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DP/ID/SER.A/1389
18 September 1990
ORIGINAL: ENGLISH

TESTING OF TEXTILE RAW MATERIALS, YARNS AND FABRICS AND PRODUCT DEVELOPMENT

DP/VIE/86/015/11-01

VIET NAM

Technical report: Third mission of the Chief Technical Adviser*

Prepared for the Government of Viet Nam
by the United Nations Industrial Development Organization,
acting as executing agency for the United Nations Development Programme

Based on the work of Roy Nield, Chief Technical Adviser

Backstopping officer: J. P. Moll, Agro-based Industries Branch

United Nations Industrial Development Organization
Vienna

* Mention of company names and commercial products does not imply the endorsement of UNIDO. This document has not been edited.

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TABLE OF CONTENTS

ABBREVIATIONS

BSO	Back Stopping Officer (UNIDO)
CTA	Chief Technical Adviser
Est	Estimate
JD	Job Description
MOLI	Ministry of Light Industries
NPD	National Project Director
Prodoc	Project Document
Req xx	Requisition No. xx
SIDFA	Senior Industrial Development Field Adviser
TOR	Terms of Reference
TPR	Tri-Partite Review
TRI	Textile Research Institute (Hanoi)
TRSI	Textile Research Sub-Institute (Ho Chi Minh City)
UTE	Union of Textile Enterprises
VISERI	Union of Sericulture Enterprises of Vietnam

I EXECUTIVE SUMMARY

This mission took place during July and August 1990. It was coordinated with a mission to Project DP/VIE/86/014 in Hanoi.

The project concept remains very relevant to the Government's Development Plan which emphasises the need to expand the production of consumer goods especially clothing.

A progress report is attached (Annex 1).

Outputs 1 and 2 will be fully produced after completion of the expert missions and delivery of an Uster "Tensorapid" yarn strength tester (as approved by the last TPR).

Output 3 has not yet been produced due to difficulties in selecting the most appropriate equipment for the testing and processing of silk. However, after completion of the Study Tour in February 1990, the silk testing equipment has now been ordered and the silk processing equipment has been selected. The Government have promised additional funds for this purpose.

Output 4 has been produced.

It is expected that the main project objectives will be achieved by the middle of 1991. The intended life of the project was to have been 2 years from 8/8/88.

It is recommended to continue implmentation of the project according to the work plan given in Annex 5.

The most suitable date for the next TPRs for this project and 014 is 13 December 1990. The following timetable is proposed:-

Oct	24	CTA arrives Hanoi and works in Project 014
Nov	18	CTA travels to HCM City and works in Project 015
Dec	9	Back Stopping Officer (BSO) arrives HCM City
	10	Visit to Project 015. Meeting with NPD and CTA
	11	BSO and CTA travel to Hanoi
	12	Visit to Project 014. Meeting with NPD and CTA
		Visit to UNDP. Meetings with Res Rep and SIDFA
	13	Delegates visit Project 014
		TPR for 014. TPR for 015
	14	Final discussions with BSO
	15	BSO departs from Hanoi to Vienna
	18	CTA departs from Hanoi to UK.

It is suggested that the proposed Joint Evaluation Mission be postponed until March or April 1991 when an evaluation will be much more meaningful.

II INTRODUCTION

The main object of the project is to increase the availability of good quality textiles for domestic consumption which is in line with the Government's development plan for the period 1986-90 which emphasizes the need to expand the production of consumer goods - especially clothing.

The immediate objective is to strengthen the capability of the southern subsidiary of the Vietnam Textile Research Institute in the areas of physical and chemical testing, product development and dissemination of information.

These objectives were elaborated upon in the first mission report of the CTA (DP/ID/SER.A/1154).

III RECOMMENDATIONS

1. Continue implementation of the Project according to the work plan (Annex 5) and increased budget (Annex 9).

2. Complete the building alterations as soon as possible and then keep the laboratories clinically clean. (NPD)

3. Officially inform UNDP of the increased budget. (MOLI)

4. Inform UNIDO of the increased budget. (UNDP)

5. Order the Tensorapid and silk processing equipment as soon as authorisation is received from UNDP. (UNIDO)

6. Provide the CTA with a contract for his next mission to Hanoi and HCM City (approx 1/2 time in each), as follows:-

Duration: 10 weeks (incl. travel time/completion of reports at home base) over a period between 17 October 1990 and 10 January 1991.

