



TOGETHER
for a sustainable future

OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.



TOGETHER
for a sustainable future

DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

RESTRICTED

16871

DP/ID/SER.A/1025
13 June 1988
English

ESTABLISHMENT OF A MANAGEMENT SERVICES DIVISION
AT THE TEXTILE TRAINING AND SERVICE CENTRE

DP/SRL/87/012/11-01

SRI LANKA

Technical report: Findings and recommendations during the first
year of project's activities*

Prepared for the Government of the Democratic Socialist Republic of Sri Lanka
by the United Nations Industrial Development Organization,
acting as executing agency for the United Nations Development Programme

Based on the work of Lawrence J. Gibson, senior textile adviser

Backstopping officer: A. Eräneva, Agro-based Industries Branch

United Nations Industrial Development Organization
Vienna

* This document has been reproduced without formal editing.

<u>Contents</u>	<u>Page</u>
<u>Summary Conclusions & Recommendations</u>	2
Description of the Project	3
Scope of this Report	4
Recruitment of Local Staff	5
Preparation of Terms of Reference for Sub Contract	6
Setting up Liaison Advisory Committee	6
Installation of Equipment	8
Commencement of the Sub Contract	10
Introduction of 'Procedures & Methods'	13
Training	15
Annexe I Justification of Equipment Purchases	17
Annexe II TMS Operations	21
Annexe III Recording of Activities	25

Summary

Conclusions

The project is on schedule and progressing satisfactorily: although still hampered by late and slow recruitment of local staff.

Recommendations

1. Internal administration affecting discipline, the proper execution of consultancy assignments, and the recording and monitoring of activities, should be strengthened at T.T.& S.C. immediately.
2. The remuneration of local staff operating on consultancy assignments should be improved by:-
 - a substantial increase in the individual's share of the consultancy fee.
 - an increase in the consultancy fee rates,
 - and an increase in Consultant's D.S.A. payments.
3. T.M.S. should be required by T.T.& S.C.
 - to minimise the number of short visits by consultants;
 - to ensure continuity of an experts' involvement throughout each separate programme;
 - to provide even coverage, i.e. to avoid overlapping programs and gaps between programs.
4. T.T.&S.C. should ensure that T.M.S. fulfill their obligations under the Consultancy contract, including that of providing methodologies, formats, checklists work routines etc.
5. Fellowships & study tours should be allocated strictly according to the requirements of the Management Services Division, without reference to seniority or any other consideration.

I. Project Description

Title : Management Services Division at the Textile Training & Services Centre.

Number: DP/SRL/87/012/A/01/37 Duration: 4 years.

Programme Classification: (05) Industry

Sub-programme: (0510) Industrial Development Support Services .

Primary Function: Institution-building

Secondary Function: Direct Support

Government Implementing Agency: Ministry of Textiles Through the Sri Lanka Textile Training & Services Centre, Colombo.

Executing Agency: United Nations Industrial Development Organization

Estimated Starting date: June 1987

Government Input: Rs. 4,530,000.

UNDP Input: US \$1,064,700

Development Objective

To contribute to the national development through improved performance of the country's textile and garment industry sectors, by the creation of needed infrastructural and supporting services. This has been envisaged in the draft country programme IV, part III 'Stimulating Industrial Growth' paragraph 66.

Immediate Objective

To strengthen the Textile Training and Services Centre's industrial consultancy capability and to broaden the scope of such consultancy beyond the present technical trouble-shooting.

Outputs

The principal output will be an operational Management Services Division (M.S.D.) which will complement the existing Technical Divisions to provide a comprehensive range of professional consultancy services to industry. The M.S.D. will cover: Industrial Engineering, Human Resource Development, Technical Economics & Marketing.

A subsidiary output will be the multi-disciplinary team work transcending the divisional structure of T.T.& S.C., thus loosening its internal rigidities and permitting it to provide an integrated package of training & consultancy services to industry.

Inputs

In the achievement of these outputs, the primary input is the subcontracting of an International Consulting Company to promote, guide, encourage and assist the T.T.& S.C. in the selling, planning, execution and presentation of consultancy projects over a period of three years.

Scope of this report

This report covers the first year of the four year project; the preparatory phase, during which the following activities have been undertaken.

The recruitment of local staff for M.S.D.

The preparation of terms of reference for sub-contract. For a recognised international consulting company to guide, T.T.& S.C. for a period of three years.

The setting up of a Liaison Advisory Committee - to improve contact with industry.

The installation of equipment, computers & software to improve T.T.& S.C. operational effectiveness.

The commencement of the execution of the sub contract.

