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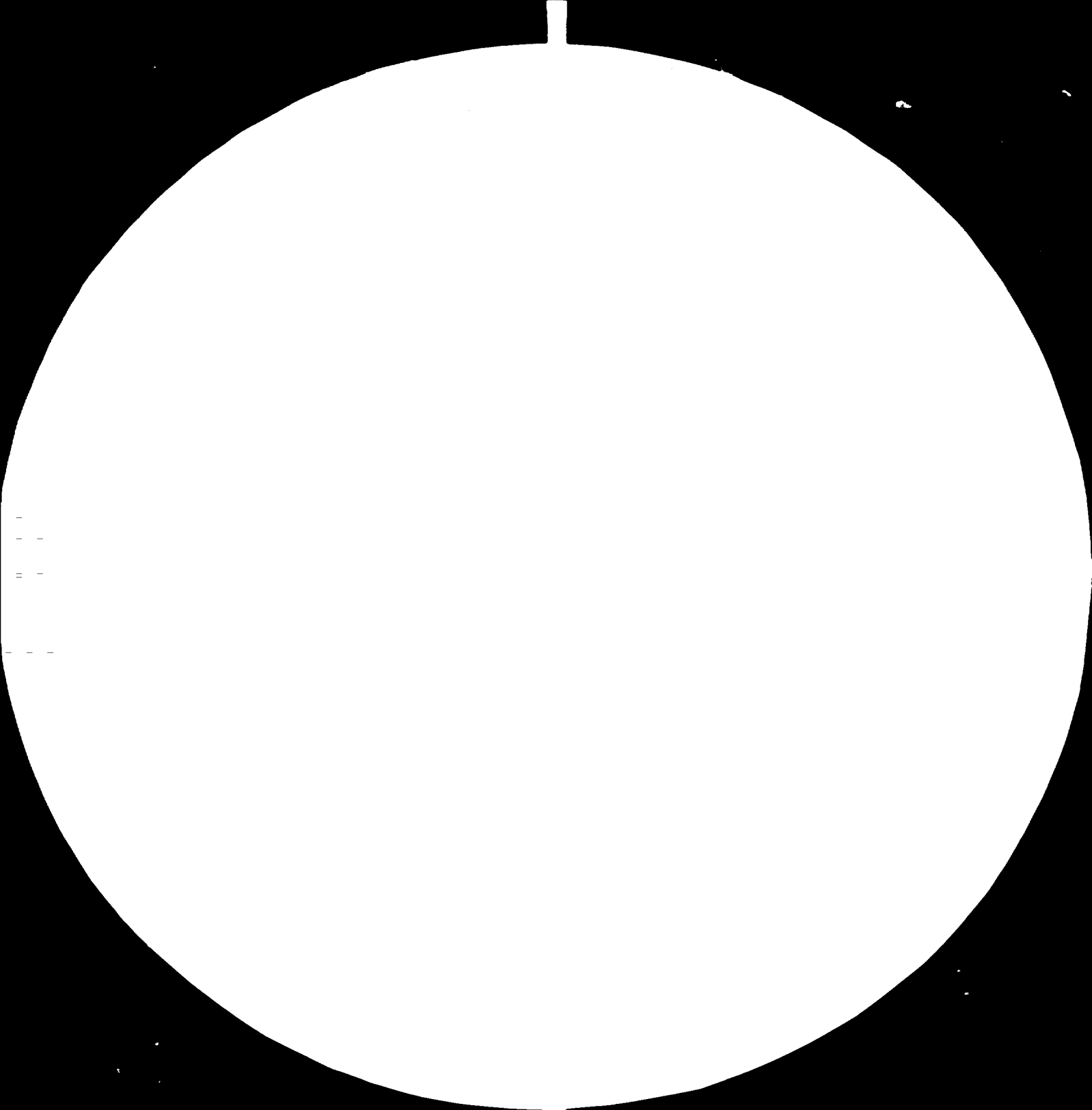
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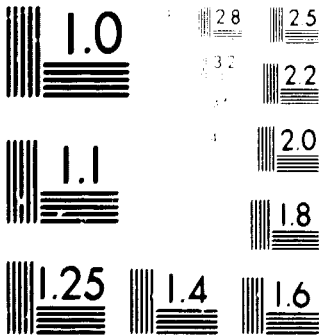
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30 APRIL 1962
INDIA

India - INVESTMENT AND DEVELOPMENT OF NEW ENTERPRISES

SIXTH - PHASE II.

