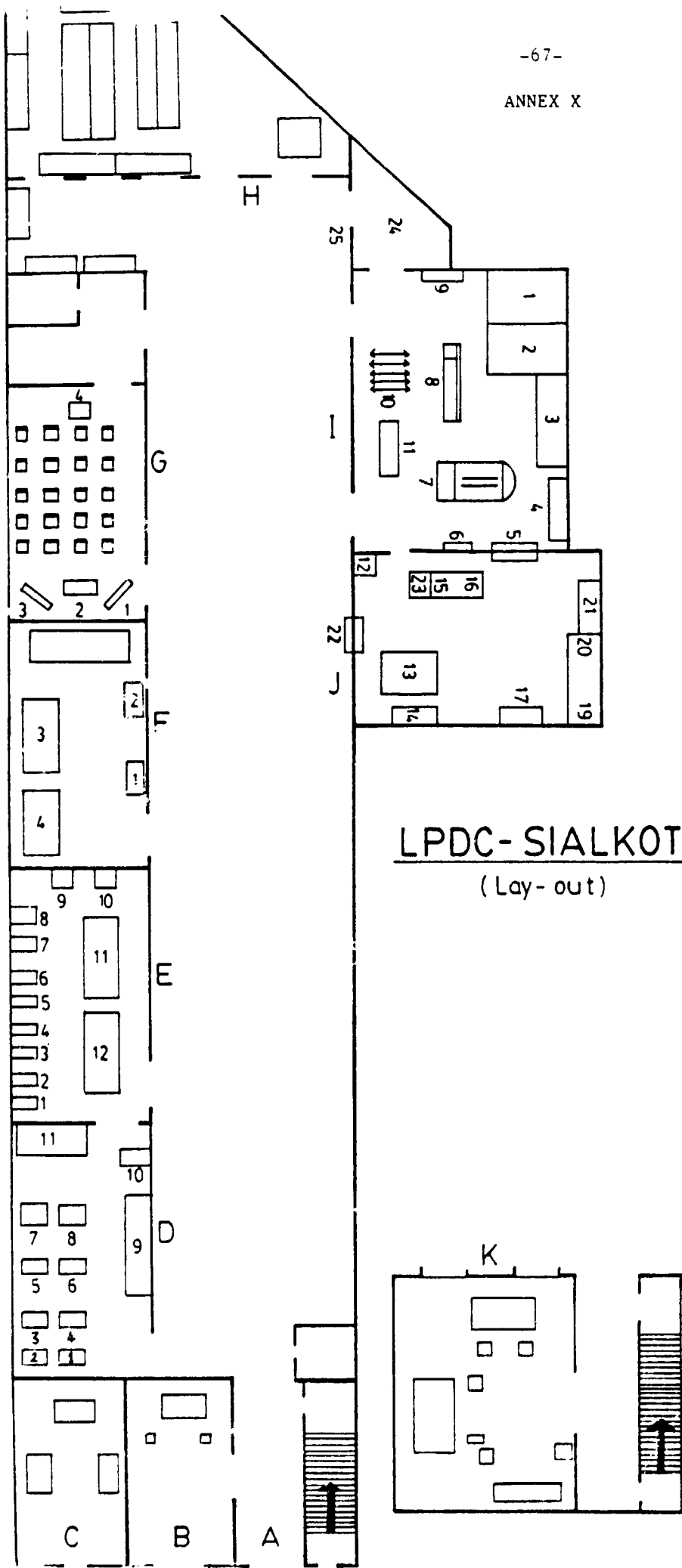
Annex.VIII (cont'd)

Project Documentation

| S.No. | Document Title | Date | Duty Station | Author & Title |
|-----------------------|---|---------|---------------------|---|
| <u>Leather Gloves</u> | | | | |
| 11 | Technical Report Training and development of fancy leather gloves | Feb.'86 | Sialkot | V. Zimmermann Leather gloves consultant |
| 12 | Technical Report Design, pattern cutting, grading, packaging and marketing of leather gloves of different categories | June'84 | Karachi/ Sialkot | R.W. Beeby Expert in leather gloves, design and manufacture. |
| 13 | Terminal Report Training for leather gloves manufacturing instructors and representative from industry - split mission | Nov.'82 | Karachi | -do- |
| <u>Sports Goods</u> | | | | |
| 14 | Production of leather for balls, gloves and other leather items - establishment of advisory unit | May'86 | Sialkot | M.G. Haecker Expert in production of leather for sports goods. |