Travel: St Annes on Sea/London (2 days for visa purposes)/ Hanoi/Ho Chi Minh City/Hanoi/St Annes on Sea (5 days at home base for completion of reports). (UNIDO). (For itinerary in Vietnam please see page 2 of this report).

7. Field the Testing/QC expert for one month in November 1990 to overlap with the next mission of the CTA.

8. Field the Silk Weaving expert in mid-September. (UNIDO)

9. Field the Silk De-Gumming and Finishing expert for 1 month in early October 1990 as planned.

10. Complete preparations for the arrival of the experts - examples, materials, visual aids for seminars, etc so as to make full use of the experts' time in the field. (NPD)

11. Organise the next TPR (coordinated with project 014) in Hanoi on 13 December 1990. (UNDP, Hanoi)

12. Prepare for a Joint Evaluation Mission (coordinated with Project 014) in March/April 1991. (UNDP, Hanoi)

13. Organise the Terminal TPR in 1991 (coordinated with Project 014). (UNDP, Hanoi)

14. Study the possibility of a Project extension and discuss at the next TPR.

15. Provide the driver with training in the correct use of the gearbox so as to prolong the life of the project vehicle (NPD).

IV. ACTIVITIES AND OUTPUTS

Purpose of the Mission

To review progress since the last mission and follow-up on the recommendations in the previous report and on the decisions taken at the TPR.

To discuss outstanding issues and decide what needs to be done.

To settle the technical specifications for the remaining items of equipment to facilitate procurement as soon as possible.

To review the training programmes which have now been completed and debrief the participants.

To up-date the work plan.

To advise the NPD on the work to be carried out in the absence of the CTA.

To assist in preparation of a PPER which is required in September for the TPR in December.

To revise the Terms of Reference (TOR) for a future Joint Evaluation Mission.

To prepare a mission report recording all decisions taken and recommending the actions necessary, and by whom, to expedite further implementation of the project.

Programme

The mission was combined with a mission to the TRI in Hanoi which is receiving assistance through project DP/VIE/86/014.

Counterparts

The NPD is Mme Pham Thi Minh Chau. The Director of the TRSI is Dr Tran Quoc Thinh. The Director of the TRI is Dr Mme Nguyen Thi Bau.

Meetings, Seminars, etc.

Frequent meetings were held with the NPD and her staff when all outstanding matters were discussed in great detail.

The members of the study group on Production of Silk and Blends, which had recently returned from Italy, France and South Korea, were debriefed.

The following fellowship groups were debriefed:-
Textile Testing
Testing and Processing of Blends
Standard Testing Procedures
Circular Knitting

All the items of equipment supplied were checked out.

An informal seminar on using International Standards was given.

The status of the Project was discussed with the SIDFA.

Inputs

The project inputs are elaborated in Annex 1.

Budget

We were informed that the Government had authorised UNDP to increase the budget by USD 49,664 to cover the cost of the Tensorapid and the silk processing equipment from ICBT.

Documentary Outputs

Progress report dated August 1990 (Annex 1 of this report).

Draft PPER which is required in September for the next TPR on 13 December 1990.

Revised Terms of Reference (TOR) for a future Joint Project Evaluation.

Third Mission Report of CTA.

Schedules detailing the present status of the project as regards equipment, training and experts (Annexes 2, 3 and 4).

A revised JD for Post 11-02 Textile Testing/QC expert (Annex 8)

A detailed work plan for the remainder of the project (Annex 5)

The latest Budget Revision (Annex 9).

Justification for the purchase of silk processing equipment from ICBT (France) - letter from the NPD (Annex 7).

Case for a Shuttleless loom - letter from the NPD (Annex 8).

Visits

Visits were made to the Union of Sericulture Enterprises of Vietnam (VISERA), the Bao Loc silk reeling factory (supported by FAO) and farms where sericulture experiments are in hand.

V. CONCLUSIONS

Follow-up of the recommendations in the previous report and of the decisions taken at the TPR has been satisfactory.

There have been some delays, firstly in starting to implement the project, then in selecting the most appropriate equipment for silk testing and silk processing and finally in obtaining the additional funds required. However, the selection has now been made and it appears that sufficient funds will be made available.

If implementation of the Project is continued as outlined in this report, all the project outputs should be produced by the middle of 1991.