DP/IND/76/023

INDIA

INDIA

Prepared for the Government of India
by the United Nations Industrial Development Organization,
Exporting Agency for the United Nations Development Programme

United Nations Industrial Development Organization

United Nations Industrial Development Organization

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RESTRICTED

30 APRIL 1982

ENGLISH

DIVERSIFICATION AND DEVELOPMENT OF NEW FABRICS

SITRA - PHASE II

DP/IND/76/023

INDIA

TERMINAL REPORT*

Prepared for the Government of India
by the United Nations Industrial Development Organisation,
Executing Agency for the United Nations Development Programme

Based on the Work of B.D.Dickson,
Clothing Technologist

United Nations Industrial Development Organization,
Vienna

*This report has not been cleared with the
United Nations Industrial Development
Organization which does not, therefore,
necessarily share the views presented.

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SUMMARY

The project Diversification and Development of New Fabrics, Phase II (IND/76/023) aims to develop further the expertise of SITRA staff in relation to the needs of the knitting industry of South India. This mission (November 1981 - April 1982) was to help develop and advise on research, training and technical services for the making-up sector.

After surveying local industry, two training programmes were developed and run successfully - Pattern Making and Grading, and Garment Assembly Techniques. A Pattern Library was set up, as a reference and service centre for industry. An Internal Training Programme was planned for the counterpart with basic training in pattern making, garment construction, machine training and mechanical adjustments on a lockstitch machine.

There was an input of machinery, March 1982, with 3 sewing and 2 cutting machines from UNDP, and 6 sewing machines purchased by SITRA. The extension at SITRA to be used for Garment Making is estimated to be finished by May 1982 with an area of 800 sq.ft. It was decided to have an additional staff member at SITRA in the garment making section, and this staff member commenced April 1982.

The objectives of the mission were achieved with a fair degree of success. It is recommended that the garment making section be further developed as a complete reference and research centre with a range of machinery, fashion magazines, patterns and fashion garments. As well as existing training programmes, new ones should be developed to meet the needs of industry. Also research programmes on different facets of the industry should be undertaken.

INTRODUCTION

The project Diversification and Development of New Fabrics, Phase II (IND/76/023) was submitted to the UNDP by the Government of India on 12 November 1979 and signed by UNDP 12 December 1979. This project named UNIDO as the Executing Agency with the Ministry of Industry as the Indian Government Co-operating Agency acting through SITRA. The project is of a two year duration commencing April 1980, with the UNDP contribution totalling \$259,300 and the contribution of the Government of India \$121,500.

During the first phase of this project the UNDP/UNIDO assistance concentrated on the improvement in yarn quality, training in knitting technology and the provision of technical services to the knitting industry. The present phase aims to build upon the achievements of the first phase and to develop further the expertise of SITRA staff in relation to the needs of the knitting, dyeing and finishing and the making-up industries. It will also extend appropriate research and development activities in these areas related to the needs of the hosiery and related industries, both short term and long term. It will also institute technical liaison and training courses in these areas of industrial activities.

The objectives of the experts mission were to:

- i. survey garment making from knitted fabric, especially in South India, and familiarise herself with local and national practices and resources for garment manufacture;
- ii. advise on the selection and organization of making-up equipment at SITRA;

- iii. advise on a continueing research programme in making-up, including the development of equipment and instrumentation;
- iv. advise on the development of internal training programmes in making-up for SITRA staff;
- v. assist in the development of training programmes for the hosiery making-up industry;
- vi. advise SITRA staff on the operation of technical service functions to industry in factory organization and quality control.

I. FINDINGS

A. Garment Making Industry

Shortly after the expert's arrival, visits to industry were arranged (Appendix II) in order to ascertain local production methods, machinery, quality and styling. The greater percentage of local production is in briefs and banians for local consumption. A smaller percentage produce T-shirts, ladies knitted tops, men's knitted shirts, and ladies outerwear for export purposes. The traditional garments for local consumption are of fair quality with unsophisticated production methods, due mainly to cheap labour. The emphasis is placed on saving of fabric, often at the cost of good pattern shape.

Garments produced for export are of fairly good quality, as they are, on the whole, copied from samples. Knowledge of pattern making and grading is limited. Type and quality of machines are varied. There is a mixture of imported and locally made machinery.

Discussions held when visiting industry showed a desire to learn new methods of production and pattern making.