(Lay - out)
LPDC KARACHI





LPDC-SIALKOT
(Lay-out)

LPDC KARACHI LAY-OUT

- A. Experts office
- B. Secretary
- C. Project Director/OTA office
- D. Reception
- E. Leather Goods Workshop

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. Cupboard 2. Guillotine 3. Manual strap cutting machine 4. Edge staining machine 5. Clicking press 6. Power strap cutting machine 7. Glazing machine 8. Edge polishing machine 9. Embossing machine 10. Skiving machine 11. Skiving machine 12. Bandknife splitting machine 13. Bandknife splitting machine 14. Glueing machine 15. Folding machine 16. Piping machine 17. Automatic punching machine 18. Fixed knife splitting machine 19. Curve folding machine 20. Plywood binding machine 21. Finishing plant 22. Plywood pressing machine 23. Suitcase stitching machine 24. Automatic reuniting machine 25. Heavy duty cylinder arm stitching machine 26. Pedal Eyeletting machine 27. Manual strap folding machine 28. Post bed stitching machine (Pfaff) 29. Cylinder bed heavy stitching machine (Pfaff) 30. Flat-bed stitching machine (Pfaff) 31. " " " 32. " " " (Adler) 33. " " " 34. " " " (Bernina) | <ul style="list-style-type: none"> 35. Flat-bed heavy stitching machine (Pfaff) 36. " " " 37. Flat-bed stitching machine (Adler) 38. Cylinder bed light stitching machine (Pfaff) 39. Skiving machine (Yakumo) 40. Shelf 41. Shelf 42. Designing table 43. Designing table 44. Finishing table 45. Pedal reuniting machine 46. Button fixing machine 47. Assembling tables (54) 48. Cutting tables (62) |
|---|---|

- F. Store Room
- Shelves and fixtures for leather auxiliaries, accessories and machines spare parts.

G. Process of Production Hall (Leather Garments)

1. Compound feed single stitch machine (Adler)
2. " " "
3. " " "
4. " " "
5. Flatbed stitching machine (Mitsubishi)
6. " " "
7. Revolving stand (for leather garments)
8. " " "
9. Fur stitching machine (Strobel)
10. Flatbed stitching machine (Mitsubishi)
11. " " "
12. Flatbed stitching machine (Pfaff) roller feed
13. Overlock safty stitching machine (5 thread) (Rimoldi)
14. Double needle upper and lower feed flatbed stitching machine (Adler)
15. Zigzag stitching machine (Adler)
16. Garment press machine
17. Compound feed stitch machine (Adler)
18. " " "
19. " " "
20. Double needle upper and lower feed machine (Adler)
21. Compound feed stitching machine (Adler)
22. " " "
23. Universal feed stitching machine (Adler)
24. Ironing table
25. Pattern cutting machine
26. Zigzag stitching machine (Pfaff)
27. Domestic stitching machine, half round (Salika)
28. " " "
29. Pattern cutting table
30. " " "
31. Assembling tables (34)
32. Almirah (2)

H. Show Room

I. Canteen

J. Design of Pattern Room

1. Band saw cutting machine
2. Pattern making table
3. Writing board (white)
4. Pattern making tables (2)

K. Lecture Room

1. Projector screen
2. TV, VCR
3. Writing board (white)
4. Magazine & books cupboard
overhead projector

L. Instructors Room

M. Instructor Incharge's Room

N. Administration Room

O. Maintenance Section

1. Pattern binding, pattern vice and pattern cutting machines
2. Welding plant
3. Welding plant
4. Knife cutter
5. Die making machine
6. Knife cassettes
7. Punching plate
8. Whole punch
9. Corner maker
10. Cupboard for patterns
11. Grinding machine

LPDC SIALKOT LAY-OUT

A. Entrance

B. Instructors Room

C. Administration

Gloves Section

D. Gloves cutting

- 1-9 cutting tables
- 10 hydraulic press
- 11 skiving machine

E. Gloves Stitching

- 1-4 flatbed sewing machines (Pfaff 463)
- 5-6 flat bed sewing machine (Pfaff 34)
- 7 Bernina sewing machine
- 9 PK Porkert sewing machine
- 10 Prixseam sewing machine
- 11-12 Preparation tables

F. Gloves Finishing

1. Seam folding
2. SFA lining knitting machine
3. Electrically heated ironers
4. Gloves polishing machine

G. Lectures Room

1. White board
2. Instructors table
3. Projector screen
4. Overhead projector

H. Store Room

With shelves and fixtures for leather, auxiliaries, accessories and spare parts.