VI ACKNOWLEDGEMENTS

The author wishes to thank all who participated in the work of this mission for their co-operation and valuable advice and in particular:

Dr Pham Hoang Minh	Director of the TRI (Retired)
Dr Mme Nguyen Thi Bau	Director of the TRI
Dr Tran Quoc Thinh	Director of the TRSI
Mme Pham Thi Minh Chau	National Project Director
Dr Mme Pham Thi Minh Ha	Vice-Director, VISERI
Mr J M Bonnamy	SIDFA, UNDP
Mr Tran Trong Phung	Programme Officer, UNDP.

DP/VIE/86/015 Annex 1

PROGRESS REPORT DATED AUGUST 1990

A TPR was held on 12 Dec 1989. Follow-up of the decisions taken at that meeting and the recommendations made in the previous report has been satisfactory.

Buildings

The existing premises have been modified as follows:-

A special room to house the silk processing machines has been made.

The old silk-processing room has been up-graded, with a suspended ceiling and improved lighting. Some of the old machines will be retained for the time being for simple work.

The industrial air-conditioning equipment supplied by UNIDO has been installed in the testing laboratory. The atmospheric conditions in the laboratory now conform to international standards. The mini-computer has been transferred to a room adjacent to the laboratory.

A separate laboratory for silk testing is being prepared in anticipation of delivery of the UNIDO equipment.

Division of the upper floor into a conference room, library, information section, etc has been completed.

The hand-embroidery section (50 persons) is working well.

The garage for 2 cars has been completed.

Equipment

All the equipment finally selected for the physical testing laboratory as been installed and is operational except the Tensorapid.

All the equipment supplied for the dyeing and finishing facility is in regular use.

Books and periodicals have been delivered to the information department regularly during the past 2 years and the quality of the monthly news letter with a circulation of 500 copies has been improved. The periodicals should be re-ordered for a further 2 years by UNIDO. Thereafter arrangements should be made for the Government to undertake the continued supply so that this very useful activity can be continued.

The circular knitting machine is working very well. Successful tests have been made with silk as well as cotton.

The sample loom from AVL was shipped in July 1990.

Based upon the recommendations of Study Tour No 54, the silk testing equipment (Req 88/9) has been ordered. The denier balance was cancelled because an existing balance can be used and the serigraph has been cancelled because its function will be fully covered by the Tensorapid.

The silk processing equipment has been selected and will be ordered along with the Tensorapid as soon soon as UNIDO is officially informed that the additional funds are available.

Training

Both Study tours have been successfully completed and reports issued.

Five fellowship programmes with a total of 13 persons have been successfully completed and reports issued. The last 2 fellows should be placed with a loom maker such as Somet who have very good training facilities in both Italy and Hong Kong. Details of training are given in Annex 3.

The project vehicle is still in good condition but the driver needs some training in how to use the gearbox correctly.

Experts

It was always intended to field the experts after completion of training and delivery of the equipment. Accordingly, all experts should be fielded during 1990 or early 1991. Details are given in Annex 4.

Work Plan

The agreed work plan for the rest of the project is given in Annex 5.

Budget

The latest budget revision is attached as Annex 9.

Product Development of Silk

The NPD has written to UNIDO justifying the selection of silk processing equipment from ICBT (France) rather than from Nissei and Toyo of Japan who were cheaper. This letter is reproduced as Annex 6. I endorse the remarks of the NPD.

The NPD has also written to UNIDO making out a case for the purchase of a shuttleless loom for silk. This letter is reproduced as Annex 7. It should be discussed at the next TPR.

DP/VIE/86/015
Testing Raw Materials, yarns and fabrics + product development

EQUIPMENT - Revised August 1990 (* = Already Delivered)

