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17244

Distr.  
RESTRICTED

IO/R.85  
16 December 1988

UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

ESTABLISHMENT OF A CLOTHING UNIT IN THE DEPARTMENT  
OF SUPPLIES TO ORGANIZE AND SUPPORT TECHNICALLY  
LOCAL MANUFACTURE OF SCHOOL AND OTHER UNIFORMS

US/BOT/87/097/11-01

BOTSWANA

Technical report: First visit of the Chief Technical Adviser\*

Prepared for the Government of Botswana  
by the United Nations Industrial Development Organization

Based on the work of Don<sup>A</sup> Haque  
Chief Technical Adviser

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

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\* This document has not been edited.

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ABBREVIATIONS

CTA	Chief Technical Adviser
UNDP	United Nations Development Programme
BEDU	Botswana Enterprise Development Unit
OND	Ordinary National Diploma
M & R	Maintenance and Repair
U.K.	United Kingdom
DPSM	Directorate of Personnel Services Management
UNIDO	United Nations Industrial Development Organisation
P	Pula

**Exchange rates:**

During the period of this mission, 5 November to 20 November 1988, the following exchange rate prevailed.

US \$ 1 = P1.95

2: INTRODUCTION

The purpose of this mission was to check that the project activities were correctly distributed and to ensure that conditions were right for the start up of the project.

Due to the time slippage of some eighteen months between the writing of the Project Document and the allocation of funds, it had been considered necessary to rewrite the list of activities, primarily to ensure that the two long Fellowships could be funded at the right time. It was felt at the time of the rewrite, that the new list of activities was not quite right and therefore an additional mission by the CTA should be undertaken.

Due to changes made necessary by the time slippage, parts of the Project Document have had to be adjusted, and so the Document has been amended and copies are attached to this report.

The majority of the mission was spent talking to various people about the availability of staff for the Clothing Unit - for the four remaining Technical/Managerial positions. There are a number of problems; particularly, shortage of suitably qualified people, difficulties in transferring between Government Departments, and procedures for increasing/decreasing Departmental establishments.

These problems have been, or are about to be resolved.

During discussions at the Ministry of Commerce and Industry, it was discovered that a "Report on Market Research for School Uniforms" had been produced, but apparently not circulated to the Department of Supply. Whilst the Department of Supply is not, at the moment, directly responsible for school uniforms, it would have been helpful to have a background picture of the situation.

Another report, which would have been very useful to the originators of the Project Document, was found on a desk in the Assistant Co-ordinators office. It is "Export Market Analysis and Product Development Survey for the Botswana Textile and Clothing Industry". This report was commissioned by the Commonwealth Secretariat and researched and prepared by consultants from Shirley Institute, in 1985.

The report gives a much broader and more detailed analysis of the textile and clothing situation than the PE Report of 1986, which was used as a background for the preparation of the Project Document.

There is always a danger that unless reports such as the ones mentioned above are made available to consulting staff, needless time and resource-consuming effort could be applied in duplicating existing work.

## II. BUILDINGS

The Stores Depot complex at Gaborone West has now been completed, and space allocated to the Clothing Unit.

At the moment there are three offices for the Coordinator, Assistant Coordinator and Purchasing/Procurement Officer, and a large classroom fitted with a wall-mounted chalkboard and tables and chairs to seat 24 students.

The large office currently being used as a general office has been earmarked as the testing laboratory, but nowhere is yet allocated as a workshop facility for the Mechanics.

A spare office will be available for the visiting experts, but there is a lack of space to house clerical support staff.

These problems are in hand and should not interfere with the commencement of the project.

## III. EQUIPMENT

The original equipment list prepared in 1987 has been rewritten in greater detail, as requested, and is now at Appendix V in the rewritten Project document.

Slight changes needed to be made for a number of reasons:-

- the Rub/Pilling tester requirement has been split into two separate items of equipment
- there was an omission in the original list of item 22 which probably should have been a video camera
- many items are available locally "off the shelf" and accurate prices have been obtained. These items could be purchased by Field Purchase Order by the CTA and Maintenance and Repair Expert at the commencement of the next series of missions
- transport is always likely to be a problem and, whilst it is written into the Project Inputs that "adequate facilities for project related transport of goods and personnel should be a responsibility of the Department of Supply, I feel that provision of a vehicle within the equipment component of the budget, should be given the utmost priority. This would ensure that during the life of the project, difficulties in the provision of transport to allow the expatriate staff to carry out their duties unhindered, would be minimised. The matter has been fully discussed with the UNDP Programme Officer, who agrees with the request.

- More accurate costings have been made, particularly on the major items of equipment, and even with the additional cost of a vehicle, it was possible to reassign about \$6,000 of equipment funds to BL 51.00.

It is strongly recommended that equipment purchased outside Botswana with the exception of the vehicle, should be air freighted by the direct flight to Gaborone, and not through South Africa. This should minimise delays in delivery and incurring of additional costs.

At the suggestion of the UNDP Programme Officer, some items of Expendable equipment have been added to the equipment list in order to supplement the accommodation furnishings to be supplied as a Government input.

#### IV. PROJECT PERSONNEL

The matter of personnel to fill the vacancies in the Clothing Unit became the first priority on the first day of the mission. It was made quite clear that timed activities, involving the work of specialised individually recruited experts could not be planned unless it was certain that suitable counterpart staff would be available.

With the demise of the Botswana Enterprise Development Unit (BEDU) some staff of the Ministry of Commerce and Industry, who were involved in the training and development work of BEDU, have become available. Two members of staff have requested, and been selected for transfer to the Ministry of Finance and Development Planning, in order to join the Clothing Unit of the Department of Supply. One of these ladies, in particular, is extremely well qualified having attended a City and Guilds of London Institute certificated course at the London College of Fashion, and also a special Hand Flat Knitting Machine training course in Sweden. She has been involved in the BEDU training courses for entrepreneurs, and should prove to be a valuable asset by way of ability and experience.

The recruitment of mechanics is likely to be much more difficult, as no training of Sewing Machine Mechanics is carried out in Botswana. A visit was paid to the Polytechnic to seek the advice of the Head of Mechanical Engineering, Mr D Jackson.

It would appear that many students following the various engineering courses are sponsored by organisations, and are therefore not available for recruitment. However there are a number who are not sponsored, following an OND course who possibly will be suitable candidates.

I do feel that decision by committee about a highly specialised unit is likely to create operating difficulties which will be totally outside the control of Ms Mwasi, whose main concern, like mine, is that this Unit (Section) should operate efficiently to provide the customers ( Government Departments) with the best possible products at the best price and at the right time; and to do this we have to develop not only a system, but an embryonic industry.

V. EXPERTS

Some rescheduling of experts activities has been necessary but a glance at the Schedule of Project Activities and Inputs, will show that as originally envisaged, from Month 6 to the end of the project, there is adequate cover by at least one of the experts.

In order for the project to be operational at the earliest possible date, rapid recruitment of all the experts is necessary.

The UNDP Programme Officer has requested the Department of Supply to arrange for accommodation in the form of a house, with at least three bedrooms. Accommodation is in very short supply in Gaborone and this situation should be monitored very closely. Hotel accommodation is also in short supply and even though a new hotel is to be built, it will not be available certainly in the early stages of the project.

It is, therefore, most important that a very firm commitment is obtained regarding the provision of a house. If this commitment cannot be given well in advance, then hotel accommodation will have to be booked.

As mentioned in III Equipment, certain expendable items have been included in the Equipment list at Appendix V of the Project Document.

VI. PROJECT DOCUMENT (See Appendix 2)

As indicated earlier, parts of the Project Document have had to be amended. The objectives and methods of implementation have not changed; only the Activities, Budget Analysis and Equipment components.

The changes are:-

1. Paragraph 4, PROJECT OUTPUTS

This has been extended to specify course and seminar activities.

2. Paragraph 5, PROJECT ACTIVITIES, B. PRINCIPAL PROJECT ACTIVITIES

This part has been completely rewritten to allow for changes in activity timings.