Sports Goods Advisory Unit

I. Experimental Tannery

1. Stainless steel drum
2. Wooden drum
3. Dyeing machine (Wacker apparat)
4. Wall shelf
5. Box-cupboard (locker)
6. Wall shelf
7. Laboratory table, with top shelf and bason
8. Chemical preparation table
9. Horses for piling
10. Wall shelf for chemicals
11. Writing table

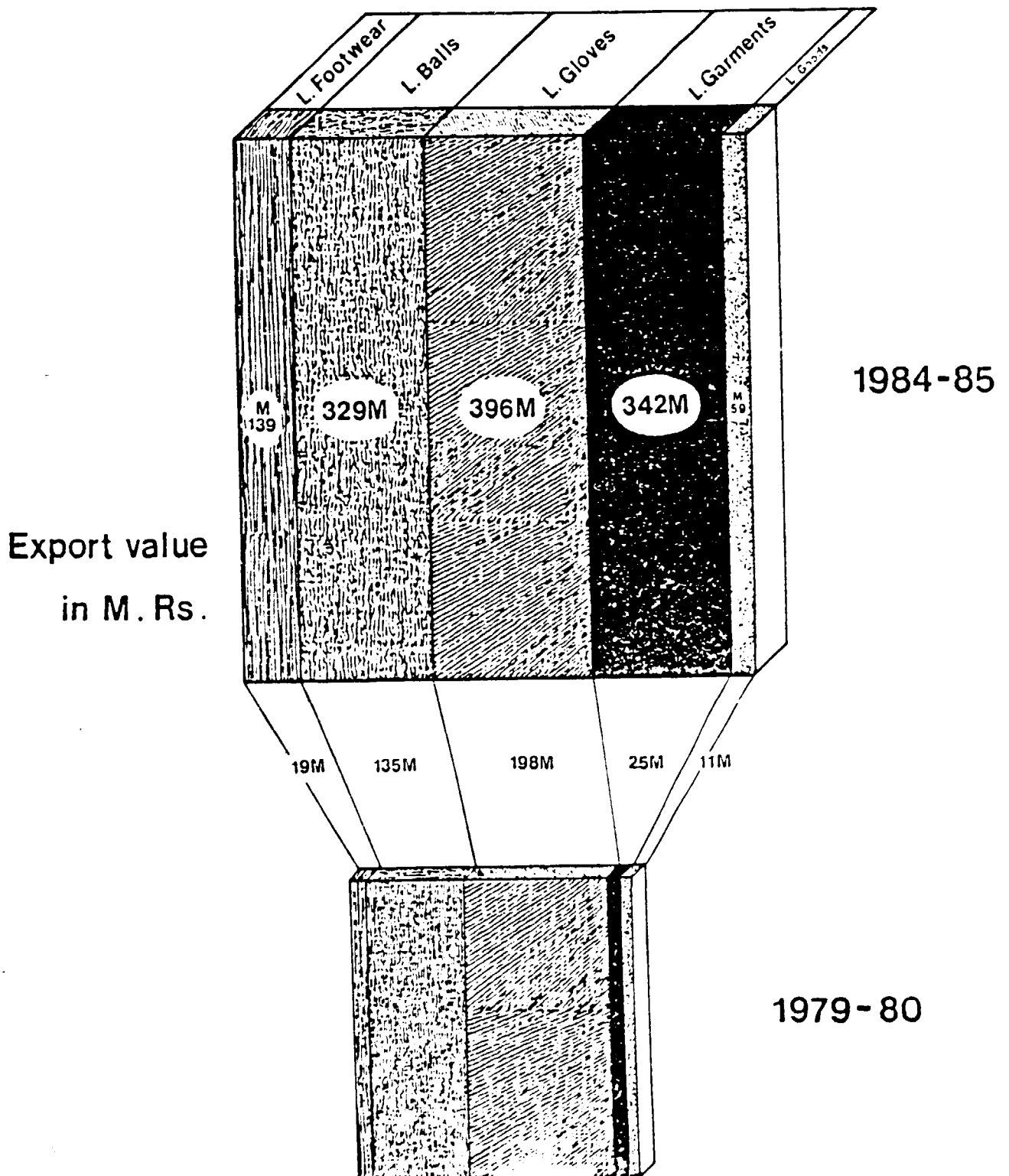
J. Physical Testing Laboratory

12. Bason
13. Office table
14. Wall shelf
15. Rubbing test machine with thermotester
16. Flexometer test machine
17. Wall shelf
18. Penetrometer test machine
19. Tensile strength test machine
20. Splitting machine (fixed knife)
21. Hot water boiler (high up on the wall)
22. Airconditioner
23. Adhesion of finish test apparatus
24. Chemical Store Room
25. Spray booth, 1 exhaust fan - 1 compressor