B. Equipment - SITRA

The equipment for the Garment Making Section in SITRA has been considerably increased with the input of three sewing and two cutting machines provided by UNDP, and six sewing machines purchased by SITRA (Appendix III). The six latter machines are of Indian origin and are industrial lockstitch machines. They were used by participants in two training programmes on Garment Assembly Techniques.

There is still a need for two additional types of machine used in the manufacture of knitted garments - a collette or binding machine, and a two needle-four thread mock safety stitch machine. A steam iron and a fusing press would also be required.

For research projects a sewability tester for research in needle damage is advisable.

C. Internal Training - Counterparts

1. Mr. D.VENKATAPATHY

Introduction

Under a U.N.Fellowship programme Mr.Venkatapathy spent 37 weeks at Manchester Polytechnic doing a diploma course in Clothing Technology. His programme consisted of

- | | |
|---|------------|
| a) Operative Experience in Industry | - 2 Weeks |
| b) Management Studies | - 2 Weeks |
| c) Foundations of Clothing Technology and Production Management | - 10 Weeks |
| d) Industrial Experience | - 5 Weeks |
| e) Production Management Study | - 16 Weeks |

Being a management course, there was minimal time spent on practical subjects, - ten hours on pattern making, and a similar time on garment construction.

And unfortunately, his industrial experience was with a firm which manufactured umbrellas, boiler suits and uniforms.

At the end of his course he had an additional two weeks in industry with a firm producing ladies wear, where he observed technical and managerial aspects of clothing production in various departments.

Internal Training - SITRA

A programme was planned to supplement this management course. The expert has given basic training in:-

- a) Garment Making Techniques
- b) Pattern Making
- c) Grading of Patterns
- d) Machinist Training
- e) Mechanical Adjustments on lockstitch machine

The concept of the garment making section at SITRA as an advisory, consultative and research service to industry, covers a wide range of subjects, being:-

- | | |
|------------------------|--------------------------|
| 1. Design | 8. Quality Control |
| 2. Pattern Making | 9. Time and Motion Study |
| 3. Grading | 10. Modern Technology |
| 4. Cutting | 11. Costing |
| 5. Lay Planning | 12. Research Programmes |
| 6. Garment Assembly | |
| 7. Production Planning | |

As Mr.Venkatapathy shows considerable ability and aptitude for production management and research, it was decided after consultation with the Director of SITRA, Mr.Sreenivasan, and the Head of the Knitting Laboratory, Dr.Sivakumar, to employ a second person who could concentrate on the practical aspects.

2. Mrs. VIJAYALAKSHMI has a Diploma of Costume Design and Dress Making from the Adyar Polytechnic for Women, Madras. The subjects for the three year diploma were - Design, Pattern Making, Production Methods, Art, Drawing, Clothing Theory, Hand Embroidery (theory and practical), Machine Embroidery (theory and practical), Handicrafts.

Mrs. Vijayalakshmi commenced work at SITRA April 5th, 1982. Her knowledge of pattern making and garment making is quite sound, and she is experienced in the use of an industrial sewing machine. She is a trained teacher, and shows a keen and quick attitude to learning all aspects of the garment making industry.

She is at present learning the functions and stitch types of various industrial machines, and has been taken to visit several garment making factories in Tirupur, to familiarize her with industrial methods and machinery.

D. Training Programmes

(i) Training Programme on Pattern Making and Grading

(a) After factory visits in Tirupur and Thanjavur, the expert found a lack of knowledge on pattern shape and grading. Shapes were either copied from overseas garments (sometimes badly), or were traditional. It was decided to develop a Pattern Making and Grading Programme suitable for manufacturers of knit and woven garments, and let participants evaluate content suitability. A syllabus was written (Appendix IV) and course material and handouts were prepared.

Twenty nominations were received for the first course, scheduled from 7-18 December, 1981, of which sixteen were selected as participants. Ten were from Tirupur, the others from outstations. Four staff from the Knitting Division of SITRA also attended.

As approximately half of the course consists of practicals, this meant limited time was spent assisting each individual. This was shown in the evaluation of the course by participants, where, in the main, the same people who found the "coverage of subjects" unsatisfactory, also indicated that the "duration of course" was too short.

The most comprehensive topics were the subjects TRANSPOSITION OF LARTS and SLEEVES which scored 77% by all the participants. The subject voted by 69% to be allotted more time was KNITS.