The introduction of 'procedures & methods'.

Each activity is treated in detail below.

2. The Recruitment of Local Staff

Four posts for local staff were specified:-

- Marketing Specialist
- Training Specialist (Human Resource Development)
- Industrial Engineer
- Industrial Economist

The provision of these four senior staff is part of the Government contribution, and budgetary provision for their recruitment was made a precondition of UNDP assistance. (Prodoc Part II L.P.24): their actual recruitment was to have been completed prior to the commencement of the consulting company's assignment.

The posts in 'Marketing' and 'Human Resorce Development' were filled early in '87. Despite the clarity and force of 'the prior obligation....' statement in the Project Document, the Centre's management claim prior agreement with UNDP/UNIDO that the Economist and the Industrial Engineer would not be recruited until 1988.

The recruitment process was started late- indeed there was no intention of filling the posts of industrial engineer and technical economist before 1988. The first round of recruitment failed to find the right people and although an 'engineer' wzs appointed he tendered his resignation after only two or three days at the Centre, in early February.

Eventually, an Economist was appointed to start 7.3.88. However, he resigned to take up a more lucrative post after only one month.

Comment

The recruitment of local staff for M.S.D. is unsatisfactory because of the intention to delay two of the appointments until 1988: this delay has been aggravated by the Government's misunderstanding of the term "Industrial Engineer" and their resistance that any post so designated must be filled by an engineer qualified in one of the traditional engineering disciplines. The post has now been redesignated "Operation's Management Specialist".

The recruitment process is continuing - interviews of candidates for both remaining positions are to be held on 23.05.'88.*

* Both posts, "Operation's Management Specialist" and "Economist" were filled - subject to official ratification of appointments. 25.5.88 - see page 16.

4. The preparation of the terms of reference for the sub-contract

The terms of reference were used in an international call for offers for the Consulting Company sub contract. The main burden of this project falls upon the subcontractors, a recognised international consulting company with expertise and experience in textiles to guide the development of consultancy services at T.T.&S.C. This contract was awarded to: TEXTILE MANAGEMENT SERVICES INC. (TMS) a subsidiary of Dominion Textile of Montreal Canada. Contract 87/115 signed in Dec. '87; work started in Sri Lanka 16.02.88. and is scheduled to end in Dec. 1990.

The essence of the contract is that T.M.S. will promote and guide the staff of T.T.& S.C. in all aspects of industrial consultancy but not to attempt to substitute the T.T.&S.C. or to work directly as consultants to the Sri Lankan Industry.

5. The formation of a Liaison Advisory Committee

The committee was formed on 26/08/87 and meets every two months under the Chairmanship of the Centre's Director or Deputy Director.

This committee, consisting of representatives of industry at mill manager level and some of the Centre's Divisional heads, advises the Board of Governors at T.T.&S.C. of the industry's view and requirements of the Centre itself. In meetings to date this advice has been prolific and largely concerned with educational and training requirements as distinct from consultancy needs.

Comments

The following comments are prompted by observation of the proceedings and operations of the Liaison Advisory Committee.

The recommendations of the Committee should be put before the Board of Governors in a more organised and forceful manner, for example in the form of carefully prepared formal Board Papers requiring a considered and formal response from the Board.

On the specific topic of training it is evident that the Textile Industry is not satisfied with what is available by way of education and training from the facilities at its disposal. This view is reinforced by comments the Industrial Liaison Committee whose members frequently return to this topic.

The concensus is that industry requires:-

- trained technicians, expert in mechanical and electrical aspects of textile machinery.
- Supervisors and foremen who combine man-management skills with the technical knowledge of the processes which they supervise.
- good trainers for the systematic training of operators.

There appears to be a genuine need for, longer term courses of study on a part-time basis for people already working in industry. Such courses should lead, by stages, to recognised qualifications, combining theoretical with practical knowledge and providing a route for aspirants from the shop floor to qualify as supervisors, foremen and managers, according to their application and abilities.

Although there is a need for smaller numbers of more highly qualified technologists, the Diploma in Textile Industries, awarded by the textile school at the University of Moratuwa is not generally held in high regard by mill managers: it is criticised on the grounds that many diploma holders are lacking in practical experience and unable or unwilling to operate effectively under factory conditions.

The open university has never really got under way and attracts very few students.

All-in-all there is a crying need for an overall review of industry's educational and training needs and for a integrated approach to the problem.