Req No	Item	Supplier	Cost ($)	Remarks
88/1	Landcruiser	Toyota	14,414	*
	Spare parts		2,290	*
88/2	Pressley tester	Baer	2,591	*
88/3	Micronnaire	SDL	4,947	*
88/4	Fineness/Maturity	SDL	23,113	*
88/5	Fibre blender	SDL	6,022	*
88/6	Evenness tester	Uster	75,112	*
88/7/1	Cloth abrasion	Heal)		*
/2	Cloth thickness	Heal)	10,686	*
/4	Pilling tester	Heal)		*
/3	Crease recovery	SDL)	6,234	*
/5	Crimp tester	SDL)		*
88/8/1	Wash fastness	SDL	6,886	*
/2	Crock tester	Heal	746	*
/3	Skein dyeing m/c	Roaches	8,872	*
/4	Lab. mercerizer	Cancelled		Not available
/5	Viscosimeter	Roaches)		*
/6	Lab. steamer	Roaches)	6,345	*
/7	Hydrometers	Roaches)		*
88/9/1	Denier balance	Cancelled		Use existing balance
/2	Seriplane winder + 6 blackboards			Ordered
/3	Seriplane viewer + photographs			Ordered
/4	Serigraph	Cancelled		Use Tensorapid
/5	Manual length meter			Ordered
/6	Cohesion tester		61,962	Ordered
/7	Drying oven	(Items 2+3+5+6+7)		Ordered
88/10/1	Doubler/twister	ICBT	42,261	Selected
/2	2 for 1 twister	ICBT	30,678	Selected
	Winding machine	ICBT	9,744	Selected
88/11	Sample loom	AVL	33,654	Shipped July 90
88/12	Knitting machine	Qualitex	36,650	*
88/13/1	Piece glass 25cm	Heal)		*
/2	Piece glass 20cm	Heal)	2,127	*
/3	Tensiometer	Heal)		*
/4	Thermohygrograph	Heal)		*
88/14	Overhead projector	Kwan	679	*
88/15	4 airconditioners	Kwan	2,204	*
88/16	Room conditioners	BB/York	12,326	*
88/17	PP copier	Kwan	1,649	*
88/18	Books/periodicals	Munksgaard	3,220	Reorder
88/19	Digital fibrograph	SDL	38,082	*
88/	Tensorapid yarn strength tester	Uster	84,845	Place order

Annex 3

DP/VIE/86/015
Testing Raw Materials, yarns and fabrics + product development

TRAINING - Revised August 1990

Number	Name	Duration	Remarks
FELLOWSHIPS			
Textile testing			
31-01	Do Van Quong	3	Implemented May 1990
31-02	Nguyen Thi Ngan Ha	3	Bolton
31-03	Tran Thanh Liem	3	
Testing and processing of blends			
31-08	Tran Gia Huyen	3	Implemented May 1990
31-09	Nguyen Anh Kiet	3	Bolton
31-10	Dinh Cong Quyet	3	
Standard testing procedures			
31-	Nguyen Thi Minh Duc	3	Implemented May 1990
31-	Nguyen Thi Tuy	3	Bolton
Silk testing and processing			
31-04	Ha Nhu Thi Viet	3	Implemented 1989
31-05	Thai Dao Duy	3	S. Korea + India
31-06	Vuong Cu Luu	3	
31-07	Thuy Pham Van	3	
Circular knitting			
31-11	Lanh Tran Ngoc	1	Implemented January 90 Qualitex, UK.
Shuttleless weaving			
31-		1	Scheduled 1991
31-		1	
Fancy yarns and fabrics		2x3	Cancelled - covered by the Bolton group.
STUDY TOURS			
Textile testing (No 53)			
32-01	France, UK + Hungary	5x1	Implemented 1989
Production of silk and blends (No 54)			
32-02	Italy, France + S.Korea	5x1	Implemented January 90

DP/VIE/86/015
Testing raw materials, yarns and fabrics + product development

EXPERTS - 1990 AND FUTURE - Revised December 1989

Post no	Title	m/m	Remarks
11-01	CTA	4	R. Nield selected. Next missions Nov 90, Apr 91 and Oct 91. Co-ordinate and share cost with DP/VIE/86/014.
11-02	QC/Testing	1+1	Mr Goerlach appointed for 1 m/m. Arrival 1 November 90 (approx).
11-03	Silk weaving	2	Mr J C Guigou appointed. Arrival mid-September.
11-05	Degumming & Finishing	1	Mr H R Hofstetter appointed. Reduced to 1 m/m at expert's request. Arrival October 1990.