Evaluation of Course by Participants in %

	Very good	Good	Satisfactory	Unsatisfactory
General Impression	8	33	46	8
Coverage of Subjects	8	15	46	31
General Arrangement	38	31	31	0
Lectures	23	46	23	8
Aids	24	38	38	0
Practicals	23	64	8	8
Discussion Session	26	8	58	8
	Too long	Slightly long	About right	Too short
Duration of Course	8	15	54	23

(b) Batch II - 15th-26th February, 1982

For this second course, it was decided to limit the number of participants to ten, therefore, allowing double the time assisting individuals during practical work. The evaluation by participants on "coverage of subjects" was noticeably different to that of the first batch. This time the participants who indicated duration "too short", rated coverage as "adequate".

The total course evaluation by participants proves that the maximum number for future programmes should be limited to ten.

Evaluation of Course by Participants in %

	Very good	Good	Satisfactory	Unsatisfactory
General Impression	45	55	-	-
Coverage of Subjects	11	67	22	-
General Arrangements	33	56	11	-
Lectures	67	33	-	-
Aids	11	89	-	-
Practicals	34	44	22	-

	Too long	Slightly long	About right	Too short
Duration of course	-	11	56	33

The most comprehensive topics were COLLARS and YOKES which scored 100% by all participants. The subjects voted by 75% to be allotted more time were KNITS and GRADING.

With limited advertising of this course, response was good, and later feedback from participants has been positive. The wide variety of topics nominated by participants as "Ideas from the course that could be implemented" shows that course content is relevant to the South Indian Garment Industry.

ii. Training Programme on Garment Assembly Techniques

This programme was planned as a result of suggestions by participants in Pattern Making and Grading Programmes.

The syllabus was written (Appendix V) and samples showing various production techniques were prepared. The aim of the course is to show a number of alternative methods of assembling garments, and from this, participants will be able to choose the most suitable method to suit their own production/quality/cost.

Twenty nominations were received for the first course, scheduled 24-25 March, 1981, of which eleven were selected. Although in advertising the course it was specified that "suitable personnel must be Production Managers/Supervisors with at least 5 years experience in the operation of sewing machines", this pre-requisite was difficult to enforce. Therefore, time was spent with a few participants who had to be shown the elementary basics, such as how to operate the machine.

To avoid this in future two programmes could be offered
a) A two day programme for experienced personnel b) A five day programme for inexperienced personnel.

Evaluation of Course by Participants in %

	Very Good	Good	Satisfactory	Unsatisfactory
General impression	29	71	-	-
Coverage of Subjects	29	29	29	11
General Arrangement	57	29	14	-
Lectures	36	14	-	-
Aids	71	29	-	-
Practicals	29	71	-	-
	Too long	Slightly long	About right	Too short
Duration of course	-	-	29	57

In the evaluation of the course by participants there was positive feedback on the content and presentation of the course. Under 'Coverage of Subjects' the same people who answered 'satisfactory' and 'unsatisfactory', also indicated that the 'Duration of Course' was too short. There were the unexperienced personnel who would need five days training.

Batch II of this programme was disappointing, as of 9 nominations, 7 agreed to come 6-7 April, 1981. Of these only 3 attended, due to business commitments.

The decision to run the course with such a small number was because of expert's limited time, and also the extra experience it would give SITRA staff Mr. Venkatapathy and Mrs. Vijayalakshmi, counterparts in Garment Making.

E. Garment Making Section

The extension at SITRA to be used for the Garment Making Section is still under construction, and estimated time of completion is May 1982. The area allocated is 800 sq. feet with overhead power outlets for twelve sewing machine (Plan - Appendix VI) and cutting machines.

F. Pattern Library and Information Services

1. PATTERN LIBRARY

It was decided to develop a pattern library at SITRA, as a reference and service centre for industry. Initially, to have a complete set of basic shaped block patterns for men's, ladies, and children's, woven and knitted under and outerwear garments. Ultimately, from these to develop a range of fashion garments combining newly developed fabrics with fashion trends.

From observation and consultation during the term, it was found that the greater percentage of local manufacturers have little knowledge of pattern shape, design, fashion trends or fabric potential. Several fabrics traditionally used to manufacture underwear had outerwear (T-shirt) potential. It has been recognized in developed countries that design (pattern shapes) of knitted outerwear is limited, and new fabrics are developed as an alternative. New textures, and mixing different textures together gives many possibilities.

The pattern Library at SITRA, as well as being a reference centre for pattern shape and size, could show manufactures fabric potential and different production methods.