It is suggested that the following course of action is taken with regard to these candidates:-

1. CTA and M & R expert liaise with Mr Jackson in March 1989, and interview a number of final year students identified by him.
2. On completion of the Polytechnic examinations in June 1989, successful suitable candidates should be engaged and despatched to UK for Fellowship Training in August 1989.
3. On completion of the Fellowships at the end of 1989/ early 1990, the M & R expert returns and commences work with the mechanics.

The Activities list has been adjusted accordingly.

On the very last day of the mission, whilst still trying to clarify the position regarding the local staffing of the Unit, the Directorate of Personnel Services Management (DPSM) became involved, and the two gentlemen concerned became alarmed that the organisation structure as originally planned did not suit the grading of likely staff and also that it was not neat.

There followed a long detailed discussion, mainly in Civil Service code regarding the levels and positions within the organisation that holders of C1, C2, GA1, GA2 grades should hold. It became obvious to me that the Unit (which apparently should be termed a Section) was being constructed with no regard to competence and specialist qualification. My views were strongly put forward which seemed to cause a certain amount of consternation, as it would appear that in the eyes of DPSM, a C1 with no specialist qualification or competence is more suitable than a C2 who is admirably qualified. I did eventually win the concession that a suitable C2 could operate in lieu of a C1 until such time as a C1 is recruited, or the C2 is promoted.

Later in the day, it was discovered that it is the intention to operate two Clothing Units (or Sections) one based in Gaborone and the other based at Francistown, further complicating the distribution of staff.

After discussions with Ms Mwasi, the present Coordinator, we agreed that she should work with the Director of Supply and the DPSM to produce an organisation chart that would suit the requirements of all parties in the long term, but in the short term we should continue our project plans based upon the original structure, which is all we have staff for now.

3. SCHEDULE OF PROJECT INPUTS AND ACTIVITIES

This has been completely rewritten

4. Paragraph 6, PROJECT INPUTS PART B UNIDO INPUTS

Amendments made to BL 42.00 and BL 51.00

5. PROJECT BUDGET/REVISION

These three pages have been recalculated.

6. APPENDIX IV JOB DESCRIPTION 11-02

Duties amended to include the words "training and advisory facility".

7. APPENDIX V

Rewritten in more detail with more accurate cost estimates, plus an indication of those items which can be purchased locally.

LIST OF PERSONS CONSULTED

UNDP

H C von Sponeck	-	Resident Representative
Simon Nhongo	-	Deputy Resident Representative
Neils Maargard	-	Programme Officer

DEPARTMENT OF SUPPLY

P M Mokgosana	-	Director
M G Bakwena	-	Deputy Director
Ms C Mvasi	-	Coordinator - Clothing Unit
R J Bimbo	-	Assistant Director(s)
A C Kelly	-	Supplies, Management Adviser

MINISTRY OF COMMERCE AND INDUSTRY

William Miller	-	UNIDO Project Analyst
Mrs Bogoba	-	Personnel Management
Anthony K Matsheka	-	Project Research Unit
Lebogang Sechaba	-	H.Q. Ministry Management

POLYTECHNIC

Mr D Jackson	-	Head of Mechanical Engineering
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DIRECTORATE OF PERSONNEL, SERVICES MANAGEMENT

Mr Maucho  
Mr Joshe

CTA's report on his first mission to Botswana in November 1988.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

PROJECT DOCUMENT (REVISION 1)

November 1988

PART A - BASIC DATA

COUNTRY/REGION : Botswana

PROJECT NUMBER : US/BOT/87/097

PROJECT TITLE : Establishment of a Clothing Unit in the Department of Supplies to organize and support technically local manufacture of school and other uniforms

SCHEDULED START : December 1987

SCHEDULED COMPLETION : December 1989

ORIGINAL AND DATE OF OFFICIAL REQUEST : Letter from the Director of Supply to the UNDP Resident Representative dated 14 August 1986.

GOVERNMENT COUNTERPART AGENCY : Department of Supplies, Ministry of Finance and Development Planning

UNIDO CONTRIBUTION : US\$ 537,300

GOVERNMENT CONTRIBUTION :

CURRENCY REQUIRED

FOR UNIDO INPUT : US\$ 537,300

CONVERTIBLE : US\$ 537,300

OTHER :

UNIDO SUBSTANTIVE BACKSTOPPING SECTION : Agro-based Industries Branch

PROGRAMME COMPONENT CODE : J13102

PART B - NARRATIVE

1. OBJECTIVES

The development objective of the project is to improve the Botswana garment industry's ability to meet the local demand for garments. This is in keeping with the country's National Development Plan 1985-91 which emphasizes the importance of developing the manufacturing sector.

The project objective is to strengthen the Department of Supplies of the Ministry of Finance and Development Planning in its role of promoting, coordinating and supporting technically the manufacture of garments by local, indigenous entrepreneurs for the various Government agencies.

2. SPECIAL CONSIDERATIONS

Garment manufacture in Botswana is mostly in the hands of women - both as entrepreneurs and as employees. The project will thus contribute towards the integration of women in industry in the country. It will in particular increase their income and remove some of the major constraints generally faced by women entrepreneurs such as lack of access to raw materials, markets, credit facilities and technology.

3. BACKGROUND AND JUSTIFICATION

The garment industry in Botswana comprises only a few small and medium-size units and only one of these can be regarded as an industrial-size unit with a capacity of up to 10,000 garments per month; for the most part garment making is based on cottage-level operations. Of a total of some 400 garment making enterprises, most of which are owned by women, about 40 are actively engaged in the manufacture of garments for the various government agencies.

While there is a great deal of enthusiasm and effort on the part of the entrepreneurs the technical capability of most leaves much to be desired - not for lack of inherent skill but for lack of technical

knowledge and training. The situation is aggravated by a total absence of sewing equipment maintenance and repair facilities in the country.

The fragmented and disorganized character of production and the great variety of fabric types, colours and styles required for the school uniforms - the biggest single item - result in small and thus uneconomical fabric orders, mostly from South Africa direct or through one dominant wholesale importer, the Small Industry Supply and Marketing Organization (SISMO). In addition, extremely high interest rates cause liquidity problems and low profitability for the small and financially weak entrepreneurs.

The Southern Africa Customs Union (SACU) allows duty-free import of fabrics and accessories from South African sources but in recent months these sources have begun to dry up and long waiting periods and quotas are now commonplace. Overseas sources are clearly outside the reach of practically all individual garment entrepreneurs and, besides, fabric imports from outside the SACU are subject to a 35% customs duty which would make the cost of the end product prohibitive.

In this situation the Government, through the Department of Supplies, intends to pursue a scheme whereby the Department of Supplies would import the fabric in bulk from the cheapest source - China or other Far East countries - and organize and coordinate its conversion into garments for the various Government agencies on a commission manufacturing basis. The Government thus being both the importer and the consumer of the goods the duty is waived.

While the scheme would cover only garments consumed by Government agencies the volume of this sector alone - valued at P 4 million in 1986 (= \$ 2,5 million)\*- would provide an effective stimulant for the garment manufacturing sector as a whole.

\* 1 US\$ = 1,6 Pula (March 87)

To execute this scheme successfully the Department of Supplies must be in a position to determine the fabric requirements accurately, procure these fabrics from the most economical sources and to coordinate and support technically their conversion into garments by selected entrepreneurs. The technical support is especially important if consistent quality - an essential requirement - is to be achieved.

External assistance is needed in the form of specialist advisory services, training programmes and supporting equipment to start the scheme.

#### 4. PROJECT OUTPUTS

A Clothing Unit within the Department of Supplies with a trained staff of 8, capable of

- identifying the exact clothing requirements of the various Government agencies;
- identifying the items that could be manufactured by the local garment industry;
- determining the fabric requirements for these items;
- sourcing and procuring the requisite material and coordinating its conversion into garments;
- providing technical assistance to the manufacturing units executing the orders;
- providing technical assistance to the manufacturing units executing them by running courses in:-

- Garment Production Management
- Pattern Cutting, Grading and Styling
- Quality Control and Inspection
- Production Planning and Control

and short seminars on:-

- Low cost work aids
- Improvement in methods

5. PROJECT ACTIVITIES

A. PREPARATORY PROJECT ACTIVITIES

Before the commencement of the project, certain activities must be completed by the Government in connection with the establishment of the Clothing Unit within the Department of Supplies:

- a) Recruit all necessary local staff (see chapter "institutional infrastructure" for the organisation and Appendix I for suggested qualifications).
- b) Make financial provision for
  - i. Local travel, on a continuing basis, in connection with
    - determination of items to be manufactured;
    - establishing the capacity and capability of each manufacturing unit;
    - providing technical assistance in manufacturing;
    - equipment maintenance and repair.
  - ii. International travel and subsistence in connection with materials procurement.
  - iii. Purchasing of identified materials.
- c) Ensure that adequate and appropriately equipped office, workshop, laboratory and storage space is provided to house the Clothing Unit.