DP/VIE/86/015
Testing Raw Materials, Yarns and Fabrics + Product Development

WORK PLAN - PROJECT INPUTS AND ACTIVITIES - Revised Aug 1990

	1989	1990	1991
Personnel			
11-01 Chief Technical Adviser	—	— —	— —
11-02 QC/Testing		—	—
11-03 Silk weaving		—	
11-05 Degumming of silk		—	
Fellowships			
Silk testing. S.Korea/India 4x3m/m	—		
Textile testing. Bolton 8x3m/m		—	
Circular knitting. UK 1x1m/m		—	
Shuttleless weaving. 2x1m/m			—
Study Tours			
Textile testing (No 53) 5x1m/m	—		
Silk and blends (No 54) 5x1m/m		—	
Equipment			
Physical testing	—		—
Dyeing & Finishing	—		
Circular Knitting	—		
Silk testing			—
Product development of silk			—
Sample loom		—	
Activities of TRSI			
Physical testing	—	—	—
Dyeing and finishing tests	—	—	—
Silk testing			—
Product development of silk			—
Circular knitting	—	—	—
Sample weaving		—	—
Dissemination of information	—	—	—
Evaluation of Project			—

Justification for the purchase of Silk Processing Equipment from ICBT (France) - Req 88/10.

Text of letter from the NPD to UNIDO dated 15 August 1990.

In the light of experience gained during our study tour to Italy, France and South Korea and subsequent discussions with MOLI, we strongly recommend purchase of the equipment for product development of silk from ICBT (France) because:-

The development of the silk industry is becoming increasingly important to the Government of Vietnam.

A high-level Government mission, representing the State Planning Committee, the State Science and Technology Committee and MOLI, visited the TRSI in July. They said they were very pleased with the rate of progress of the project, with the quality of the equipment supplied, with the training provided and with the improvements to the buildings - especially the standard-atmosphere testing laboratory. They were also pleased with the research already carried out on silk and conscious of the fact that it had been done on very old machinery.

The Government have decided to allocate 1,200 million dongs VN (approx 235,000 US Dollars) for silk research during the period 1991/95.

The political situation is improving rapidly and links are being forged between Vietnam and various European countries. In the past few days it has been announced that Vietnam is to receive a long-term loan for industrial development from Italy amounting to USD 96 million of which USD 18 million are to be allocated to the silk industry. There is to be another loan of USD 50 million from France and further loans from Germany and Sweden.

In the past, very little was known in Vietnam about Western European equipment and methods. The Government is now keen to learn all about European technology which is one reason that they would prefer to obtain equipment from Europe.

There are also the following strong technical reasons for preferring to order silk processing equipment from ICBT:-

At present product development work on silk is being carried out on 3 very old machines:-

1. A Winding machine for winding from skein to bobbin.

2. A doubling machine for assembling 2 or 3 threads on to one bobbin with no twist.

3. An uptwister for imparting twist to the assembled threads.

This sequence of machines is only capable of producing yarns within the range 200 to 2,000 turns/metre which is totally inadequate. The most commonly required twist levels are:-

	Turns/metre
Embroidery yarns	30 - 50
	200 - 300
Knitting yarns	200 - 400
Weaving yarns for light fabrics, crepe de chine, kimonos, etc	600 - 4,000

As an example of the difficulties facing the TRSI at present, the only way we can produce a yarn with 50 t/m is by processing the same material twice on the up-twister. The first time we insert 250 t/m of twist in one direction and the second time 200 t/m in the opposite direction, leaving a residual twist of 50 t/m. This is ridiculous and produces very poor results. Obviously new machinery is required as was foreseen in the original Project Document.

Because so little was known in Vietnam about the latest silk technology as practised in other countries, the selection of equipment was postponed until after completion of the Study Tour on silk processing in Jan/Feb 90.

Three offers of equipment were received:-

Nissei (Japan)	USD 35,765
Toyo (Japan)	USD 37,960
ICBT (France)	USD 83,569

Nissei and Toyo both offered the same equipment made by Kubota (Japan). The price is low but and the specifications are reasonable (e.g. 50 - 4,000 t/m) but this is only a somewhat up-dated version of our existing equipment. Also we have been informed that Kubota have ceased to manufacture this kind of equipment so we are afraid that we are being offered second-hand machines, which is contrary to the policy of the TRI. ICBT, on the other hand, have offered the latest technology:-

1. A winding machine similar to Kubota.

2. A Universal Doubling and Twisting Machine capable of assembling 2 - 6 threads onto one bobbin and simultaneously inserting 30 - 600 t/m.

3. A Two-for-One Twisting Machine for 4,000+ t/m which inserts 2 turns of twist for every revolution of the spindle.

These machines represent the latest technology; they are more flexible and more suitable for research work. For example, embroidery yarns can be produced using 2 processes only - winding and doubler/twister.