The T.T.&S.C. , as the one organisation with the capability to provide both theoretical and practical training in technical subjects, plus the ability to offer management training and the training of trainers is in a unique and central position which should be fully exploited in any scheme to rationalise textile education and training. To do this would require, a radical reappraisal and reorganisation of the Centre's role in teaching and training, a readiness to offer the longer term courses that the industry apparently wants, and a willingness to hold classes on a regular basis at outstations, or mills.

It is strongly recommended that a comprehensive survey be made of the Textile Industry's current and future needs for education and training: this with a view to expanding the Centre's corporate activity and influence in this field and to the more effective, and rewarding use of its resources and talents.

6. Installation of Equipment

Personal Computers for : In-house control of the Centre's own activities.
: the use of MSD and the consulting company.
: Word processing.

have now been installed.

Similarly, Facsimile Transmission and office copier are installed. The colour computer, called for in the project document, has not been installed because a survey of the likely users in industry and at the Centre revealed that there was no demand for this equipment and no justification for its purchase. (See copy of memo to D.R.R./UNDP September, '87. Annexe 1.

Instead, a quantity of analytical equipment for the Centre's chemical laboratory - operated by the Processing division, has been purchased. Testing, grading and analysis on a fee-earning basis is proving a successful venture in the Centre's physical test section: The Chemical Laboratory was under-equipped to fill a parallel role. good testing and analytic facilities are an essential back-up to consultancy services, particularly in its technical aspects.

A summary of equipment purchases appears overleaf.

DP/SRL/87/012 - Management Services Division T.T. + S.C.

Summary of Equipment Purchases

<u>Purchase Order</u>	<u>Goods</u>	<u>Status</u>	<u>Price US\$</u>
1/87	Office Copier	Delivered	967
2/87	Computers PC's V.D.U.S. Printers Software + SPSs	"	26,230
3/87	Facsimile Transceiver	"	2,720
15-7-C4157	Subscriptions to journals	"	3,090
15-8-I4042	" " "	"	2,660
15-7-C4154	Distance learning packs	"	263
15-8-B0345	Laboratory equipment	Ordered	17,840
15-8-B0359	" "	"	5,216
15-8-B0448	" "	"	345
			<u>59,331</u> =====

7. The execution of the Subcontract

This work was started on 15th Feb. '88. With introduction of the T.M.S. Consultants, to the Ministry, to the Centre, to UNDP/UNIDO and to industry.

A planning meeting on 22nd Feb. allocated T.T.& S.C. staff from M.S.D. and from Technical Divisions to the main topics of the TMS 'menu' of standard programmes. A work schedule and staff assignment for the six months to August, '88 has been drawn up. (Annexe II)

Comment

The major objective of the TMS presence is to foster active, professional, industrial consultancy in both technical and management areas, promoting the multidisciplinary cooperation which is so often necessary in such projects.

The TMS approach includes the essential promotional & sales aspects of industrial consulting as well as the design, execution and presentation of projects, (linked to the concept of "selling on"). The whole scheme is designed to involve T.T.& S.C. staff in the actual work of real projects under the guidance of T.M.S. consultants.

Their programme started with two diagnostic studies: one in a spinning mill and the other in an integrated textile plant. These studies analyse the functions of marketing, management, production and finance, within a particular plant and evaluate the Company's strengths and weaknesses, highlight problem areas and opportunities for improvements. Diagnostic studies are the logical first step, and the classic ploy of consultants who then frequently bid to remedy the faults which the initial survey has uncovered.

From the Centre's point of view this initial effort by the TMS team has been a most auspicious introduction to industrial consultancy. Both studies, now at the draft report stage will provide plentiful opportunities for further work over the next few years, which the centre, supported by TMS, must exploit to the advantage of its revenues and reputation by bringing considerable benefits to its clients.

The TMS scheme for the next three years offers 17 separate, well defined programs which together cover all aspects of industrial consultancy in the textile industry. This 'menu' of programs has been put before the industry and the response so far is summarised in Table 1. Annexe II. These are the results of a mail shot and are most likely to be altered, redefined and precised in the face-to-face discussions which are following up. Nevertheless they do serve to indicate the extent of interest at the beginning of the TMS assignment, outlining the prospects for expanding the Centre's consultancy services. Some hard selling, assisted by appreciative comment as the benefits of the earlier projects are broadcast, or percolate through the trade should ensure the establishment of TT&SC on the consultancy scene.

On the other hand there are some problems to be overcome and some lessons to be learned. The demands of two overlapping projects have stretched the resources of the organisation and of individuals. At the outset of the TMS programme there was a marked reluctance on the part of some senior staff to participate in multidisciplinary consultancy work. The initial concerted resistance has now eroded into a spectrum of different individual responses ranging from flat refusal, through, reluctant acquiescence to active cooperation.