Basic patterns have been made for men's, ladies and children's wear, and a reference and filing system has been organized.

2. DESIGN AND FASHION LIBRARY

Periodical magazines with design, colour and fabric forecasts and trends, in men's, ladies, and children's wear, are needed to keep abreast of latest overseas fashion trends.

II. RECOMMENDATIONS

A. Equipment

It is recommended that the following equipment should be purchased:

<u>Machine Type</u>	<u>Estimated Cost</u> (US \$)
a) Collarette - 2 needle stitch type 602 with folder for attaching bands	.. 2,200
b) 2 Needle - 4 thread overlock - stitch type 512	.. 1,500
c) Electric Steam Iron Unit Auto-boiler, electrically heated ironing table	.. 1,700
d) Transfer Printing/Fusing press Bonding area 76 x 61 cm (30' x 24') Heat control/timer unit	.. 1,900
c) L & M Sewability Tester Measures force of penetration of sewing needles	.. 1,000

B. Internal Training

1. It is recommended that Mr.Venkatapathy should spend a period of one month in the garment making industry, where he should experience the practical aspects of garment making.
2. It is recommended that Mr.Venkatapathy should attend a Mechanic's Training Course, available at Rimoldi in Italy, in order to learn maintenance and repair of sewing machines.
3. It is recommended that Mrs. Vijayalakshmi should spend the period of one month in the garment making industry, where she should experience the practical aspects of garment making.
4. It is recommended that Mrs. Vijayalakshmi should spend the period of one month in the garment making industry, where she should work with a pattern maker, and have practical experience in pattern making.

C. Training Programmes

1. It is recommended that the training programmes on Pattern Making and Grading, and Garment Assembly Techniques be run by SITRA staff every 3 or 4 months, or alternatively, as often as required by industry.

2. It is recommended that training programmes on

- a. Production Planning
- b. Machine and Stitch Type Selection
- c. Brief Making
- d. Quality control

should be developed and run by SITRA Staff.

3. In view of business commitments by participants, it is recommended that alternative times and venue should be considered for some future programmes. For instance, evening classes in Tirupur, twice weekly, 3 hours per evening, over X number of weeks.

D. Pattern Library and Information Services

1. PATTERN LIBRARY

It is recommended that the Pattern Library should be continually developed and expanded by appropriate SITRA staff as a fashion and pattern reference centre.

2. DESIGN AND FASHION LIBRARY

It is recommended that a range of periodical magazines be purchased to cover fashion and fabric trends and forecasts in the following areas:

- a) Men's wear
- b) Ladies wear
- c) Children's wear
- d) Knits
- e) Leisure wear (Appendix VII)

E. Research Projects

It is recommended that the following research projects should be implemented by the appropriate staff at SITRA (As outlined in M.S.Burnip's Technical Report 1980).

1. Anthropological pilot study on relationship between age group/sex/size/region and the sizing standards used by hosiery and outerwear manufacturers, in order to set National and/or Regional Standards for India.
2. An assessment of sewing threads, including availability, product range, thread properties and performance in seams.
3. A study of interlinings suitable for knit and woven fabrics, including availability, product range, and performance before and after washing.
4. A study of machine needles, including availability, product range and performance in seams.
5. A study of seam strengths of typical seams produced in industry, and a comparison of their efficiency in locally produced knitted fabrics.
6. Determination of sizes offered in (say) **underwear** and the relationship between sizes offered and dimensions found before and after washing.
7. Determination of the variation in sizes of normally the same (labelled) size.
8. The development of internationally acceptable standards of labelling.

APPENDIX I

Job Description

UNITED NATIONS

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO 11 September 1980

PROJECT IN THE REPUBLIC OF INDIA

JOB DESCRIPTION

DP/IND/76/023/11-03/31.7.B

Post title Clothing Technologist

Duration Six months

Date required October 1981

Duty station Coimbatore

Purpose of project The project aims to strengthen and develop the capacity of the South India Textile Research Association (SITRA) to undertake research, provide specialist advisory services and to conduct courses for the benefit of the spinning, knitting, dyeing and making-up mills and factories of South India.

Duties The expert will work in conjunction with the Director and Project leader at SITRA and will be expected to:

- (i) survey garment making from knitted fabric, especially in South India and familiarize himself with local and national practices and resources for garment manufacture;
- (ii) advise on the selection and organization of making-up equipment at SITRA;
- (iii) advise on a continuing research programme in making-up, including the development of equipment and instrumentation;

....//..