For the above reasons, MOLI and the NPD strongly recommend the acquisition of this high-tech equipment from ICBT.

The Government have agreed to make additional funds of about USD 50,000 available to UNIDO to make it possible to buy this equipment from ICBT in addition to the Tensorapid yarn strength tester, which has also been held up pending a decision on the silk processing equipment.

Recommendation

Place the order for silk processing equipment with ICBT.

The Need for a Shuttleless Loom for Product Development of Silk

Letter from the NPD to UNIDO dated 15 August 1990

I would like to explain to you the present situation regarding our work at the TRSI on product development of silk.

Hand Embroidery

The hand-embroidery section of the TRSI, which employs 50 people, fulfils 2 useful functions; it generates some income and, more important, it provides means of acquiring knowledge and experience of the silk industry in other countries.

In the beginning, both the silk fabrics and the embroidery threads were imported from Japan but, now, most embroidery threads are produced in the TRSI from Vietnamese raw silk. The quality is equal to Japan and the price is less. In this way the TRSI gains access to a wide range of yarns and fabrics of Japanese origin.

The finished goods are marketted by the GENERALIMEX Company of the Ministry of Foreign Trade in many countries and the TRSI benefits from a feedback of information from abroad.

This indirect method of acquiring know-how is necessary because there is a lot of secrecy in the silk industry; for example, Japan refused to accept our fellowships.

Silk Testing

The analysis of yarns and fabrics and the study of export requirements will be placed on a more scientific basis when the silk testing equipment (Req 88/9) is received.

Processing of Raw Silk

The quality of the embroidery thread will be enhanced and productivity will be greatly increased when the silk processing equipment (Req 88/10) is received.

Weaving of Silk

The next logical stage will be to start producing silk fabric by modern means. This is best done on a shuttleless (Rapier type) loom.

A shuttleless loom was not included in the original plan due to financial constraints but, now, it is becoming essential if the momentum of the development work is to be maintained.

The study tour were impressed by the "Master SM 93" loom made by Somet (Italy) but there are many other models available.

Recommendations

It is recommended that an in-depth study should be made to determine the most suitable make and model of Shuttleless loom for use in the development programme of the TRSI. This should include the following steps:

1. Seek the advice of the Silk Weaving Expert on the most suitable loom and the best place for fellowship training.

2. Implement the remaining fellowships (2 x 1m/m) in shuttleless weaving. This should be at the factory of a loom maker such as Somet, who have very good training facilities both in Italy and Hong Kong.

3. Consider this item seriously at the next TPR meeting and in any proposals for an extension of the project.

Annex 8
August 1990

UNITED NATIONS

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION
UNIDO

Job Description
DP/VIE/015/11-02/J13102

Post title	Textile testing and Quality Control expert
Duration	1 month
Date required	1 November 1990
Duty Station	**Ho Chi Minh City with possibility of travel within country.**
Purpose of project	To strengthen the Textile Research Institutes capability of conducting cotton fibre evaluation and spinning development work, with particular emphasis on the use of short staple cotton. This will enable the Institute to advise spinning mills on optimum processing conditions when using such cottons and to develop an improved hand spinning technology for use in rural areas.
Duties	The expert will work in co-operation with counterpart personnel and under the leadership of the CTA and will specifically be expected to assist the national staff to: 1. reinforce the technical skills already acquired through fellowship training. 2. organise the work of the laboratory and prepare job descriptions for the staff. 3. establish testing routines in line with the best international standards. 4. evaluate Vietnamese and imported cottons. 5. evaluate Vietnamese and imported yarns and fabrics. 6. begin to compile experience ststistics. 7. establish quality assurance & certification procedures for cottons and exported yarns. 8. advise mills on quality control through seminars.
Qualifications:	At least 10 years experience in fibre, yarn and fabric testing and quality control and cert-fication for export. Wide knowledge of quality standards expected in importing countries.
Language	English
Background Information	As in Job description for post 11-01.