These two diagnostic studies have already served to indicate which members of staff are willing, able and ready to learn about industrial consultancy, and those who are less able or less well motivated for this type of work. Clearly not everyone is equally suited and as the TMS assignment proceeds it may become necessary to reappraise and redefine individual roles within the organisation this to maintain flexibility and ensure fair reward for effort.

Overall, there is a general inability to adhere to agreed work schedules, particularly when working at mills distant from the centre. Staff are unwilling to stay overnight near to the job, preferring long, tiring, and time wasting journeys, and resulting in short working days at the plant. From the viewpoint of the experienced professional consultant accustomed to working intensively (at high rates and proportionate rewards), the current effectiveness of his Sri Lankan counterpart is at present quite low. This factor must be taken into account in future scheduling of TMS inputs, and also kept under review as the project proceeds. The efficiency with which local staff operate will be a useful measure of the progress of the overall project.

It is recommended that every effort be made to actively promote and sell the Centre's consultancy services; not only those programs which constitute the formal part of the TMS contract but also work arising from diagnostic studies, other follow-up projects, and consultancy projects which are generated separately from the TMS effort.

It is recommended that the effectiveness of the man in the field be improved by making it possible and worthwhile to adhere to schedules and to stay overnight when the work programme demands - increasing the intensity and effectiveness of the individual consultant is a prerequisite to charging proper fees.

It is recommended that the man-day rates for consultancy work, and the allowed expenses for travel, accomodation and subsistance be reviewed and increased.

At a meeting of the Board of Governors on 12/05/88 it was agreed that local staff working on consultancy assignments would receive 50% of the consultancy fee charged to the client. (This compares with 25% payable previously).

It was also agreed that the Board would consider increasing the consultancy fee rate in three months time, that is in August, '88.

8. The Introduction of 'Procedures & Methods'

The project document and the consulting company's terms of reference call for....'

"A complete set of methodologies procedures, work routines, reporting formats, guidelines and checklists will be developed to support consulting activities throughout all Divisions. Consultancy methodologies and procedures (Management and technical audits/surveys, problem diagnosis techniques, study design, data gathering techniques, analysis and presentation will be institutionalised")

Comment

The greater part of this work falls within the requirements of the subcontract and it will be an important part of UNIDO's supervision of the project to see that this requirement is fulfilled.

The following is an extract from a recent (9/5/88) message to the TMS president....."

"Thanks for the sample report of a plant technical review by Geatan Raiche: we will welcome each and every hard copy model, standardised format and manual as the project proceeds. We particularly require the transfer of TMS methodology for storage and retrieval of the accumulated information which will be gathered during the project and the system should start now with our first two diagnostics, to avoid an unmanageable logjam of data later."

A start was made to institutionalize the reporting and recording of activities within the centre by the introduction of Visit Reports; and individual monthly Time Sheets for fee earning grades. See 'Procedures and Methods' I. Annexe III.

There appears to be neither the will nor the ability on the part of the management to insist on the systematic and comprehensive recording of activities. In consequence the response from the staff concerned is very poor. After a three-month trial period which consisted only of explanations and exhortations by the Senior Adviser, the scheme went into 'full operation' with a directive from the management, on Jan. 1st '88. January's returns accounted for less than 9% of all the man hours available in that month. There have been no returns for February, March, or April. It is evident that neither the staff, nor the Management are prepared to keep the sort of records that have been proposed and there is apparently no interest on the Government's part in closely monitoring the activities of the Centre and in particular the cost effectiveness of these activities.

Services are charged at very modest rates. The income thus generated is of the order of 12% of the total cost of running the Centre: the major portion of the total is paid by the Treasury.

Those members of the Centre's staff who contribute directly to those revenue-earning activities range from Senior Textile Technologists to Workshop Assistants, numbering some 36 in total: supported by the Directorate, and Administrative, Clerical, Library and Transport sections.

The diagram, Figure 1, Annexe III summarises the activities of the Centre's income-earning grades for the period April through December 1987. (only 'billable' activities are recorded in the Centre's reports)

It is noted that the quarterly progress reports on which Figure 1 has been based contain the following typical comment:-

"The work carried out during this period, both in consultancy and training was very satisfactory". The criteria for 'satisfactory' performance are not defined.

The foregoing observations briefly summarise describe the centre's performance during the period preceding the start of the T.M.S. Consultancy contract.

9. Training

As required by the Tripartite Review fellowships and study-tours should be implemented strictly according to the need of the Management Services Division, regardless of, seniority and/or possible previous fellowships by the same persons. 'On-the-job' training within companies abroad is considered an effective form of training.