B. PRINCIPAL PROJECT ACTIVITIES

MONTH	ACTIVITY	DURATION IN MAN MONTHS
1	*Fellowship programmes in garment technology and manufacturing for 2 persons. Suggested programme outlined in Appendix II.	20
3	The Chief Technical Adviser (CTA) visits to start up the programme, check that original requirements are still correct.	0.5
6-7	The Chief Technical Adviser (CTA) introduces the in-coming experts, reviews proposed activities and recommends any necessary adjustments.	2
6-7	The Maintenance and Repair (MR) expert will assess the needs of the industry and the selected maintenance staff in order to be able to plan and advise on appropriate fellowship training details	1
7-8	The Materials Purchasing and Procurement (MPP) expert will review the current procurement procedures within the Department and make recommendations for modification or improvement as necessary. He will leave a work plan for local staff to complete before his second visit and arrange a foreign buying mission for his second visit.	1
7-11	The Garment Technology and Manufacturing (GTM) expert will conduct training courses in garment production management, and in pattern cutting. In addition he will provide direct technical assistance to garment manufacturers.	4

MONTH	ACTIVITY	DURATION IN MAN MONTHS
10-11	Equipment should arrive and be installed.	Over 1 or 2 months
■ The fellowship programmes in garment technology will need to start at the beginning of an academic year, i.e. September.		
12-13	CTA will review progress to date, make liaison and assistance visits to customers and factories, and run short seminars on low-cost work aids and production methods and work plan layout.	2
12-14	Fellowship programme for 1 person in quality control and fabric and garment testing. Suggested outline programme in Appendix II.	3
12-16	A 5-month fellowship programme for 2 persons in sewing equipment, maintenance and repair. Suggested programme outlined in Appendix II.	10
12-16	GTM expert will conduct training courses in production planning and control, and quality control and will carry out short consultancy assignments to render direct assistance to manufacturers.	4
13-15	MPP expert accompanies his counterpart on the foreign buying mission and reviews work done.	3
17-20	MR expert assists recently returned maintenance staff in establishing a maintenance and repair facility, making factory visits as required.	3

MONTH	ACTIVITY	DURATION IN MAN MONTHS
17-20	CTA reviews progress and plans activities for the final visit of the GTM expert. He will also conduct more seminars on production methods and provide direct consultancy to manufacturers.	2.5
20-23	GTM expert conducts training courses/activities as identified and arranged by the CTA.	4
21-22	Purchasing and procurement expert returns to assist in further development of the purchasing system	2
23-24	CTA completes final review of progress; completes final project report making any appropriate recommendations to Government and UNIDO. Attends terminal tripartite review meetings.	2
24	Project evaluation and tripartite review meeting.	0.5

The local training courses and seminars, to be conducted by the CTA and the GTM expert, are outlined in Appendix III.

SCHEDULE OF PROJECT INPUTS AND ACTIVITIES

ACTIVITIES	1988				1989												1990							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
MONTHS	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
<u>EXPERTS</u>																								
CTA		0.5				2						2						2.5					2.0	
M & R						1												3						
G.T.M.							4					4							4					
P & P						1						3								2				
<u>FELLOWSHIPS</u>																								
Gmt Mfr					10																			
Gmt Mfr					10																			
Maint												5												
Maint												5												
Quality Control/testing												3												
<u>EQUIPMENT</u>																								
<u>LOCAL TRG PROGS</u>																								
Gmt mgf																								
Patt.Cutt/Styling																								
QC/Testing																								
P.P.C.																								
Low Cost W/Aids Methods/																								
<u>PREP ACTIVITIES</u>																								
<u>PROJ.REV&amp; EVAL</u>																								0.5

6. PROJECT INPUTS

A. Government inputs (Department of Supplies, Ministry of Finance and Development Planning)

a) Premises

Suitable accommodation for offices, testing laboratory, workshop and fabric and garment stores.

b) Clothing unit staff

Recruitment of all national staff (suggested qualifications in Appendix I)

c) Transport

Adequate facilities for all project-related transport of goods and project personnel - including expatriate project staff.

d) Training

Any local training that might be required for the staff of the Clothing Unit. The Department of Supplies will also be responsible for the salaries of fellowship holders while they are undergoing training abroad.

e) Administrative support

The necessary administrative support - including office equipment - to ensure a smooth functioning of the project.

f) Accommodation

Suitable fully furnished housing with a minimum of 3 bedrooms should be provided for the duration of the project - commencing not later than 1 February 1989.

**B. UNIDO inputs**

<u>BL</u>	<u>Input</u>	<u>M/M</u>	<u>Cost(\$)</u>
<u>Personnel</u> (for job descriptions, see Appendix IV)			
11-01	Chief Technical Adviser (CTA)	9	113,300
11-02	Sewing machine maintenance and repair technician 2 split missions	4	43,800
11-03	Garment technology and manufacturing expert 3 split missions	12	122,500
11-04	Materials purchasing and procurement expert 3 split missions (including one foreign buying mission)	6	65,700
15-00	Project travel		6,000
16-12	HQ staff travel (technical review)	0,5	<u>5,000</u>
		Sub-total	356,300
			356,300
<u>Training</u>			
31-00	Fellowships (see Appendix II)	33	90,000
<u>Equipment</u>			
41-00	Expendable equipment		1,080
42-00	Non-expendable equipment (see Appendix V)		77,420
<u>Miscellaneous</u>			
51-00	Sundries (reporting costs and contingencies)		11,880
		Project total	<u>537,300</u>

7. INSTITUTIONAL INFRASTRUCTURE

The Clothing Unit will be part of the Department of Supplies, one of eight Departments in the Ministry of Finance and Development Planning.

The Unit will be a focal point between customers, material suppliers and manufacturers.

It will

- investigate the requirements of potential customers and solicit orders;
- receive garment and fabric specifications from customers, convert these into fabric orders, combining the requirements into larger orders wherever possible;
- make efforts to standardize fabric and garment specifications to the extent possible;
- contact material suppliers world-wide, negotiating the most favourable terms of purchase;
- monitor the processing of orders to ensure timely delivery;
- check the quantity and quality of the materials upon delivery. Laboratory testing of properties such as dye fastness, yarn count, fabric weight, fabric construction and fibre content will be necessary on each lot received;
- place orders to garment manufacturers on the basis of their capacity and capability;
- monitor the execution of the orders;
- check the completed orders against the customers' specifications and, if satisfactory, deliver the goods to the customers.

In addition to the coordinating function described above, the Unit will provide direct technical assistance to the manufacturers.

12,500

This will include

- training courses;
- information on standards of performance;
- information on costing based on proper work measurement;
- advice on garment construction, factory lay-out, organization and equipment;
- sewing machine repair and maintenance service;
- general information on garment industry trends: materials, fashion and equipment.

The above functions of the Clothing Unit are illustrated in the form of a flow chart (diagram 1) on page 13 and the organization of the Unit in diagram 2 on page 14.

8. EVALUATION

An annual performance self-evaluation, plus a terminal evaluation, will be required for this project in accordance with the requirements of UNIDO's internal evaluation system.

9. REPORTS

Quarterly progress reports and an Agency Terminal Report at the completion of the project.