DETAIL REPORT ON PROJECTS AS AT 1990-07-31
BY PROGRAM ELEMENT AND COUNTRY

PROJECT NUMBER: DP/VIE/88/018

PROJECT TITLE: TESTING OF TEXTILE RAW MATERIALS, YARNS AND FABRICS AND PRODUCT DEVELOPMENT

BACK STOPPING OFFICER: MR. MOLL
PROJECT REVISION: 0
PROJECT STATUS: 0 - ONGOING
PGM-ELEMENT CODE: JI3102
FIRST ISSUED: 88-08-26 LAST UPDATED: 90-07-13

BUDGET LINE	DESCRIPT.	TOTAL ALLOTMENT M/M (1)	TOTAL ALLOTMENT DOLLARS (2)	CURR YR PHASING M/M (3)	CURR YR PHASING DOLLARS (4)	PRIOR YEAR EXP. M/M (5)	PRIOR YEAR EXP. DOLLARS (6)	CURR YR DISB. M/M (7)	CURR YR DISB. DOLLARS (8)	BAL.CURR YR OBL. M/M (9)	BAL.CURR YR OBL. DOLLARS (10)	COMMITTED FUTURE YEARS (11)	BALANCE CURR.YR (12) (4-8-10)	UNCOMMITTED BALANCE (13) (2-6-8-10-11)	YTD IMPL VERSUS PHASING (14)
11-01		6.0	69,781	2.0	24,272	2.0	21178	0.0	0	0.0	0	0	24,272	48,603	
11-02		2.0	20,000	1.0	10,000	0.0	0	0.0	0	0.0	0	0	10,000	20,000	
11-03		2.0	20,000	2.0	20,000	0.0	0	0.0	0	0.0	12000	0	8,000	8,000	
11-04		0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	
11-05A		2.0	20,000	2.0	20,000	0.0	0	0.0	0	0.0	0	0	20,000	20,000	
11-05B		0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0	
11-99	INTEXPERT	12.0	129,781	7.0	74,272	2.0	21178	0.0	0	0.0	12000	0	82,272	96,603	
15-00		0.0	22	0.0	0	0.0	0	0.0	0	0.0	0	0	0	22	
15-01		0.0	0	0.0	0	0.0	22	0.0	0	0.0	0	0	0	22-	
15-99	TRAVEL	0.0	22	0.0	0	0.0	22	0.0	0	0.0	0	0	0	0	
16-00		0.0	5,000	0.0	5,000	0.0	0	0.0	0	0.0	0	0	5,000	5,000	
16-99	OTHERPERS	0.0	5,000	0.0	5,000	0.0	0	0.0	0	0.0	0	0	5,000	5,000	
18-00		0.0	272-	0.0	0	0.0	0	0.0	0	0.0	0	0	0	272-	
18-01		0.0	0	0.0	0	0.0	272-	0.0	0	0.0	0	0	0	272	
18-99	SUR PY OB	0.0	272-	0.0	0	0.0	272-	0.0	0	0.0	0	0	0	0	
19-99	PERSONNEL	12.0	134,811	7.0	79,272	2.0	20928	0.0	0	0.0	12000	0	87,272	101,882	15 %8
31-00		0.0	189,500	0.0	134,760	0.0	0	0.0	0	0.0	0	0	134,760	189,500	
31-01		0.0	0	0.0	0	0.0	0	0.0	68	0.0	1481-	0	14,678-	14,678-	
31-02		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-03		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-04		0.0	0	0.0	0	0.0	8885	0.0	312	0.0	0	0	312-	8,807-	
31-05		0.0	0	0.0	0	0.0	8885	0.0	312	0.0	0	0	312-	8,807-	
31-06		0.0	0	0.0	0	0.0	8885	0.0	312	0.0	0	0	312-	8,807-	
31-07		0.0	0	0.0	0	0.0	8885	0.0	312	0.0	0	0	312-	8,807-	
31-08		0.0	0	0.0	0	0.0	0	0.0	68	0.0	1481-	0	14,678-	14,678-	
31-09		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-10		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-11		0.0	0	0.0	0	0.0	0	0.0	6964	0.0	466-	0	7,430-	7,430-	
31-12		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-13		0.0	0	0.0	0	0.0	0	0.0	0	0.0	13013-	0	13,013-	13,013-	
31-99	FELLOWS	0.0	189,500	0.0	134,760	0.0	34740	0.0	8348	0.0	107788	0	18,848	18,848	88 %8
32-00		0.0	113,843	0.0	59,813	0.0	0	0.0	0	0.0	0	0	59,813	113,843	
32-01		0.0	0	0.0	0	0.0	53928	0.0	12880	0.0	0	0	72,880-	66,808-	
32-02		0.0	0	0.0	0	0.0	0	0.0	20908	0.0	0	0	78,808-	78,808-	
32-99	STUDYTOUR	0.0	113,843	0.0	59,813	0.0	53928	0.0	32888	0.0	0	0	32,872-	32,871-	184 %8
39-99	TRAINING	0.0	283,343	0.0	194,573	0.0	88668	0.0	100833	0.0	107788	0	14,028-	14,028-	107 %8
41-00		0.0	5,428	0.0	0	0.0	0	0.0	0	0.0	0	0	0	5,428	
41-10		0.0	0	0.0	0	0.0	2280	0.0	0	0.0	1892	0	1,892-	3,852-	