The following tentative request was made to TMS on 9th May.

"We would like to explore the possibility of T.M.S. providing specialised training for the four members of M.S.D. Ideally we would like to place each member in turn within your organisation for a period of four months (on average) to be taught, in plant by one of your management specialists in the theory and practice of his particular speciality. Starting, say, in 1989 and extending into '90, the respective trainees will require expert guidance in: Human Resource Development: Marketing: Industrial Engineering: and Management Cost Accounting."

The Summary of Training is overleaf.

Summary of Training

			<u>Man-months</u>
A. <u>Completed</u>			
L.K. Lenaduwa Dep. Director	Study tour. Bremen Conference, and visits to leading textile machine makers in W. Europe.	Feb-March 1988	1
B. <u>Arranged</u>			
N.P. Kumara- singhe. Knitting	Special course in selected aspects of Knitting Technology. Hinkley College. U.K.	Oct. 1988 to March 1989	4 1/2
C. <u>Proposed</u>			
L.K. Lenaduwa	Study tour, Indian Textile Service Organizations. SITRA, BITRA + ATIRA	Jan-Feb 1989	1 1/2

The following courses are for the four members of the Management Services Division. The proposition is that each, in turn will receive in-plant training organized by TMS/Dominion Textile, during which the trainee will be instructed in the theory and practice of his speciality by attachment to a recognized expert operating in the appropriate industrial/commercial environment.

Ranjith Goonatilake	All aspects of Human Resource Development, Selection, Training. Motivation of personnel at all levels.	1989 1st half	4 1/4
Padmasiri Gunewardena	All aspects of Marketing, Product Development + Quality Assurance	1989 2nd half	4 1/4
Industrial Engineer.* Kirthi Rasaputra	All aspects of Industrial Engineering Method + Work Study Labour + Production Standards, Wage + Incentive Schemes.	1990 1st half	4 1/4
Economist/ Accountant.* S. Omar Mowlana	Management Cost Accounting Investment Appraisals Cost/Benefit Analysis	1990 2nd half	4 1/4
			<u>24</u> =====

* Appointed 25.5.88. Appointments pending Ministerial Ratification.

ANNEX I

Justification of Equipment Purchases

25th September 1987

M E M O

TO : Mr M Kahane,
Actg. Resident Representative
UNDP

FROM : L J Gibson
Senior Technical Adviser
UNIDO PROJECT DP/SRL/87/012

CC : Mr A Eraneva
IO/AGRO
UNIDO/Vienna

SUBJECT : Equipment

The equipment requirements of this project are outlined in the Project Document, page 19, as follows :

" Equipment

Ncn-expendable

- Colour matching computer and miscellaneous equipment, such as computer software, a facsimile machine and subscriptions. \$.100,000
- Specifications will be prepared by the Senior Adviser and attached as Annex 3 to this Project Document."

The major single item is a colour-matching computer to be installed at the Centre and capable of providing a service to the whole industry. This was originally envisaged during the previous project DP/SRL/79/054, and is specifically mentioned in Recommendation No. 12 in the Report of the Evaluation Mission February 1986.

" The use of a computer in the textile industry is fast becoming indispensable. Even in less developed countries, textile industry computer systems can play a vital part in the continuous monitoring of the individual performance and

providing analysis of stoppages and breakdowns. The computer is also used for effective fabric design. Computerised integrated management information systems are now common in most advanced mills.

Initially in the context of Sri Lanka, a computerised colour-matching service at the Centre could be a first step in this direction. It is well known that the use of colour-matching computer has given about 15 percent saving in the costs of dye-stuffs used. All dye-stuffs being imported, this service will save substantial foreign exchange to the country. The provision of this and other common user services besides the economic justification would also serve as an entry point for the Centre for the provision of a wider range of services to industry. The establishment of a colour computer in the Centre will assist the industry in evaluating dye-stuffs and the shades quickly and accurately. One such computer can serve all the mills in Sri Lanka.

The Centre should charge a special fee for this service, so that this department can be self-financed. This service may be extended in the future to other industries, which use colour, such as the paint industry. "

A specification and quotation for such a system from a firm of international repute has been received and evaluated. The initial asking price for the central computer with a capacity of upto 12 terminals, is UK£ 65,000. Each terminal situated at a user company would comprise colour-eye micro processor, and modem link to the central machine would require further expenditure by each user of some UK£ 12,000.