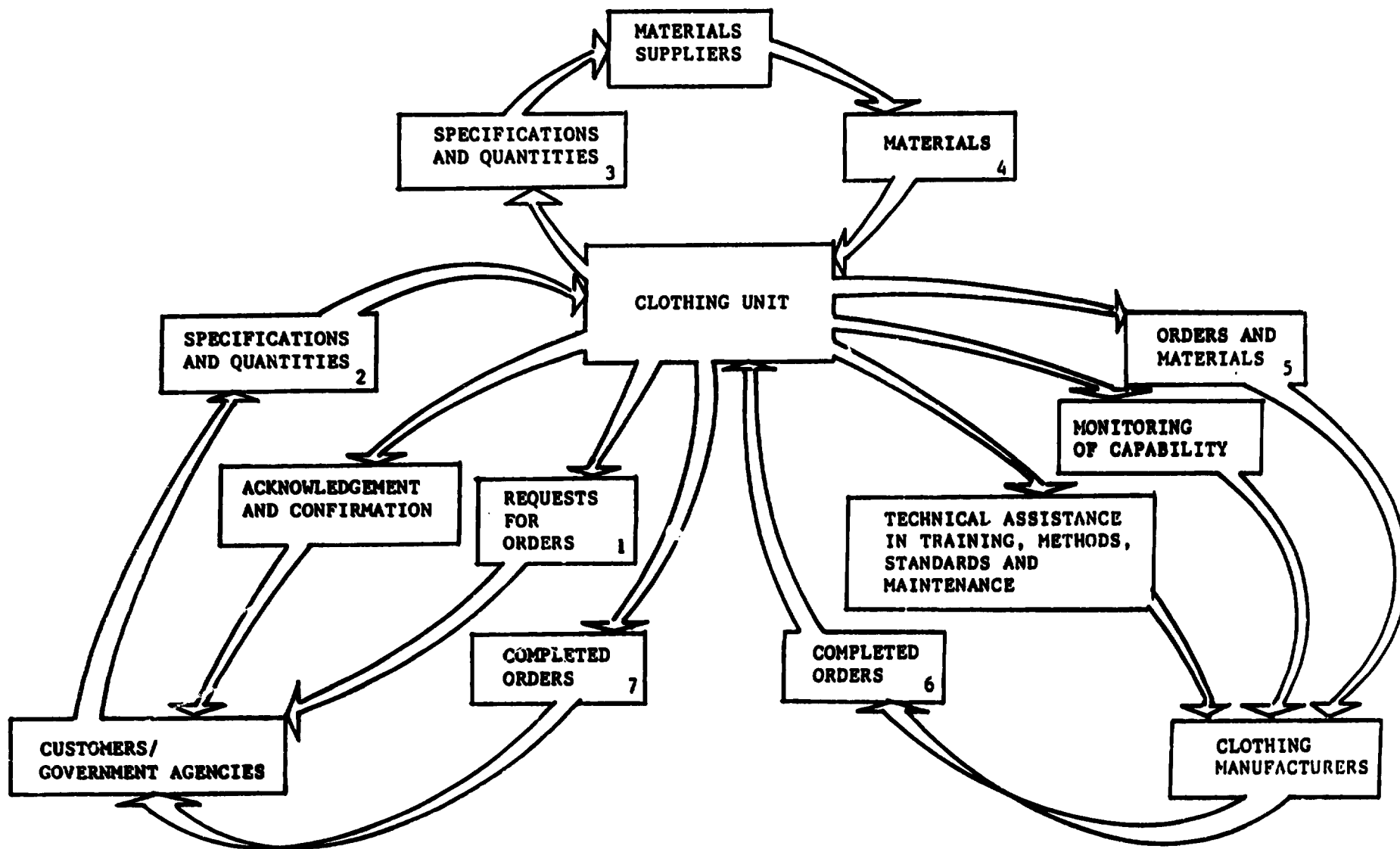
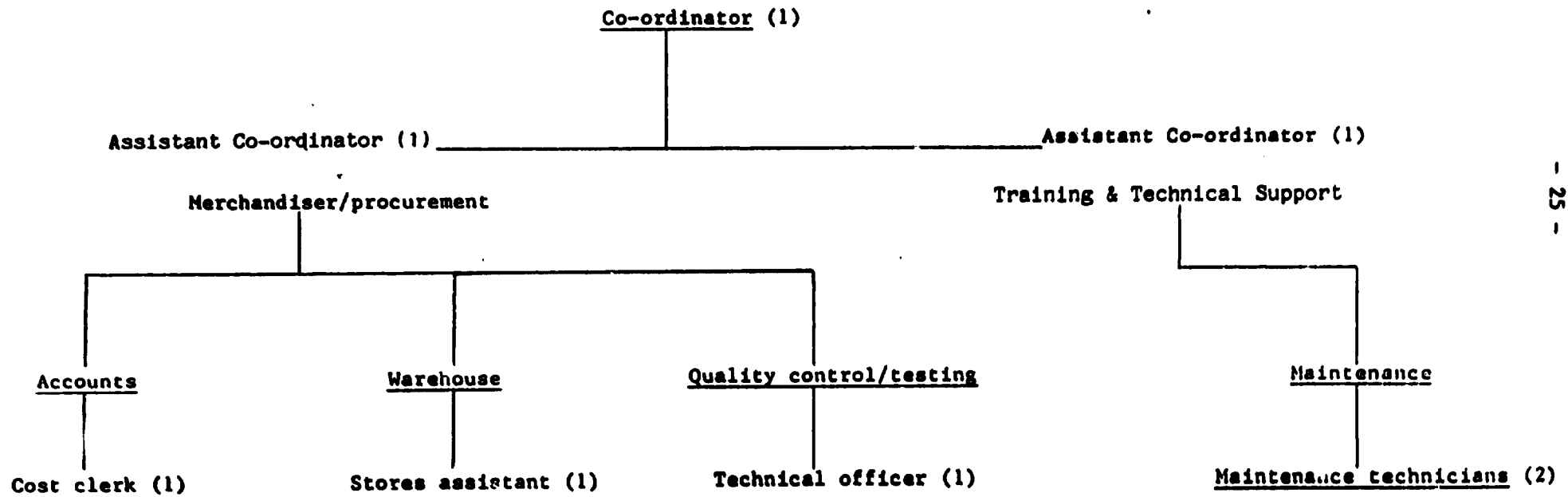


DIAGRAM 1

DIAGRAM 2

ORGANIZATION CHART

CLOTHING UNIT



TOTAL STAFF: 8



## PROJECT BUDGET/REVISION

3. COUNTRY BOTSWANA	4. PROJECT NUMBER AND AMENDMENT US/BOT/87/097 1.	5. SPECIFIC ACTIVITY J 13102
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16. PROJECT TITLE  
ESTABLISHMENT OF A CLOTHING UNIT IN THE DEPARTMENT OF SUPPLIES TO ORGANISE AND TECHNICALLY SUPPORT LOCAL MANUFACTURE OF SCHOOL AND OTHER UNIFORMS.

19. INTERNATIONAL EXPERTS (functional titles required except for line 11-50)	16. TOTAL		17. 1988		18. 1989		19. 1990		20.	
	m/m	\$	m/m	\$	m/m	\$	m/m	\$	m/m	\$
11-01 Chief Technical Adviser	9.0	113,300	0.5	8200	4	49,700	4.5	55,400		
02 Repair/Maintenance Technician	4.0	43,800	-	-	1	12,650	3	31,150		
03 Garment Technologist	12.0	122,500			8	81,666	4	40,834		
04 Purchasing/Procurement Expert	6.0	65,700			4	43,800	2	21,900		
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
11-50 Short term consultants										
11-50 Sub-total - International experts*	31.0	345,300	0.5	8200	17	187,816	13.5	149,284		

21. REMARKS

\* If more than 16 experts are required check here  and attach continuation sheet 1A. This sub-total must include all experts.



