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THE CHINA GARMENT TECHNOLOGY DEVELOPMENT CENTRE

DP/CPR/85/055/11-01

CHINA

Technical report: Second visit of the
Chief Technical Adviser*

Prepared for the Government of the People's Republic of China
by the United Nations Industrial Development Organization,
acting as executing agency for the United Nations Development Programme

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Vienna

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TABLE OF CONTENTS

PAGE NUMBER

1	ABBREVIATIONS
2	I INTRODUCTION
3	II RECOMMENDATIONS
4	III STUDY TOURS AND FELLOWSHIPS
4	A. STUDY TOURS
4	B. FELLOWSHIPS
5	IV EQUIPMENT
6	V BUILDINGS
7	VI EXPERTS/SUBCONTRACT
8	VII CONCLUSIONS

APPENDICES

1. LIST OF PEOPLE
2. NEW STAFFING LEVELS
3. EQUIPMENT
4. ACTIVITIES PLAN - MAY TO SEPTEMBER 1988

ABBREVIATIONS

TGIDC	Textile Garment Technology Development Centre
UK	United Kingdom
FRG	Federal republic of Germany
PESR	Pilot/Experimental Sewing Room
MSTIU	Marketing Service and Technical Information Unit
CAD/CAM	Computer Aided Design/Computer Aided Management
PAC	Project Appraisal Committee
PPER	Project Performance Evaluation Report
TPR	Tri-partite Review
MTI	Ministry of Textile Industry
CTA	Chief Technical Adviser

Exchange rates:

During the period of this mission, 16 April - 3 May 1988, the following exchange rate prevailed:-

US \$1 = RMB¥ 3.71

I INTRODUCTION

The mission began on 16 April 1988 in Beijing, and lasted for two weeks. The period from 19 April to 28 April was spent in Hangzhou.

The objectives of the mission were to:-

- review progress against the recommendations made in the CTA report of 9 October 1987
- review equipment requirements
- discuss the request for changes to the technology sub-contract
- assist in the final selection of candidates for Fellowships
- assist in the preparation of the Project Progress Evaluation Report (PPER)
- give short lectures on productivity
- review work activities.

All objectives were met, and the outcome of the mission should be regarded as successful.

The problems indicated in my last report (October 1987) have now been overcome, and there are now no obstacles to implementation of all activities on time, or close to the indicated time.

Some activities may be slightly delayed, but I see no reason to amend the Project Document Activities List at this stage. The Tri-partite Review Meeting takes place in a few months, and any adjustments can be made at that time when a more complete picture will be seen.

Due to changes in control of the industry, the need for a Pilot Sewing Room capable of carrying out production work on TGIDC designed garments has disappeared, and the equipment requirement therefore has also diminished. A new list of equipment is given at Appendix 3.

Because of slight changes, it is inevitable that an adjustment of the Project Budget becomes necessary.

A detailed Work Plan has still not been prepared, but a simple Activities Plan (May to September) has been agreed with the Project Management, and this is attached as Appendix 2.

The temporary accommodation now occupied by the Centre is quite adequate. However the general lack of space means that it would probably be unwise to recruit staff up to the original staffing levels. Slightly lower levels should be accepted until the new building has been completed. In the case of the Pilot Sewing Room, the need for large numbers of staff has disappeared as with the equipment requirements. New staffing levels are at Appendix 2. The changes in staffing levels also have some effect upon Study Tours.

II RECOMMENDATIONS

1. All equipment should be ordered immediately in accordance with the new equipment lists at Appendix 3.
2. The stop watches should be given the utmost priority as they are needed by 4 July for the Work Study Officers Course.
3. An additional car should be purchased as the present transport arrangements will be overtaxed when all staff become operational.
4. The Tri-partite Review meeting should take place at the end of September or beginning of October 1988.

III STUDY TOURS AND FELLOWSHIPS

A. STUDY TOURS

Study Tour A was completed on schedule, and the report of the personnel involved is in preparation.

Due to the number of staff available at the present time, the Project Management have requested that Study Tour B should be combined with Study Tour C.

Study Tour C, for 6 persons, should take place in 1989.

B. FELLOWSHIPS

There are no changes envisaged in the planned Fellowship Programmes.

The nominees for the first five programmes have been selected and the documentation has been forwarded to Vienna for processing.

Fellowship Programme V, (Marketing Service and Technical Information Unit) - The list of countries suggested includes Singapore, but as there are no diplomatic links between PRC and Singapore, visits to Singapore should be excluded.

It has also been requested that Fellowships V and X should be with one main host organisation with short visits to other organisations.

Four members of staff have been sent to Japan for two years training and work experience. This is at Government expense and is additional to any Study Tours or Fellowships planned into the Project Document.