In essence, the system requires that the relevant technical data describing the processing facilities and conditions of each user, should be logged into the central machine - that is, some thousands of pieces of information from each participating firm. Each firm must then install the facilities for instrumental colour measurement of samples and the equipment to transfer the coded data of their colour co-ordinates to the central computer which will then issue the requisite dye recipes and 'corrections'.

Enquiries at the Centre itself, at the three major public sector companies with an interest in colouration, and of a selection of private sector processors, elicit no interest at all in a central colour-matching service based at the T.T. & S.C., particularly when both capital investment and usage charges are required.

It should be noted that the processing sector (bleaching, dyeing, printing and finishing) is on the whole, more up-to-date in technology and equipment than the spinning and weaving sectors. Even so, colour matching by computer even in a shared system appears esoteric and unattractive to its leading firms. Most colouration is printing of low grade cotton fabrics for the home market and this does not present a critical colour-matching requirement.

Even if there was an enthusiastic response to the notion of a centralised colour-matching service, the low quality and unreliability of the local telephone links would be a matter of serious concern.

There has been mention of other industries - paint and foodstuffs for example - as potential users of the system, however, the only enthusiast for the system that I have yet encountered - the representative of the selling agent - has not been able to present any evidence of real interest or commitment on the part of firms inside or outside the textile industry.

Under these circumstances, I seriously question the wisdom of going ahead with the original plan to purchase the colour matching computer as described in the Project Document. At best, it would be a speculative venture without justification and the 'service' would require active selling, including the promotion of equipment sales to potential users. At worst, it would be a total waste of money.

Instead of a colour-matching computer, I suggest we consider acquiring non-expendable equipment for this project as follows :

1. Computing capacity to provide for : in-house monitoring and control by recording and analysing records: of staff time, of expenditure on specific assignments (training courses and consultancies), of contacts with clients and general accounting, and to provide routine computing facilities for the Management Services Division and the consulting company via standardised, statistical analyses, spread sheets, graphics, data base and word processing facilities.

Ideally, these requirements could be met by a small number of P.Cs or by a mini-computer with multiple terminals. The possibilities of both are being assessed at the moment, through enquiries and consultations with five local firms and specifications will be submitted as soon as possible after a full evaluation has been made. We will require hardware, software, training and maintenance contracts and I will be requesting local purchase of this equipment after submitting specifications and prices.

2. Facsimile equipment to facilitate communication of the consultancy company with its home office.
3. Some further technical equipment for the Centre's processing laboratory and workroom which appears to be under-equipped for the work involved. This may well include some instrumental colour measurement equipment but nothing on the scale of the colour matching computer originally envisaged. A list of equipment, with likely costs is being prepared.

Clearly, I cannot at this moment submit specifications for purchase of equipment from overseas before the end of this year. It is possible, indeed probable that we will be able to specify in time, our needs for local purchase of computers and facsimile machine, if this method of purchase is acceptable.

ANNEX II

TMS Operations

Table 1

T.M.S. Program	No. of firms who expressed interest.
1. In process quality control	6
2. Control & Re-cycling of Fibre waste	-
3. Job evaluation & Wage rate structure	2
4. Labour & production standards and incentive pay system	5
5. Work Measurement System (WOST)	5
6. Standard cost system, including:- Production & process costing Budgetary control Management Accounting	7
7. Quality Assurance Program	5
8. Preventive Maintenance & Audit Procedures	3
9. Energy conservation, saving	5
10. Water conservation & waste water treatment	1
11. Marketing	4
12. Materials handling	2
13. Dye & chemical formulation	1
14. Vocational training-foremen, managers and trainers	4
15. Trainability testing	-
16. Capital Expenditure Analysis includes:- Cost benefit analysis Feasibility studies for instruments Investment appraisals	2
17. Technical review of textile operation diagnostic study.	1

TMS PROPOSED WORK SCHEDULE MARCH/AUGUST 1988

<u>TOPIC</u>	<u>DATE</u>	<u>THE PERSON(S)</u>	<u>TI + SC Staff</u> <u>COUNTERPARTS</u>
1) How to approach prospective client to "sell" consulting	Week of Feb. 29th	Jean Pierre Plamondon	All consultants.
2) Plant Technological Review (Diagnostic Review)	4 Weeks Starting March 3rd	Denis Marcotte	P.R.D.Gunatilleke D.P.Gunawardena K.Rasaputra
	4 Weeks Starting March 14th	Gaetan Raiche	M.S.J.Fernandc (Spg.) G.McIllicda (Weaving) U.H.Liyanage (Processing) Nisal Fernando (Knitting)
3) Feasibility Study Weaving Plant	3 Weeks Starting April 3rd	D.Marcotte (G.Raiche) (TMS Head Office)	<hr/> L.K.Lenaduwa P.D.R.Gunatilleke D.P.Gunawardena Industrial Engineer Accountant <hr/> P.D.R.Gunatilleke
4) Training Program (Staff Operators)	4 to 8 weeks Starting April/May	Gerard Plante	
Job Evaluation	4 weeks June	Real Gagne	P.D.R.Gunatilleke Industrial Engineer
Trainability Tests	4 weeks May	Andre Laurendeac	P.D.R.Gunatilleke
5) In process Quality Control Control Recycling Waste	4/5 weeks August	G.Raiche	L.Mettananda P.M.Abeyratne
6) Preventive Maintenance Audit Procedures	"	Francis Sarni	M.S.J.Fernandc + Assistants G.McIllicda + Assistants U.H.Liyanage + Assistants Nisal Fernando + Assts.