UNIDO

## PROJECT BUDGET/REVISION

4. PROJECT NUMBER	16. TOTAL		17. 1988		18. 1989		19. 1990		20.	
	m/m	\$	m/m	\$	m/m	\$	m/m	\$	m/m	\$
US/ROT/87/097										
OPAS EXPERTS (functional titles required)										
12-01 _____										
12-02 _____										
12-03 _____										
12-99 Sub-total—OPAS experts <sup>b</sup>										
ADMINISTRATIVE SUPPORT PERSONNEL										
13-00 Clerks, secretaries, drivers										
13-50 Freelance interpreters (non-UNDP projects)										
13-99 Sub-total—Administrative support personnel										
UN VOLUNTEERS (functional titles required)										
14-01 _____										
14-02 _____										
14-03 _____										
14-04 _____										
14-99 Sub-total—UN Volunteers <sup>b</sup>										
15-00 Project travel		6,000				3,000		3,000		
16-00 Other personnel costs (including UNIDO staff mission costs)		5,000						5,000		
NATIONAL EXPERTS (functional titles required)										
17-01 _____										
17-02 _____										
17-03 _____										
17-04 _____										
17-05 _____										
17-99 Sub-total—National experts <sup>b</sup>										
18-99 TOTAL—PERSONNEL COMPONENT	31.0	356,300	0.5	8,200	17.0	190,816	13.5	157,284		

<sup>b</sup>If additional individual budget lines are required, check here  and attach continuation sheet 1A. These sub-totals must include budget lines listed on page 1A.



UNIDO

## PROJECT BUDGET/REVISION

4. PROJECT NUMBER US/BOT/87/097	16. TOTAL		17. 1988		18. 1989		19. 1990		20.	
	m/m	\$	m/m	\$	m/m	\$	m/m	\$	m/m	\$
<b>SUBCONTRACTS</b>										
21-89 Subcontracts										
<b>TRAINING</b>										
31-89 Individual fellowships	33.0	90,000	7	28,759	26	61,241		-		
32-89 Study tours; UNDP group training										
33-89 In-service training										
34-89 Non-UNDP group training										
35-89 Non-UNDP meetings										
<b>36-89 TOTAL - TRAINING COMPONENT</b>	<b>33.0</b>	<b>90,000</b>	<b>7</b>	<b>28,759</b>	<b>26</b>	<b>61,241</b>				
<b>EQUIPMENT</b>										
41-89 Expendable equipment		1,080		-		1,080				
42-89 Non-expendable equipment		77,420		-		77,420		-		
43-89 Premises										
<b>44-89 TOTAL - EQUIPMENT COMPONENT</b>		<b>78,500</b>		<b>-</b>		<b>78,500</b>		<b>-</b>		
<b>MISCELLANEOUS</b>										
51-89 Sundries		12,500		-		6,250		6,250		
52-89 Hospitality (non-UNDP projects)										
53-89 Support costs (CC and DC projects only)										
<b>54-89 TOTAL - MISCELLANEOUS COMPONENT</b>		<b>12,500</b>		<b>-</b>		<b>6,250</b>		<b>6,250</b>		
<b>SURPLUS/DEFICIT</b>										
81-89 Surplus/Deficit (ADM/FS use only)										
<b>90-89 PROJECT TOTAL</b>	<b>64.0</b>	<b>537,300</b>	<b>7.5</b>	<b>36,959</b>	<b>43.0</b>	<b>336,807</b>	<b>13.5</b>	<b>163,534</b>		
* COST SHARING (UNDP/PPF projects only)										
* NET UNDP CONTRIBUTION										

\* For information only - not for PAD input

APPENDIX I

CLOTHING UNIT STAFF

Qualifications (General guidelines)

1. Co-ordinator (1)

- garment technologist or textile technologist;
- minimum of five years of factory supervision or management experience;
- some knowledge of business management;
- some training experience.

2. Assistant co-ordinator (1)

- garment technologist (competence to be acquired through project's fellowship programme);
- minimum of three years of factory management or business administration experience;
- some training experience.

3. Merchandiser/procurement officer (1)

- garment technologist (competence to be acquired through project's fellowship programme);
- minimum of three years of factory management or business administration.

4. Technical officer, quality control and testing (1)

- textile technologist or technician;
- minimum of two years working experience in a textile testing laboratory.

5. Maintenance technicians (2)

- diploma in mechanical engineering;
- specialization in sewing machine repair and maintenance (competence to be acquired through project's fellowship programme).

6. Cost clerk

The qualifications for this post should meet the normal civil service requirements as applied by the Department of Supplies.

7. Stores assistant

The qualifications for this post should meet the normal civil service requirements as applied by the Department of Supplies.

APPENDIX II

FELLOWSHIP PROGRAMMES

1. Garment technology and manufacture (2)(10 months)

The fellows will

- follow a regular post-graduate course in garment technology course in garment technology covering all aspects of garment manufacture;
- guided by course tutors, visit factories, cloth purchasing agencies, manufacturers of accessories and sewing machine maintenance workshops.

Suggested place of study: Hollins Faculty at the Manchester Polytechnic, UK

estimated fee \$ 5,000 - \$ 6,000/person

2. Sewing machine maintenance (2) (5 months)

The fellows should

- study the repair and maintenance of a wide range of sewing machines, cutting equipment and pressing equipment.  
(the exact details will be determined during the Maintenance and Repair expert's first assignment during month 4).
- visit garment factories and maintenance workshops;
- visit manufacturers of equipment for the garment industry.

Suggested places of study:

i) Trafford Park Skills Centre, Manchester, UK

ii) Hollins Faculty of Manchester Polytechnic, UK

estimated fee at Trafford \$ 5,500/person

" " " Hollins \$ 3,000/person

(Advantage of Trafford: courses are tailor-made and not necessarily linked with an academic year. Scheduling of fellowships thus easier)



3. Quality control and testing (1)(3 months)

The course should cover

- quality control as applied both in the textile industry and in the garment industry;
- testing of fabrics and yarns;
- fabric construction and sewing characteristics of fabrics and yarns;
- visits to fabric and sewing thread manufacturers;
- visits to purchasing agencies to observe quality checking procedures.

Suggested places of study:

- i) Cardonald College, Glasgow, UK
- ii) Shirley Institute, Manchester, UK

estimated fee \$ 5,000

APPENDIX III

TRAINING COURSES (local)

The activities of this project include a number of training courses to be conducted by the expatriate experts. The following notes outline the content of these courses. Further details will be worked out by the CTA during his periodic visits.

1. Garment production management course - duration 4 weeks

Syllabus outline

Quality control  
Construction analysis and flow charts  
Construction improvements  
Equipment selection  
Work aids  
Method study  
Time study (principles only)  
Loss of production  
Factory layout  
Production time balancing  
Production systems  
Payment systems  
Product costing

2. Pattern cutting and grading - duration 4 weeks

Syllabus outline

Basic pattern construction  
Style details - interpretation of drawings  
Grading - size progression  
Size charts  
Design - anatomy:  
- seam arrangement  
- measurements  
- fashions  
- variations  
- fabric limitations

3. Quality control and inspection - duration 5 days

Syllabus outline

Methods/types of Q.C.  
Frequency of inspection/random sampling  
Inspection work aids  
The need for quality  
Pareto Analysis  
Faults analysis  
Training of garment examiners  
Q.C. documentation and controls

4. Production planning and control

Syllabus outline

The need for accurate work measurement  
Use of skills matrices  
Estimating output capacity  
Time balancing  
Calculation of production times  
Control systems  
Factory layout  
Equipment planning  
Use of attachments

In addition, short seminars will be conducted on the subject of:

Low cost work aids and improvements in methods.



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

5 August 1988

PROJECT IN BOTSWANA

**JOB DESCRIPTION**

US/BOT/87/097/11-01/J13102

**Post title** Chief Technical Adviser

**Duration** 9 man-months (1st mission: 0.5 m/m) (4th mission: 2.5 m/m)  
(2nd mission: 2.0 m/m) (5th mission: 2.0 m/m)  
(3rd mission: 2.0 m/m)

**Date required** 1st mission: 5-18.11.88 4th mission: Jan 90  
2nd mission: Feb 89 5th mission: Mid-June 90  
3rd mission: Aug 89

**Duty station** Gaborone, with travel within the country

**Purpose of project** The purpose of the project is to establish a Clothing Unit in the Department of Supplies, Ministry of Finance and Development Planning, and to assist in its initial operation. The Clothing Unit will coordinate and support technically local manufacture of uniforms for schools and various Government agencies.