DETAIL REPORT ON PROJECTS AS AT 1990-07-31
BY PROGRAM ELEMENT AND COUNTRY

PROJECT NUMBER: DP/VIE/88/018

PROJECT TITLE: TESTING OF TEXTILE RAW MATERIALS, YARNS AND FABRICS AND PRODUCT DEVELOPMENT

BACK STOPPING OFFICER: MR. MOLL
PROJECT REVISION: 0
PROJECT STATUS: O - ONGOING
PGM-ELEMENT CODE: JI3102
FIRST ISSUED: 88-08-26 LAST UPDATED: 90-07-13

BUDGET LINE	DESCRIPT.	TOTAL ALLOTMENT M/M (1)	TOTAL ALLOTMENT DOLLARS (2)	CURR YR PHASING M/M (3)	CURR YR PHASING DOLLARS (4)	PRIOR YEAR EXP. M/M (5)	PRIOR YEAR EXP. DOLLARS (6)	CURR YR DISB. M/M (7)	CURR YR DISB. DOLLARS (8)	BAL.CURR YR OBL. M/M (9)	BAL.CURR YR OBL. DOLLARS (10)	COMMITTED FUTURE YEARS (11)	BALANCE CURR.YR (12) (4-8-10)	UNCOMMITTED BALANCE (13) (2-8-8-10-11)	YTD IMPL VERSUS PHASING (14)
41-12		0.0	0	0.0	0	0.0	4135	0.0	0	0.0	0	0	0	4,135-	
41-99	EXPENDABL	0.0	8,428	0.0	0	0.0	8428	0.0	0	0.0	1892	0	1,892-	1,891-	
42-00		0.0	495,845	0.0	238,238	0.0	0	0.0	0	0.0	0	0	238,238	495,845	
42-01		0.0	0	0.0	0	0.0	257609	0.0	34488	0.0	63652	0	98,140-	356,749-	
42-99	NONEXPEND	0.0	495,845	0.0	238,238	0.0	257609	0.0	34488	0.0	63652	0	140,098	140,096	41 %8
48-00		0.0	12,788-	0.0	0	0.0	0	0.0	0	0.0	0	0	0	12,788-	
48-01		0.0	0	0.0	0	0.0	145-	0.0	0	0.0	0	0	0	145	
48-02		0.0	0	0.0	0	0.0	12641-	0.0	0	0.0	0	0	0	12,641	
48-99	SUR PY OB	0.0	12,788-	0.0	0	0.0	12788-	0.0	0	0.0	0	0	0	0	
49-99	EQUIPMENT	0.0	489,485	0.0	238,238	0.0	261248	0.0	34488	0.0	65344	0	138,404	138,405	41 %8
51-00		0.0	3,720	0.0	2,500	0.0	0	0.0	0	0.0	0	0	2,500	3,720	
51-10		0.0	0	0.0	0	0.0	0	0.0	280	0.0	0	0	280-	280-	
51-21		0.0	0	0.0	0	0.0	55	0.0	23	0.0	0	0	23-	78-	
51-22		0.0	0	0.0	0	0.0	62	0.0	0	0.0	0	0	0	62-	
51-40		0.0	0	0.0	0	0.0	590	0.0	0	0.0	0	0	0	590-	
51-41		0.0	0	0.0	0	0.0	13	0.0	0	0.0	0	0	0	13-	
51-99	SUNDRIES	0.0	3,720	0.0	2,500	0.0	720	0.0	303	0.0	0	0	2,197	2,697	12 %8
69-99	MISC COST	0.0	3,720	0.0	2,500	0.0	720	0.0	303	0.0	0	0	2,197	2,697	12 %8
99-99	PROJ TOT.	12.0	911,088	7.0	514,681	2.0	381568	0.0	135724	0.0	185110	0	193,847	228,868	82 %8