May 12, 1988

FAXCOM

Mr. Dissanaiké
Textile Training and Service Center
Colombo, Sri Lanka

Dear Mr. Dissanaiké:

Further to Mr. L. Gibson's fax of May 9, 1988, please find hereunder TMS's proposed work schedule for the coming months:

<u>TOPIC</u>	<u>TIMING</u>	<u>DURATION</u>	<u>TMS REPRESENTATIVE</u>
- Job Evaluation	June 14	4 weeks	Réal Gagné
- Organizing Training Program Trainability Tests	June 14	4 weeks	Gérard Plante
- In Process Quality Control	Sept./Oct.	6 weeks	Denis Marcotte
- Waste Recycling	Oct./Nov.	6 weeks	Denis Marcotte
- Preventive Maintenance Audit Procedures	Sept.	4 weeks	Roger Moquin
- Training Program (Doffer Training Manual Preparation) (Possibility of Audio Visual Assistance)	Oct.	4 weeks	André Laurendeau
- Marketing	Oct./Nov.	8 weeks	Robert Martin
- Management Meeting	Early July	1 week	André Bélanger

We are counting on TT&SC to find clients for the above so that we can implement the programs in pilot plants.

We know that Mattegama and Thulhiriya are desirous of a number of these programs but we believe we should attempt to spread the consulting to as many plants as practical.

The marketing program will not require a pilot plant.

Mr. Dissanaïke

For information only - outside of our present mandate TMS has made a proposal regarding the installation and proper functioning of the batteries on the Textima looms at Thuhiriya.

Hope to see you in early July.

Regards,

André Bélanger
President

AAB/ml

cc: Mr. Eraneva
UNIDO, Vienna

ANNEX III

Recording of Activities

28 December 1987

To all Senior Textile Technologists
+ Senior Engineer

Re-recording of

- (a) Recording of Job Cards
- (b) Monthly Time Sheets +
- (c) Visit Reports

I refer you to the previous discussions that we had with respect to this subject, wherein it was agreed to commence recording of these documents with effect from 1 October 1987.

I regret to inform you that the response has been very poor.

You will no doubt be wondering why so much emphasis is being paid on the recording of these documents and I give below a few reasons why you should diligently complete the above forms and also insist that all your subordinates down to the level of workshop assistant do so.

- (1) Any organisation whether it be engaged in manufacture or provision of a service should be conscious of its costs. The T.T. + S.C. should be in a position to accurately cost its services to industry so that the fees it charges will be in direct proportions to its costs.

The only way this unfortunate can be obtained is the means of the above 3 forms.

- (2) It does seem pretty absurd for the T.T. + S.C. to advise industry on aspects of cost reduction and efficiency when it has no inclination of its own costs.
- (3) You may already be aware that the T.T. + S.C. is proposing to have a Computer Installation of its own. The UNIDO which is the funding organisation for this installation has insisted that a part of this computing capacity be used for this introduction of an In-House control system and the 3 forms referred to above form the basis of the above In-House Control System.

.../..

- (4) Special programs and software will be developed for the In-House Control System which will make use of the above 3 forms. This software will enable
- a. the Centre to obtain information regarding the cost incurred by it in providing a particular service.
 - b. you and your assistants to obtain information on how active you are and indicate ways and means of improving your activity levels. This summarised information will be always available on hand.

Considering these facts the filling of the 3 forms will be considered mandatory and shall take place with effect from 1 January 1988. You as heads of your sections should insist that all subordinates fill these forms and submit to you.

A collection of all forms will be submitted by you on a weekly basis to the undersigned.