**Duties** Attached to the Department of Supplies, Ministry of Finance and Development Planning, the incumbent will

- assist the counterpart staff to establish a regular and systematic contact with the garment manufacturers, fabric suppliers, and the customers;
- conduct seminars on work aids, production techniques, factory lay-out and equipment for both his counterpart staff at the Department of Supplies and for garment manufacturers;
- review the garment manufacturing sector in Botswana, assessing its capacity and technological capability relating that to the garment requirements of schools and the various government agencies;

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

- provide direct assistance to garment manufacturers as required;
- develop his counterpart staff's skills in consultancy;
- coordinate all project activities.

**QUALIFICATIONS**

Garment technologist with extensive practical experience in production management, quality control and training of staff.

**LANGUAGE**

English

**BACKGROUND  
INFORMATION**

See separate sheet

**BACKGROUND  
INFORMATION**

The garment industry in Botswana comprises only a few small and medium-size units and only one of these can be regarded as an industrial-size unit with a capacity of up to 10,000 garments per month; for the most part garment making is based on cottage-level operations. Of a total of some 400 garment making enterprises, most of which are owned by women, 40 are actively engaged in the manufacture of garments for the various government agencies.

While there is a great deal of enthusiasm and effort on the part of the entrepreneurs the technical capability of most leaves much to be desired - not for lack of inherent skill but for lack of technical knowledge and training. The situation is aggravated by a total absence of sewing equipment maintenance and repair facilities in the country.

The fragmented and disorganized character of production and the great variety of fabric types, colours and styles required for the school uniforms - the biggest single item - result in small and thus uneconomical fabric orders, mostly from South Africa direct or through one dominant wholesale importer, the Small Industry Supply and Marketing Organization (SISMO). In addition, extremely high interest rates cause liquidity problems and low profitability for the small and financially weak entrepreneurs.

The Southern Africa Customs Union (SACU) allows duty-free import of fabrics and accessories from South African sources but in recent months these sources have begun to dry up and long waiting periods and quotas are now commonplace. Overseas sources are clearly outside the reach of practically all individual garment entrepreneurs and, besides, fabric imports from outside the SACU are subject to a 35% customs duty which would make the cost of the end product prohibitive.

In this situation the Government, through the Department of Supplies, intends to pursue a scheme whereby the Department of Supplies would import the fabric in bulk from the cheapest source - China or other Far East countries - and organize and coordinate its conversion into garments for the various Government agencies on a commission manufacturing basis. The Government thus being both the importer and the consumer of the goods the duty is waived.

While the scheme would cover only garments consumed by Government agencies the volume of this sector alone - valued at P 4 million in 1986 (= \$ 2,5 million) - would provide an effective stimulant for the garment manufacturing sector as a whole.

To execute this scheme successfully the Department of Supplies must be in a position to determine the fabric requirements accurately, procure these fabrics from the most economical sources and to coordinate and support technically their conversion into garments by selected entrepreneurs. The technical support is especially important if consistent quality - an essential requirement - is to be achieved.

External assistance is needed in the form of specialist advisory services, training programmes and supporting equipment to start the scheme.



**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**

6 December 1988

**PROJECT IN BOTSWANA**

**JOB DESCRIPTION**

US/BOT/87/097/11-02/J13102

**Post title** Sewing machine maintenance and repair technician

**Duration** 4 man-months (1st mission: 1.0 m/m)  
(2nd mission: 3.0 m/m)

**Date required** 1st mission: February 1989  
2nd mission: January 1990

**Duty station** Gaborone, with travel within the country

**Purpose of project** The purpose of the project is to establish a Clothing Unit in the Department of Supplies, Ministry of Finance and Development Planning, and to assist in its initial operation. The Clothing Unit will coordinate and support technically local manufacture of uniforms for schools and various Government agencies.

**Duties** Attached to the Department of Supplies, Ministry of Finance and Development Planning, the incumbent will

- assess the garment manufacturers' needs for sewing machine repair and maintenance services;
- outline the operations of a central repair, maintenance, training and advisory facility;
- train his counterparts and provide direct assistance to the industry.

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



**QUALIFICATIONS**

**Sewing machine mechanic with extensive practical industrial experience - including training experience.**

**LANGUAGE**

**English**

**BACKGROUND  
INFORMATION**

**See separate sheet**

**BACKGROUND  
INFORMATION**

The garment industry in Botswana comprises only a few small and medium-size units and only one of these can be regarded as an industrial-size unit with a capacity of up to 10,000 garments per month; for the most part garment making is based on cottage-level operations. Of a total of some 400 garment making enterprises, most of which are owned by women, 40 are actively engaged in the manufacture of garments for the various government agencies.

While there is a great deal of enthusiasm and effort on the part of the entrepreneurs the technical capability of most leaves much to be desired - not for lack of inherent skill but for lack of technical knowledge and training. The situation is aggravated by a total absence of sewing equipment maintenance and repair facilities in the country.

The fragmented and disorganized character of production and the great variety of fabric types, colours and styles required for the school uniforms - the biggest single item - result in small and thus uneconomical fabric orders, mostly from South Africa direct or through one dominant wholesale importer, the Small Industry Supply and Marketing Organization (SISMO). In addition, extremely high interest rates cause liquidity problems and low profitability for the small and financially weak entrepreneurs.

The Southern Africa Customs Union (SACU) allows duty-free import of fabrics and accessories from South African sources but in recent months these sources have begun to dry up and long waiting periods and quotas are now commonplace. Overseas sources are clearly outside the reach of practically all individual garment entrepreneurs and, besides, fabric imports from outside the SACU are subject to a 35% customs duty which would make the cost of the end product prohibitive.

In this situation the Government, through the Department of Supplies, intends to pursue a scheme whereby the Department of Supplies would import the fabric in bulk from the cheapest source - China or other Far East countries - and organize and coordinate its conversion into garments for the various Government agencies on a commission manufacturing basis. The Government thus being both the importer and the consumer of the goods the duty is waived.

While the scheme would cover only garments consumed by Government agencies the volume of this sector alone - valued at P 4 million in 1986 (= \$ 2,5 million) - would provide an effective stimulant for the garment manufacturing sector as a whole.

To execute this scheme successfully, the Department of Supplies must be in a position to determine the fabric requirements accurately, procure these fabrics from the most economical sources and to coordinate and support technically their conversion into garments by selected entrepreneurs. The technical support is especially important if consistent quality - an essential requirement - is to be achieved.

External assistance is needed in the form of specialist advisory services, training programmes and supporting equipment to start the scheme.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

6 December 1988

PROJECT IN BOTSWANA

**JOB DESCRIPTION**

US/BOT/87/097/11-03/J13102

**Post title** Garment technologist

**Duration** 12 man-months (1st mission: 4.0 m/m)  
(2nd mission: 4.0 m/m)  
(3rd mission: 4.0 m/m)

**Date required** 1st mission: March 1989  
2nd mission: August 1989  
3rd mission: March 1990

**Duty station** Gaborone, with travel within the country

**Purpose of project** The purpose of the project is to establish a Clothing Unit in the Department of Supplies, Ministry of Finance and Development Planning, and to assist in its initial operation. The Clothing Unit will coordinate and support technically local manufacture of uniforms for schools and various Government agencies.

**Duties** Attached to the Department of Supplies, Ministry of Finance and Development Planning, the incumbent will

- conduct training courses in
  - garment production management
  - pattern cutting.
  - quality control
  - production planning;
- provide direct assistance to garment manufacturers;
- train his counterparts in garment technology.

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Applications and communications regarding this Job Description should be sent to:

Project Personnel Recruitment Section, Industrial Operations Division  
UNIDO, VIENNA INTERNATIONAL CENTRE, P.O. Box 300, Vienna, Austria

**QUALIFICATIONS**

Garment technologist with extensive practical experience in factory management, quality control, production planning and pattern making. Training experience essential.

**LANGUAGE**

English

**BACKGROUND  
INFORMATION**

See separate sheet

**BACKGROUND  
INFORMATION**

The garment industry in Botswana comprises only a few small and medium-size units and only one of these can be regarded as an industrial-size unit with a capacity of up to 10,000 garments per month; for the most part garment making is based on cottage-level operations. Of a total of some 400 garment making enterprises, most of which are owned by women, 40 are actively engaged in the manufacture of garments for the various government agencies.