Applications and communications regarding this Job Description should be sent to: Project Personnel Recruitment Section, Industrial Operations Division, UNIDO, VIENNA INTERNATIONAL CENTRE, P.O. Box 300, Vienna, Austria.

- (iv) advise on the development of internal training programmes in making-up for SITRA staff;
- (v) assist in the development of training programmes for the hosiery making-up industry;
- (vi) advise SITRA staff on the operation of technical service functions to industry in factory organization and quality control.

The expert will also be expected to prepare a final report setting out the findings of his mission and his recommendations to the Government.

Qualifications	A degree, diploma or professional qualification in clothing technology or the manufacture of knitwear and knitted goods (circular).
Experience	Extensive experience in the making-up of knitted underwear and outerwear garments from cotton and cotton blends, especially in small scale production units.
Language	English
Background Information	During the first phase of this project the UNDP/ UNIDO assistance concentrated up on the improvement in yarn quality, training in knitting technology and the provision of technical services to the knitting industry. The present phase aims to build upon the achievements of the first phase and to develop further the expertise of SITRA staff in relation to the needs of the knitting, dyeing and finishing and <u>making-up</u> industries. It will also extend appropriate research and development activities in these areas related to the needs of the hosiery and related industries both short term and longer term.

It will also institute technical liaison and training courses in these areas of industrial activities.

In addition to the duties performed by the expert in making-up, other UNIDO experts in knitting, dyeing and finishing and training for the textile and garment industries as well as the services of an overall project consultant will have been or will be, made available to this project.

APPENDIX II

Firms Visited

12-11-81	Mohan Knitting Co., Tirupur	Banians, Shirts	
	T.M.Knittings, Tirupur	Banians, Briefs Shirts	
	Panama Hosieries, Tirupur	Shirts Frocks, Tops	Export
	Leela Hosiery Mills Tirupur	Banians Shirts T-shirts	
13-11-81	Exotic, Tirupur	Shirts, T-shirts	
	Ashok International Tirupur	T-shirts, Sweaters, Shirts	Export
	Crystal Garments, Tirupur	Banians, Briefs	
20-11-81	Tantex, Thanjavur	Banians, Briefs, T-shirts	
12-12-81	Dharanendra & Co., Tirupur	Banians, Briefs	
	Bharathi Knitting Co., Tirupur	T-shirts Ladies knitted tops	Export
	Khader Knitting Co., Tirupur	Banians, T-shirts Briefs, Children's wear	Export
	Miller Hosieries, Tirupur	Banians, Briefs	

28-1-82	Lalitha Dress Mfg. Co., Bangalore	Industrial clothing, Shirts.	Export
	Gakoldos Exports, Bangalore	Ladies outerwear, Ski clothes, Men's shirts	Export to 17 countries
29-1-82	Madura Coats, Bangalore	Shirts, Jackets, Trousers	Export
	Ellis Fashion Exports, Bangalore	Ladies outerwear	Export
1-2-82	IVY International, Madras.	Ladies outerwear	Export
	Unimax, Madras.	Men's shirts	Export

APPENDIX III

Equipment - Garment Making

Previously Purchased:

- a) Hoffman Pressing Table
- b) Indian-3-thread overlock machine
- c) Manual operation - lockstitch machine

Inputs During November '81 - April '82:

- a) 2-needle overlock machine (UNDP)
- b) Flat lock machine (UNDP)
- c) Chainstitch machine (UNDP)
- d) Rotary hand fabric cutter (UNDP)
- e) Reciprocating fabric hand cutter (UNDP)
- f) 6 Nos. Industrial lockstitch machines (SITRA)

APPENDIX IV

SYLLABUS

TRAINING PROGRAMME ON PATTERN MAKING AND GRADING

I. Introduction to Pattern Making

- Need to understand figures and shape
- Interpreting design
- Balance, proportions
- Relationship to fashion trends
- Understanding of production methods and machinery available.
- Terminology
- Equipment

II. Basic Fit

- Shape of body
- Different basic fits
 - a) Woven
 - b) Knitted
- Measuring, and relating to pattern

III. Skirts

- A-line
- Semi-flare
- 4 gore
- 6 gore
- Circular

IV. Yokes

- Saddle yoke
- Shaped yoke

V. Sleeves

- Shirt
- Gathered to Cuff
- Bishop
- Gathered Head
- Puff
- Short with Cuff
- Flared