IV EQUIPMENT

Due to the fact that it is considered that the full size Pilot/Sewing Room, with full production capabilities, is not now required, a reduction in the range of equipment is necessary. The full range of sewing equipment, listed in the Project Document under Government Inputs, should now be reduced to the equipment that has already been purchased.

The CAM part of the CAD/CAM System originally recommended is also now considered to be too expensive a luxury to provide, as it would never operate to its full potential.

With the savings on the CAM equipment, it is recommended that the CAD equipment should be improved, and that certain additional items of computerised sewing equipment should be provided.

There were some items listed in my previous report for possible inclusion into a final equipment list. With the savings outlined above, this would now be possible.

Certain additional items of equipment (air conditioners, typewriters and an additional vehicle) were discussed by the Project Management and myself, but during my discussions in Beijing with the SIDFA, Programme Officer and Government Representatives, it was pointed out that these items quite clearly fell within the parameters defined in Working Paper No.9 (WP9) and should be provided from Government Funds.

The revised equipment list is given at Appendix 3. One item of great urgency is the provision of 20 Decimal stop watches of the "Flyback" type. These will be needed by 4 July for use on the Work Study Officer Course.

V BUILDINGS

The building plan is still running well behind the original schedule; indeed further slippage is expected, however, the Centre is now housed (from 17 April 1988) in temporary accommodation rented from Hangzhou No.2 Woollen Factory.

This temporary accommodation now houses the Design/Product Development Studio, Sewing Technology Department, Marketing Service and Technical Information Unit, and Administration Offices. The Testing Laboratory is still housed at the old premises at Chang Ming Lane, and this will still be used as the postal address.

The new accommodation is quite satisfactory. There is enough space to house the necessary facilities, all on the fourth floor of the Administrative Building of the Woollen Mill. Teaching Rooms are available on the 5th floor. The Centre staff are busy decorating and refurbishing and within the short period that I was there, the Centre was beginning to take some recognisable form.

The temporary accommodation no longer presents any obstacle to the purchase of equipment, and the full range of activities can be implemented as planned.

The new building is still unstarted. The site has not yet been cleared of the old housing along the northern and eastern sides. This housing, by my rough estimates, is occupied by between 150 and 200 families. It would appear that the delay in site clearance is because the new accommodation for these displaced families is not yet complete. I was assured that the electrical supplies to this accommodation is being installed now, and that the families would be relocated in June, when demolition will commence. This puts the schedule given in October last year back by at least six months, and the new target date for completion of the TGTDC is now October 1990.

VI EXPERTS/SUB CONTRACT

The sub-contract has been awarded to Fielden House Productivity Centre, for the provision of 19 man-months of consultancy/technology input.

Before my visit to China, there had been some meetings in Beijing, where suggestions were made that the sub-contract be reduced, and the individual inputs should be changed.

As the contract had already been awarded, the man-time could not be changed, and after discussions with the project management the individual inputs were adjusted slightly. This presents no great problem to Fielden House.

The sub-contract will now be as follows:-

1. Production Engineer - 7 m.m. commencing 6 June 1988.
This assignment will be made up of two three month visits and one visit of one month.
2. Garment Management Expert - 5 m.m.
There is now no need for this expert to supervise the setting up of the Pilot Plant/Sewing Room, so his activity has changed to a Training and Advisory role. The work of this expert should commence end of February 1989.
3. Quality Control - 2 m.m. No change - 2nd half 1989
4. Training Expert - 2 m.m. No change
5. Garment Stylist - 2 m.m.
This is using up part of the unspecified time, and would be scheduled for late 1989 or early 1990.
6. Unspecified time - 1 m.m.

The timings for the Production Engineering Expert have been reversed from those outlined in my last report. This has been done in order to accommodate the Christmas and Spring Festival Holidays. The work envisaged by Mr Moll and myself has not been affected, and indeed, the fact that the expert will be on site for three months in his first visit, allows a full Work Study Officer training course to be run as well as the work to be carried out in the three factories.

VII CONCLUSIONS

As mentioned in the last report, the needs of the project have changed slightly from the original concept. These changes were outlined in the last report.

The recommendations in my last report have been largely implemented and I can now see no reason why the project should not start to progress at a steady rate.

Liaison work is taking place with the industry, and it would appear that industry is eagerly awaiting any assistance that can be given by the TGIDC.

The building of the new Centre should remain as a priority, and not be downgraded just because suitable temporary accommodation has been found.

The project Progress Evaluation Report was drafted during my visit, and left with the Project Management to complete and submit to Beijing. This report caused a certain amount of local concern in Hangzhou, as I deemed it necessary to state that some of the outputs were not satisfactory. The project management were worried that statements of "unsatisfactory" would incur displeasure from Beijing and Vienna. I must emphasise that the outputs identified as unsatisfactory are not as a result of actions or inactions by the Project Management, but rather a combination of many factors which have delayed implementation of some parts of the project.