While there is a great deal of enthusiasm and effort on the part of the entrepreneurs the technical capability of most leaves much to be desired - not for lack of inherent skill but for lack of technical knowledge and training. The situation is aggravated by a total absence of sewing equipment maintenance and repair facilities in the country.

The fragmented and disorganized character of production and the great variety of fabric types, colours and styles required for the school uniforms - the biggest single item - result in small and thus uneconomical fabric orders, mostly from South Africa direct or through one dominant wholesale importer, the Small Industry Supply and Marketing Organization (SISMO). In addition, extremely high interest rates cause liquidity problems and low profitability for the small and financially weak entrepreneurs.

The Southern Africa Customs Union (SACU) allows duty-free import of fabrics and accessories from South African sources but in recent months these sources have begun to dry up and long waiting periods and quotas are now commonplace. Overseas sources are clearly outside the reach of practically all individual garment entrepreneurs and, besides, fabric imports from outside the SACU are subject to a 35% customs duty which would make the cost of the end product prohibitive.

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While the scheme would cover only garments consumed by Government agencies the volume of this sector alone - valued at P 4 million in 1986 (= \$ 2,5 million) - would provide an effective stimulant for the garment manufacturing sector as a whole.

To execute this scheme successfully, the Department of Supplies must be in a position to determine the fabric requirements accurately, procure these fabrics from the most economical sources and to coordinate and support technically their conversion into garments by selected entrepreneurs. The technical support is especially important if consistent quality - an essential requirement - is to be achieved.

External assistance is needed in the form of specialist advisory services, training programmes and supporting equipment to start the scheme.



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

6 December 1988

PROJECT IN BOTSWANA

**JOB DESCRIPTION**

US/BOT/87/097/11-04/J13102

**Post title** Purchase and procurement expert

**Duration** 6 man-months (1st mission: 1.0 m/m)  
(2nd mission: 3.0 m/m)  
(3rd mission: 2.0 m/m)

**Date required** 1st mission: March 1989  
2nd mission: August 1989  
3rd mission: Mid-April 1990

**Duty station** Gaborone, with travel within the country

**Purpose of project** The purpose of the project is to establish a Clothing Unit in the Department of Supplies, Ministry of Finance and Development Planning, and to assist in its initial operation. The Clothing Unit will coordinate and support technically local manufacture of uniforms for schools and various Government agencies.

**Duties** Attached to the Department of Supplies, Ministry of Finance and Development Planning, the incumbent will

- assist the Clothing Unit of the Department of Supplies in developing its fabric procurement practices;
- plan and participate in an overseas fabric buying mission with his local counterpart;
- train his counterpart.

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



**QUALIFICATIONS**

Textile or garment technologist with additional professional qualifications and experience in material purchasing.

**LANGUAGE**

English

**BACKGROUND  
INFORMATION**

See separate sheet

**BACKGROUND  
INFORMATION**

The garment industry in Botswana comprises only a few small and medium-size units and only one of these can be regarded as an industrial-size unit with a capacity of up to 10,000 garments per month; for the most part garment making is based on cottage-level operations. Of a total of some 400 garment making enterprises, most of which are owned by women, 40 are actively engaged in the manufacture of garments for the various government agencies.

While there is a great deal of enthusiasm and effort on the part of the entrepreneurs the technical capability of most leaves much to be desired - not for lack of inherent skill but for lack of technical knowledge and training. The situation is aggravated by a total absence of sewing equipment maintenance and repair facilities in the country.

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To execute this scheme successfully, the Department of Supplies must be in a position to determine the fabric requirements accurately, procure these fabrics from the most economical sources and to coordinate and support technically their conversion into garments by selected entrepreneurs. The technical support is especially important if consistent quality - an essential requirement - is to be achieved.

External assistance is needed in the form of specialist advisory services, training programmes and supporting equipment to start the scheme.

APPENDIX 7

EQUIPMENT (UNIDO INPUT)

A. NON EXPENDABLE EQUIPMENT

1. LIGHT FASTNESS TESTER (1)

Capable of rapid testing of fabrics to ensure that they have acceptable levels of fastness to light. The equipment should be simple to operate, compact and robust.

Target price \$3,500

2. ABRASION TESTER (1)

Capable of subjecting a number of samples of fabric to rubbing, flexing and abrading in all directions. Used with different abrasives or other fabrics.

Target price \$7,600

3. PILLING TESTER (1)

Capable of testing the surface deterioration of woven or knitted fabrics due to pilling. Should be supplied complete with photographic standards and accessories.

Target price \$3,900

4. YARN TENSION METER (1)

Capable of checking tensions of sewing threads. Should be mechanical with analogue gauge.

Target price \$ 750

5. PIECE GLASSES (4)

Folding, all metal construction with high resolution distortion free lenses to allow detailed inspection of fabric construction. Complete with pointer.

Target price \$ 25 each  
Total \$ 100

6. TENSILE TESTER (1)

For use as both tensile strength tester of various yarns and fabrics; also to test the peel bond strength of fused fabrics. Equipment should be complete with grips, chart recorder and microcomputer.

Target price \$19,000

7. **WASHING MACHINE (1) (Local Purchase)**  
Standard domestic type washing machine capable of carrying out a variety of washing programmes to suit different fabrics. Should incorporate a spin dryer.  
Target price \$ 800
8. **LABORATORY BALANCE (1)**  
For rapid testing of small yarn and cloth samples. The equipment should be in a portable case to allow easy transportation or storage and should incorporate both metric and imperial scales.  
Target price \$ 550
9. **MECHANICS TOOL KITS (2) (Local Purchase)**  
Kits should include a range of spanners, sockets, keys, screwdrivers, pliers/grips/wrenches, hacksaws, hammers, drills and files.  
Target price \$ 250 each  
Total \$ 500
10. **ENGINEERS VICE (2) (Local Purchase)**  
Bench mounted engineers vice with jaws opening to 150 mm.  
Target price \$ 75 each  
Total \$ 150
11. **BENCH GRINDER (1) (Local Purchase)**  
Bench mounted grinder with two grinding wheels (complete with shields) of approx 150 mm diameter.  
Target price \$ 250
12. **PILLAR DRILL (1) (Local Purchase)**  
Bench mounted pillar drill complete with accessories and guards.  
Target price \$ 600
13. **ELECTRIC HAND DRILL (1) (Local Purchase)**  
Dual speed hand drill with 7 mm (3/4ins) chuck. Complete with chuck key carrying case and drills.  
Target price \$ 250

14. **SOLDERING SETS (2) (Local Purchase)**  
Portable electric soldering sets complete with a range of copper bits stand and carrying case.
- |              |             |
|--------------|-------------|
| Target Price | \$ 100 each |
| Total        | \$ 200      |
- \* 15. **LATHE (1)**  
Small bench mounted lathe with 200 mm bed capable of turning small parts.
- |              |         |
|--------------|---------|
| Target price | \$6,000 |
|--------------|---------|
16. **MULTI-METER (2) (Local Purchase)**  
Portable/hand held meters covering AC and DC ranges, for testing of voltages, current and resistances.
- |              |             |
|--------------|-------------|
| Target price | \$ 250 each |
| Total        | \$ 500      |
17. **TACHOMETER (1) (Local Purchase)**  
Capable of accurately measuring linear or rotational speeds between 0 and 20000 r.p.m. Should be of mechanical construction and complete with accessory range of centres and measuring wheels.
- |              |        |
|--------------|--------|
| Target price | \$ 350 |
|--------------|--------|
18. **STOP WATCHES (3)**  
Decimal scale mechanical stop-watches with fly back mechanism.
- |              |             |
|--------------|-------------|
| Target price | \$ 140 each |
| Total        | \$ 420      |
19. **COMPUTER (1)**  
Personal computer (IBM or IBM compatible) with twin disc drive, colour monitor and high speed daisy wheel printer.
- |              |         |
|--------------|---------|
| Target price | \$4,500 |
|--------------|---------|
20. **SEWING DATA SOFTWARE (1)**  
Software package for calculation of standard sewing times - for costing, payment, production planning and control.  
To include training.
- |              |         |
|--------------|---------|
| Target price | \$6,000 |
|--------------|---------|