VI. Collars

- 2 way
- Variation of 2 way
- Stand
- Shirt
- Peter Pan

VII. Raglan and Dolman Sleeves

- Basic draft of raglan from set-in-sleeve block
- Dolman draft and variations

VIII. Openings, Facings, and Tab Fronts

- Size of button stand
- Size and shape of facings
- Tab Front and Variations

IX. Pockets

- Patch
- Fob
- Slide
- Welt
- Side
- Jetted

X. Knits

- Variation of stretch in fabric
- Pattern shapes - raglan, set-in-sleeve
- Tight or loose fit
- Styling

XI. Transposition of Darts

- Changing dart positions
- To gathering

XII. Basic Grading

- Bodices
- Sleeves
- Slacks
- Skirts

XIII. Patterns from Garments

- Tracing shape
- Estimating gathering or tucks

XIV. Necklines

- Basic shapes
- Crossover
- Cowls

XV. Patterns from Specifications

- Size specifications
- Make specifications

XVI. Grading of Raglan and Dolman Bodices

- Raglan, Knit
- Raglan, Woven
- Dolman

XVII. Stripes and Checks

- Suitability of pattern shapes
- Straight grain or bias
- Matching of stripes and checks

XVIII. Collars

- Shawl
- All-in-one shirt and neckstand
- Style

XIX. Pleats

- Different types
- Inverted in skirt

APPENDIX V

SYLLABUS

TRAINING PROGRAMME ON GARMENT ASSEMBLY TECHNIQUES

- Aim** - To teach by demonstration and lecture, a number of alternative methods of assembling garments, thereby giving participants a knowledge of labour/quality factors.
- Objective** - That participants should be able to assemble by two or more methods, component parts of a garment; and from this should have the knowledge to choose the most suitable method to suit their own production/quality/cost.
- Pre Requisite** - Production Manager/Supervisor with at least 5 years experience in the operation of sewing machines. Knowledge of English or Tamil.
- Content** - I. INTRODUCTION
- a) Factors Affecting Appearance
 - Design
 - Fabric
 - Pattern Shape
 - Interlining
 - Stitching
 - Pressing
 - b) Seams
 - Seam types
 - Stitch density
 - Needle size and type
 - Thread size and type
 - Tensions
- II. SLEEVE OPENINGS
- 4 methods

III. CUFFS

- attached to long sleeve - 4 methods
- short sleeves - 3 methods

IV. BANDS

- 3 methods

V. TAB FRONTS

- Without neck facing - 2 methods
- With neck facing
- Concealed placket
- Fly fronts - 2 methods

VI. COLLARS

- without neckband - 5 methods
- with neckband - 2 methods
- shawl collar - 2 methods