My thanks go to all those people whom I met during this mission. The enthusiasm shown by all involved will ensure a large measure of success.

A full list of names is given at Appendix 1.

LIST OF PEOPLE MET DURING MISSION

BELJING

Manfred Kulesa	Resident Representative, UNDP
Kenneth S Stephens	SIDFA, UNIDO
Caterina Bernadelli	Programme Officer, UNIDO
Chen Baoxin	Director, Department of Foreign Affairs MTI
Zhu Xing	Department of Foreign Affairs, MTI
Huang Zhao Pei	Department of Foreign Affairs, MTI
Xu Jixin	Scientific & Technical Department, MTI
Yao Shea Hong	China International Centre for Economic & Technical Exchanges, Ministry of Foreign Economic Relations & Trade

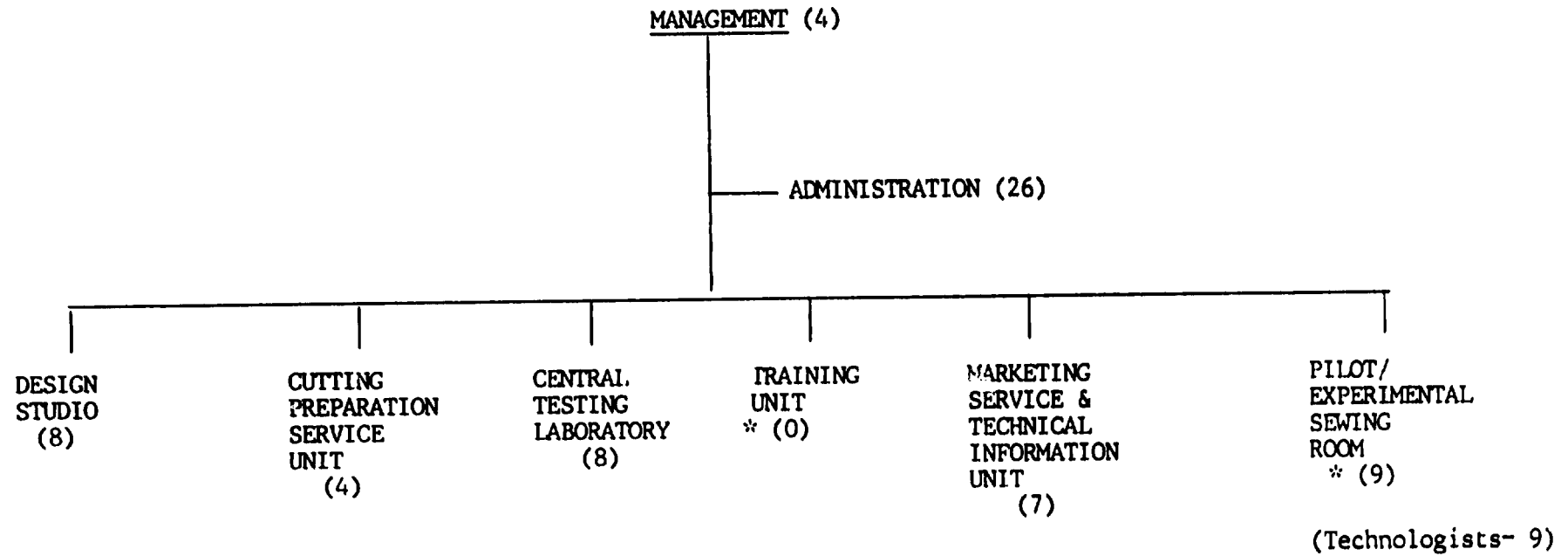
HANGZHOU

Pan Fang Ping	Director, CTGIDC
Shen Yan	National Project Director, CTGIDC
Cheng Xiao Ming	Assistant Director, CTGIDC
Mdm Zhou	Assistant Director, CTGIDC
Dai Da-Ming	Director Light Industry Department, Zhejiang Province
Zhao Wan Xing	Deputy Director, Light Industry Department, Zhejiang Province
Gong Maosong	Director, Foreign Economic Relations & Trade Bureau, Zhejiang Province
Zhang Enyuan	Deputy Director, Foreign Economic Relations & Trade Bureau, Zhejiang Province

FENGHUA

Tu Heng Wei	Vice Magistrate, People's Government of Fenghua County
Zhu Rui Hua	Zhejiang Province, Fenghua County Scientific & Technical Commission
Yuan Xing Peng	Deputy Factory Director
Zhang Xin E	Deputy Factory Director
Zhou Jian Pin	Factory Manager
Sheng Juing Hai	Factory Manager
Si Tu Hong Xun	Factory General Manager

GARMENT TECHNOLOGY DEVELOPMENT CENTRE



The figures indicate the numbers currently employed.

* These figures will be increased when necessary.