21. **WHITE BOARD (1)**  
Free standing white board for use with dry-wipe markers.  
Approximate dimensions of writing surface 2000 mm wide  
and 1500 mm high.  
Target price \$ 300
22. **OVERHEAD PROJECTOR (1)**  
Portable O/H projector with prismatic type  
reflecting head, ratchet forms adjustment, dual  
light intensity, complete with acetate roller  
winder and transparency securing studs.  
Equipment should have 3 spare bulbs.  
Target price \$ 750
23. **PROJECTION SCREEN (1)**  
Extending portable screen on tripod base, constructed  
of tear resistant materials. Must be capable of  
tilting at the top.  
Approximate dimensions 2000 mm x 2000 mm.  
Target price \$ 250
24. **VIDEO SYSTEM (1)**  
PAL/VHS Video system comprising:-  
Colour video camera  
26 inch colour monitor/T.V. receiver  
Video cassette rec order/player  
Extension cables for camera and microphone  
Tripod  
Desk microphone  
Target price \$2,500
25. **VIDEO SYSTEM CABINET (1) (Local purchase/manufacture)**  
Cabinet to house/store video monitor, video cassette  
recorder/player, accessories and cassette library.  
Should be wheeled to allow easy positioning.  
Target price \$ 200
26. **VEHICLE (1)**  
4 x 4 wheeled drive 5/6 seat, petrol vehicle  
with large load area at rear.  
Target price \$17,500 CIF.

TOTAL TARGET PRICE \$77,420

- NB. 1. Items 21-25 should be purchased and installed before the first training course runs.  
Item 26 should be purchased and delivered to UNDP office Gaborone by beginning of month 6 (1 February 1989).
2. Tools and equipment marked as "local purchase" are available from Hardware stores in Gaborone and should be purchased by the CTA and Maintenance and Repair Expert during the M & R experts first mission.
- \* 3. Item 15 should not be purchased until late 1989.

B. EXPENDABLE EQUIPMENT

The following items will be required to supplement the furnishings provided under section 6A, Government Inputs (f) Accommodation.

1. REFRIGERATOR (1)

Domestic refrigerator with large freezer compartment.

Target price \$ 520

2. KITCHEN UTENSILS

Selection of crockery, glassware, cutlery and cooking utensils.

Target price \$ 280

3. HOUSEHOLD LINEN

Selection of sheets, pillowcases, towels, kitchen cloths, curtains etc.

Target price \$ 280

TOTAL TARGET PRICE \$1,080

TOTAL EQUIPMENT TARGET PRICE \$78,500



TELEPHONE: 51221 & 2

TELEX: 2548 80

REFERENCE:

DS/S/11 III (27)

DS/R/10



REPUBLIC OF BOTSWANA

DIRECTOR OF SUPPLY

DEPARTMENT OF SUPPLY

P.O. Box 87

GABORONE

BOTSWANA

14th August, 1986

United Nations Development Programme,  
(UNPD)  
P O Box 54,  
Barclays Bank Buildings,  
(The Mall)  
GABORONE

(Att: Neils Maageard)

Dear Sir,

UNIFORM PRODUCTION ON CUT, MAKE AND TRIM (CMT)

In order : to reduce economic dependence on neighbouring states; Republic of South Africa in particular, to promote local industry and stimulate the spirit of self reliance and self sufficiency;

: to generate and enhance employment opportunities in this country, government has decided to set up a Uniform Coordination Unit within the Directorate of Supply of the Ministry of Finance & Development Planning. The primary functions of this unit are, among others :

- to implement the scheme of CMT by importing fabrics and textiles from abroad (the market has been discovered in the Far East and Malawi,) keeping it in the warehouses of the Department, distributing it to qualified identified local producers; both small and medium scales entrepreneurs to manufacture and produce items of uniform for consumption by government departments in the short term and hopefully even by the local Primary Schools and other sectors of the community in the long term
- to develop the available skill and workmanship of the potential uniform and garment producers in the whole country
- to guide the producers, advise and train them on the technological discipline of uniform and garment production
- to develop their management skill to facilitate prompt and responsive production and delivery.

cont ....

The size of this unit has not been determined. Similarly, in the absence of suitably qualified personnel in this country, because the relevant professional input is wanting, it was eventually decided to employ a consultancy to conduct a preliminary feasibility study, report his recommendations to Government of Botswana for digestion and possibly adoption and implementation. This report is expected to cover a very wide ground including the staff complement of the unit, status and grading of the unit, required professional qualifications of the unit and modus operandi.

The consultant arrived in Botswana, from a company of consultants P.E. Consulting Services of U.K. on 7th July, 1986. He has already commenced his assignment. He is Arnold Harworth C. Text., FII., FS., CA., M. Inst. M. Garment Procurement and Production Advisor. He has conducted similar consultancies in various countries both in this continent and in various overseas countries.

The decision to engage a consultancy was taken in 1984. In the same year, a tender was openly and internationally advertised to this effect. The response was poor. Shirley Institute, again of the United Kingdom recommended a certain Mr Bastow who all of a sudden, declined the offer just before he took off. Their second choice was a Justice Blum who arrived and suddenly returned because he fell ill on the way. The tender was thus re-advertised and Canadians expressed enthusiasm to appoint a consultant. A Mr Bowers was selected who, as if it was the trend, turned down the offer on the eleventh hour on account of alleged domestic handicaps.

The Canadians enthusiastically and expeditiously attempted to find his replacement but we had already lost a considerable length of time hence we could not wait any longer. Thus the Canadian Pat Group Consultancies fell off and P.E. Consulting Services (Overseas) Ltd of United Kingdom appointed Arnold Harworth.

During the course of our expectation of the arrival of Arnold Harworth, when a confirmation was already in hand, then coincidentally emerged a Mr Isaken of UNIDO who assured us of their gratis technical assistance in this respect. Although we were highly impressed not only by the benefaction of UNIDO but also by their capabilities and expertise in this area, we were already committed to P.E. Consulting Services. Nonetheless, because UNIDO solemnly assured us of technical assistance at any time when it was needed, even during or after the consultancy, to me it would be unwise and folly to decline or ignore such a noble and gracious opportunity.

The purpose of this memorandum is therefore to endorse in certain terms this departments dire desire to utilize the services offered. UNIDO have benignantly volunteered to assist us both technically and financially in achieving this national and noble objective.

...

The terms of reference are enclosed to facilitate a clear and meticulous understanding and appreciation of the project.

cont ....

... In summary and to recapitulate, the steps tabulated on page 2 of Mr Esaksens scenario of our conversation is correct and accurate. The report is enclosed for the benefit of the Permanent Secretary of Finance and Development Planning.

With regard to training, there are numerous potential training institutes willing to develop members of the Uniform Coordination Unit (approximately a minimum of six is envisaged to coordinate the entrepreneurship of the whole country) as well as, in varying instances, the entrepreneurs themselves. Seroes of Zambia have most graciously offered to instruct six of these entrepreneurs at a time. Arrangements are in progress to select and send the first six hopefully before the end of this year. It is the intention of the department to send a few more droves of six potential and progressive entrepreneurs in the subsequent years.

As far as training of the Uniform Coordination Unit staff is concerned, I am apprised of several enthusiastic institutes. These could be available in the United Kingdom, where the consultant comes, Canada, India and Geneva through the benefaction of UNIDO. Many others can be approached.

In pursuance of my discussion with Mr Esaksen on this important project, both Mr Neils Maagaard, a Programme Producer of UNDP and Mr William Miller currently seconded to the Ministry of Commerce and Industry (who accompanied the Programme Producer unofficially) came to see me twice to resurrect the discussion.

My department is enthusiastically willing to progress and proceed with these overtures for the purpose of prompt defacto implementation of the project which, in my view, is long overdue. I fully support and confirm that the paper produced by Mr Esaksen represents a true and correct record of our discussion held in my office in June this year. The report of the consultancy shall be made available to UNIDO.

Yours faithfully,



P M MOKGOSANA  
Director of Supply

cc: Director of Personnel  
Permanent Secretary, Ministry  
of Finance & Development Planning