L.K. Lenaduwa

cc: Mr. Vincent Pandita - Chairman Board of Governors
Mr. E.B. Dissanaiké - Director
Mr. L.J. Gibson - Chief Technical Officer UNIDO

Senior Textile Technologists

Mr. U.H. Liyanage
Mr. N.M.S.J. Fernando
Mr. G.J. Molligoda
Mr. M.N.C. Fernando
Mr. P.D.R. Goonatilleke
Mr. D.P. Gunawardena
Mr. M.T.M. Mashood - Senior Engineer

Procedures and Methods

Recording, Monitoring and Evaluation

1. Introduction

The in-depth evaluation report, DP/ID/SER.C/5 of February 1986; Recommendation 15(i) calls for immediate action to: "develop, install, test, evaluate, adopt and institutionalise detailed policies, procedures, methods, logics, formats, guidelines for the services provided by the Centre to help ensure that the continuing professional capability be established at the Centre to provide and monitor these services effectively and efficiently".

In the current project, DP/SRL/87/012, the Senior Adviser is required to "organise central co-ordination, recording, monitoring and evaluation of the Centre's consulting and training activities".

The following recommendations are intended as a practical first step in the provision of these systems:

2. Recording of Activities

Any effective system for control and monitoring must be based on precise, relevant and up-to-date information. For this, prompt and accurate recording of activities is essential.

It is proposed that this should be done in three basic ways:

- The Visit Report
- The job Card
- The Monthly Time Record

2.1 The Visit Report

All contacts with outside organisations (which are not integral parts of training courses or consultancy projects) should be recorded on a visit report form. (sample 1. appendix).

The purpose is to briefly and accurately record the 'what, where, who and when' of each visit, either incoming or outgoing; to transfer this intelligence 'for information' or 'for action' to the appropriate departments and to lodge a copy with the co-ordinating office - in this instance with the Deputy Director's office.

The visit report is an essential part of the Centre's liaison work, both external and internal, and since most consultancy work starts from a visit, a copy of the visit report is often the first significant document on that project file.

The analysis of information from visit reports is probably the best available corporate data on the nature and extent of the enquiry or demand for the Centre's services and is therefore an important source of market information.

2.2 The Job Card

Every transaction, be it training, consultancy, testing or in-Centre trials, should be separately logged on a job card (sample II appendix).

This single document allows the cost of each transaction to be calculated, and is the basis on which the accounts department can invoice clients for work done and services rendered.

The definitive copy of each completed job card, duly checked and signed by the appropriate Divisional Head, should be delivered promptly to Accounts Section for costing and invoicing - and from there to Central Records for recording and analysis. The periodic analysis of job cards indicates what types of work are in popular demand, and what types of work are profitable.

2.3 The Monthly Time Record

Every member of staff who is employed for training and/or consultancy work should be required to submit a monthly time sheet, within two working days at the end of each month (sample III. appendix).

Activities should be noted daily with times spent on each. (Weekly record sheets can be issued as an aid, and the monthly record is then easily compiled from the weeklies). Only, the monthly records are passed forward, via Divisional Heads to central records for analysis.

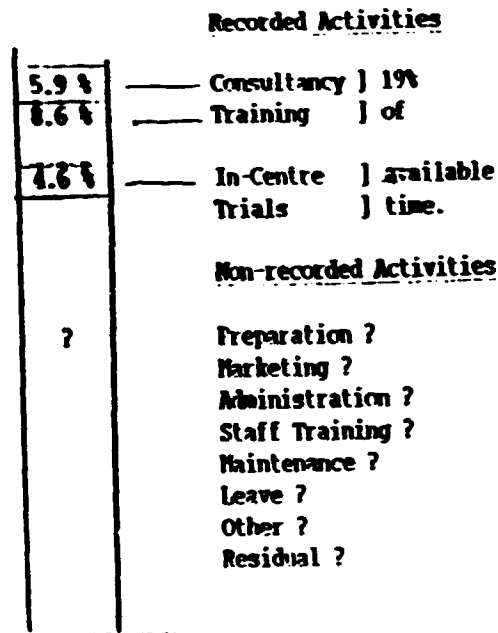
3. Recording and Analysis

Although the basic inputs in the forms of Visit Reports, Job Cards and Monthly Time Records, are by pen on paper (and all these documents are acceptable without being typewritten) - the plan should be that the further processing, analysis and storage of the condensed management information therefrom will be a computer operation.

N.B.: The sample forms in the appendix are not offered as final drafts - they will probably require some amendment and re-design before being issued and put into use.

FIGURE 1

Summary of Activities as a fraction of total available time.



April - December 1987.

Based on quarterly progress reports.

All Divisions: all staff from Workshop Assistants to Senior Technologists.

225 working days per year.

7 1/2 hours per working day.