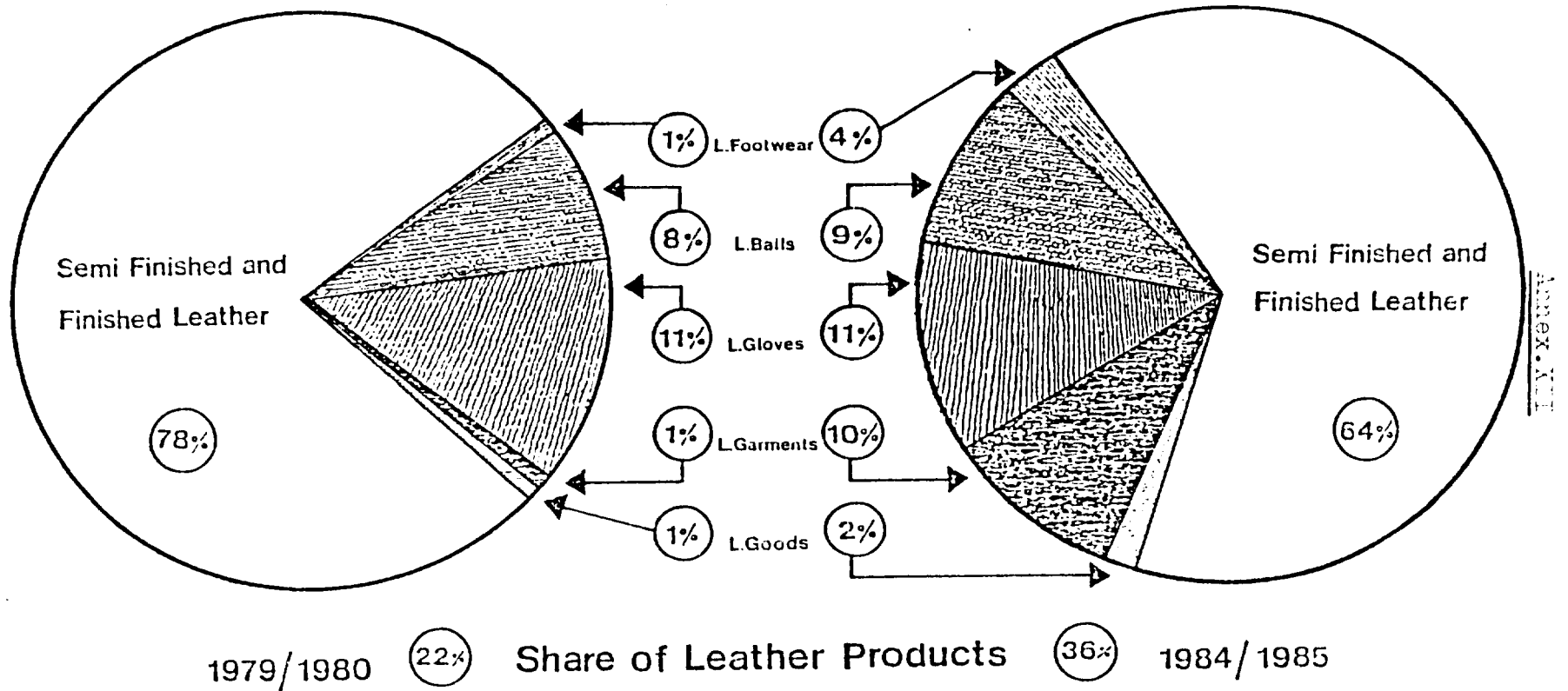
K. Experts/Project Director office

Annex.XI

EXPORT DEVELOPMENT OF LEATHER PRODUCTS



Export Development of Leather vis - a - vis Leather Products



Annex. III

ACKNOWLEDGEMENT

The author wishes to express his deep thanks for the support and co-operation of all bodies concerned with the implementation of this Project throughout his mission. This goes to the UNDP/UNIDO in the field and at the Headquarters, concerned authorities at the Federal Ministry of Industries, the National Project Director, the international experts colleagues, the national counterpart and support staff, the chairmans and members of the industry associations and the Project trainees.