EQUIPMENT

A. GENERAL INFORMATION

In order for the GTDC to efficiently carry out its various functions, it must be adequately equipped. The Implementation Agency have already drawn up a list of intended purchases of Sewing, Cutting and Pressing equipment. This list was produced from advice given by representatives from industry and from equipment manufacturers. It covers a wide range of sewing equipment, and even though some equipment will not be in use on a regular basis, it will be required for demonstration and research purposes. This list has been considerably reduced.

In order to equip the GTDC fully, the UNDP input should provide items of appropriate high technology equipment, particularly in the Design and Cutting Preparation Units. In addition, some peripheral and ancillary items should be provided in order to make a complete, efficient model of modern Design and Cutting capability.

Certain items of computerised sewing equipment have already been purchased. It is intended that more should be obtained.

A suggested list of UNDP purchased equipment with general specifications is given in Section B.

B. EQUIPMENT TO BE PURCHASED FROM UNDP INPUT

1. Computer-aided-design, pattern and marker-making system

The equipment should incorporate the following features:-

- a. Electronic Digitizer Station to input basic patterns for automatic grading, create grade files, modify grades and alter basic pattern prices.
- b. Colour Graphics Display Station for design, garment modelling, pattern making, alternations, grading and automatic marker making. Capable of generating hard copy of style analysis, cut order planning and management report information.
- c. High speed plotter for drawing individual patterns, graded sets, or full cutting markers - full size or in miniature.
- d. Data base with network controller for controlling several work stations.
- e. High Resolution Colour Graphics Display Station for design, sketching, modelling, pattern making, and automatic marker making.
- f. Laser Pattern Cutting System for cutting up to 1.5mm thick pattern card.

NB This equipment should have as part of the overall system, any necessary air conditioning and equipment to ensure Uninterrupted Power Supply (UPS) for approximately 2kw)

Target Price \$350,000

2. Mechanically counterbalanced cutting machine complete with carriage, traversing counterbalancing arm and 8 inch straight knife.

Target Price \$5,000

3. Electronically Programmable Lodestitch Profiling and Embroidery Machine

- a. The equipment should be capable of being programmed to:-

(i) Produce profile stitching around a wide range of small garment parts such as pocket flaps, collars, epaulettes etc.

(ii) Produce decorative stitching on a wide range of items.

(iii) Attach decorative loops, flaps, patches etc. to larger garment parts.

- b. The pattern area should not be less than 600 x 250 millimetres.

- c. Sewing speeds should be in the range of 800 s.p.m. to 2,000 s.p.m.

Target Price \$39,000

4. Electronically Programmable Double Chain Stitch Sleeve Easing Machine

The machine should be capable of storing a wide range of size information, fabric types etc. and be simple to operate, preferably by one-touch operation. Maximum sewing speed 4,000 s.p.m.

Target Price \$18,000

5. 2 x General Purpose Finishing Boards complete with Gravity Feed Steam Irons

Target Price \$1,000 each
Total: \$2,000

6. Bartack Machine

Target Price \$2,000

7. Buttonhole Sewing Machine

Target Price \$2,100

8. Buttonsew Machine

Target Price \$1,100

9. End-of-Lay Cloth Cutter

Target Price \$ 600

10. Cloth Drilling Machine

Target Price \$1,200

8. Arrange short (one day) Seminars to be given by Production Engineer expert on Productivity Improvements.
9. Set up the Training Unit.
10. Prepare for Tri-partite Review.

ACTIVITIES PLAN - MAY TO SEPTEMBER

1. Insert letter into Bulletin to Hangzhou factories, advertising the Production Engineering work. Immediately
2. Final selection of 3 factories who are willing to co-operate by 20 May
3. Have staff collect factory performance information by 3 June
4. Submit Project Progress Evaluation Report Mid June
5. Expert arrives Week commencing 6 June
6. Assign staff to work with expert.
7. Expert commences assessing needs of factories. Complete by 1 July
8. Commence training course for Production Engineering on 4 July
9. Complete theoretical (classroom) input by 29 July
10. Students start short projects in factories completed by 12 August
11. Students return to classroom for report writing and evaluation of projects and to receive briefings for major assignments completed by 26 August
12. Students commence main assignments from 29 August
13. Expert goes on home leave for 3 weeks.
14. Expert returns from leave Week commencing 19 September
15. Expert supervises work in 3 factories etc.

IN ADDITION

1. Clearance of building site planned to start in June
2. Fashion show September
3. Garment products competition September
4. Continue improving temporary building.
5. Continue improving liaisons with Zhejiang factories.
6. Continue developing new product lines/ranges.
7. Arrange seminars on Equipment and its uses.

8. Arrange short (one day) Seminars to be given by Production Engineer expert on Productivity Improvements.
9. Set up the Training Unit.
10. Prepare for Tri-partite Review.