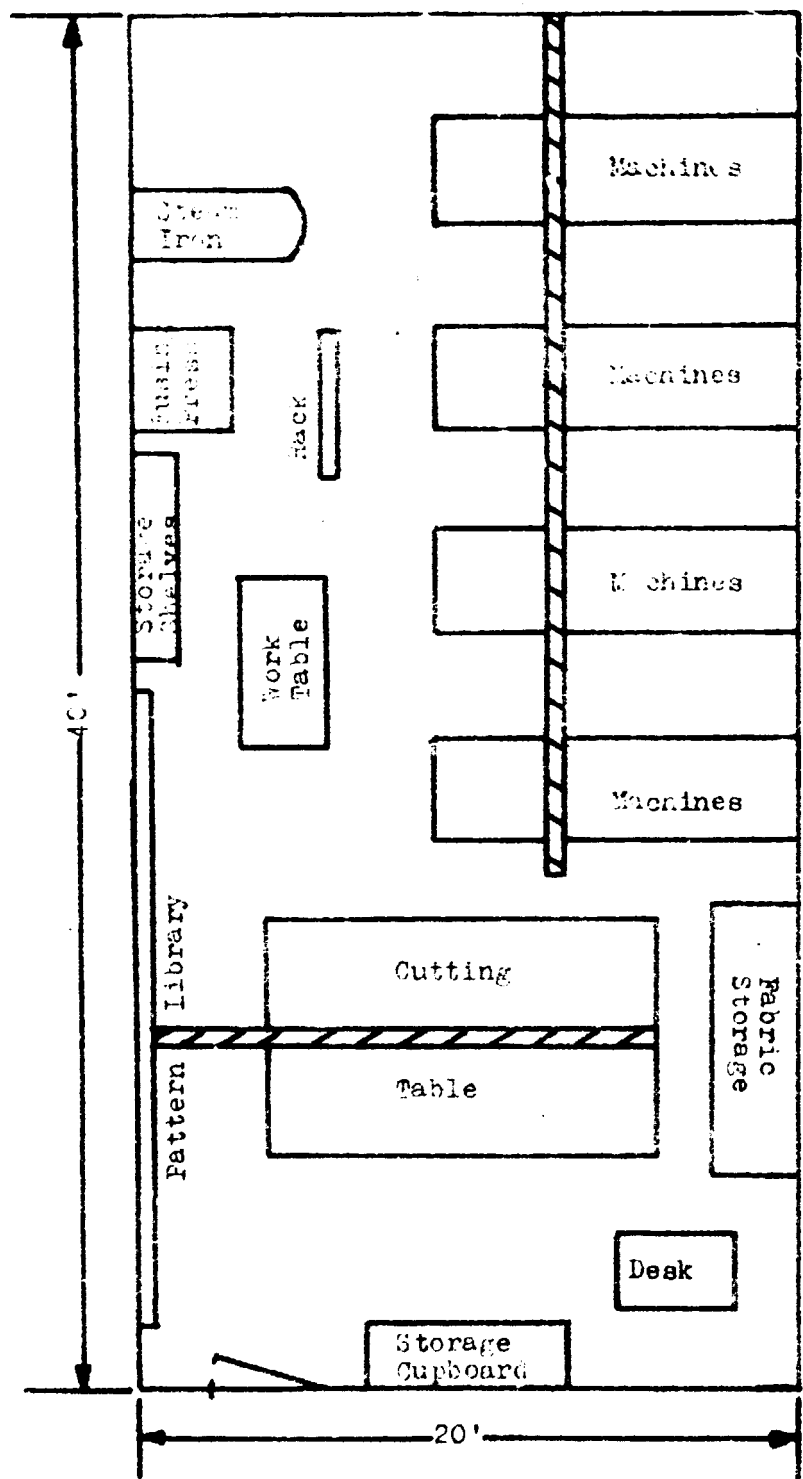
VII. KNITS

- Bands
- Cuffs
- Binding
- Assembly methods
- Different neck finishes

VIII. BRIEFS

- Assembly methods of different styles
- Machines used
- Elastic

PLAN
Pattern Room Section



Scale : 1" = 5 Feet

= Buzz Bar with Power Outlets for Sewing and Cutting Machines.

APPENDIX VII

Fashion Periodicals

1. KNITWEAR

- a) KNIT DIRECTIONS - Quarterly. Articles on style and design trends, new products and knit fabrics.

Publisher: Geer Publishing Co., Inc.
One Union Square,
New York, New York 10003,
United States of America.

- b) BRITISH KNITTING INDUSTRY
(Formerly Hosiery Times)
Monthly. World-wide technological and economic information on trends, design, markets, new equipment, etc. Edited by the National Hosiery Manufacturers' Association.

Publisher: Textile Mercury Ltd.,
Mercury House, Action Square,
Salford, Manchester 5, England.

2. MEN'S WEAR

- a) CAMICERIA E ABBIGLIAMENTO MASCHILE (Shirts and clothing for men) Monthly. Text in Italian; summaries in English and German.

Publisher: Fashion's Press s.r.l.
Via Savona 69/A
20144 Milan, Italy.

3. SPORTSWEAR - LEISURE WEAR

FREIZEIT MODE

Quarterly. In English, French and German. International trade magazine providing information on style and design trends in sports and leisure wear. Includes trade literature reviews, abstracts, statistics.

Publisher: Meisenback KG,
Hainstrasse 18,
8600 Bamberg 2, FRG.

4. LADIES WEAR

a) Vogue (British)

Publisher: Periodicals Division,
Blackwells,
P.O.Box 40,
Bythe Bridge Street,
Oxford OX1 2 EU, England.

b) Design Directions

5. CHILDRENS

a) JARDINS D'ENFANTS

17 times per year. Articles covering design and style trends for children's clothing for ages 2 to 18.

Publisher: Editions Eclat de Paris,
193, Rue de l'Universite
75 PARIS 8^e
France.

b) CHILD WEAR

Quarterly. In Chinese, English and Spanish. Articles on production, design and commercial aspects of the children's apparel industry.

Publisher: Japan Publications Trading Co. (USA), Inc.
1225 Howard Street,
San Francisco, California 94103,
United States of America.

