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

US/BOT/90/151/11-03
(formerly US/BOT/87/097)

BOTSWANA

Technical report: Assistance in garment
manufacture*

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

Based on the work of C. Whitehouse
Garment technologist

Backstopping officer: J.P. Moll,
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* This document has not been edited.

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	4
2. FACTORY VISITS	5
3. QUALITY CONTROL	6
4. WORKSHOPS	7
5. EQUIPMENT	8
6. CONCLUSIONS	9

ABBREVIATIONS

CTA	CHIEF TECHNICAL ADVISER
UNDP	UNITED NATIONS DEVELOPMENT PROGRAMME
GEM	GARMENT TECHNOLOGIST/MANAGEMENT
P&P	PURCHASING AND PROCUREMENT
M&R	MAINTENANCE AND REPAIR
U.K.	UNITED KINGDOM
CV	CURRICULUM VITAE
UNIDO	UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANISATION
EDF	BOTSWANA DEFENCE FORCE
BEDU	BOTSWANA ENTERPRISE DEVELOPMENT UNIT
BRIDEC	BRIGADES DEVELOPMENT CENTRE
UB	UNIVERSITY OF BOTSWANA

Exchange rates;

During the period of the mission, January and February 1991
the following exchange rates prevailed.

US\$1 = P1.85

1. INTRODUCTION

The purpose of this mission was to continue the technological help and assistance in garment manufacture within the newly established clothing unit of the Department of Supplies, Ministry of Finance and Development Planning. The objective of the unit is to coordinate and support technically, local manufacture of uniforms for various government agencies. Attached to the Department of Supplies, the Garment Technologist was to;

- devise and conduct training courses in
 - garment production management
 - pattern cutting and grading
 - quality control
 - production planning
- provide direct assistance to garment manufacturers
- train his counterparts in garment technology
- assist in the selection of candidates for sewing machine technician fellowships
- preparation of a final mission report

This report sets out the activities completed and the results achieved during the mission.

2. FACTORY VISITS

The factory visits continued during this eighth mission although this time the main emphasis was on workshops. One of the main visits, at the request of Mr Dimbo, Director South, was to the areas around Tshabong and Ghanzi where the new warehouses are sited. The visit was made with Miss Kwasi the Assistant Director of Uniforms to try to identify any local manufacturers which the department could use as future suppliers. We did see quite a number of small entrepreneurs who after some training could possibly be used to manufacture some of the less intricate items such as aprons, dusters etc. However I must emphasise that they should attend some of the same courses that have been running in Gaborone and Francistown before they are issued with any contracts. There is certainly a nucleus of willing entrepreneurs and there is a very good chance that the Department of Supply could be the catalyst to promoting quite a large number of jobs in the rural areas. The first part of this project would have to start with some of the counterparts going to somewhere like Ghanzi and holding first of all a three week basic pattern course followed by a two day quality control course. During the running of these courses it soon becomes evident to the counterpart which of the participants is going to have the ability and knowledge to make items for the Department to the present strict specifications.

We also made several visits to Alvic and Franka which are two perfect examples of how to use project information. Franka sends people on the courses and uses their newfound knowledge when they return and is now expanding in terms of people and market share and have recently opened a new factory. Alvic send quite a number of people on the workshops, probably more than any other company, but wont let them use any of the new systems or techniques when they return to the factory. Alvic are now struggling badly.

3. QUALITY CONTROL

The general quality of garments being delivered to the warehouses is definitely improving but there is still some way to go. The correct system of manufacture is as follows;

- a supplier is awarded the contract for an item
- they are given a sample of the item
- they are given a typed specification
- they are given a size chart
- they then produce a sample from the correct fabric
- the sample is then stamped ,or sealed, by the end user
- the sample is then stamped by the department
- the supplier can then, and only then, start to cut the fabric

The uniform section is now in a position to adhere to all of the above principles and should never under any circumstances miss out any of the recommended steps. The counterparts do understand more and more what to look for in a garment and how to advise the manufacturers to improve their quality standards. However there should be more visits made to the factories and quality checks carried out and recorded only then can we get a true picture of what is happening statistically. When a company is in production on department contracts they should be visited at least once per week as during the course of a week quite a lot of garments can be finished whereas an early check could save everyone a lot of time and money.

The department must now insist that all manufacturers follow the specification exactly if they wish to change the way that any part of the garment is sewn, for instance using a different type of machine, they must have written permission from the department.

4. WORKSHOPS.

During this eight week period we have completed four seperate workshops totalling 162 student days bringing the total for the project to 1522. A new course has been introduced this session on basic workstudy which will complement the production planning workshop. All the courses were held at the Department of Supply in Gaborone West. We are experiencing some difficulty on the work study/method study course as we still have only three stop watches, we have managed to borrow three more but when there are up to ten students it means someone is always waiting for instruction

The workshops are still going well with good attendance, by the time the project finishes in August 1991 all of the counterparts should have had enough experience to be able to go to Maun, Gantzi etc to run courses on their own. Having visited some of the rural areas and met a number of small entrepreneurs I know there is a big demand for some training and should arouse a great deal of interest. These small entrepreneurs in the rural areas will need more assistance and "hands on" help than the factories in Gaborone. It will not be enough only to run courses for them they will need a lot of technical back-up particularly on patterns and quality control.

There is still a strong demand for all workshops with the pattern making one the most popular of all.

Now that we are getting near the end of the project I would like to make the following recommendations as to which counterpart should run which course;

Gaolatlhe Dichabeng	Production planning and Work study
Beryl Phala	Basic and advanced pattern making
Nkwedi Ramalebang	Improving productivity and Supervisor training
Montsamaisa Ramahobo	Quality control

5 EQUIPMENT.

The new equipment recommended for the extension has now arrived with the exception of the the small amount of tools for the mechanics. The photocopier is already being put to good use and is giving us good clear copies for the workshops, it takes about one tenth of the time than it did previously to prepare a course. The word processor has been installed and some training given to two members of the section but it will take some time before it reaches its full potential. The facsimile machine is here but we are still waiting for a dedicated telephone line for it. All of the other equipment is in full working order and is in daily use.

We are still awaiting delivery of ten stop watches, as mentioned earlier it does give us a problem when trying to run the method study/work study course.

The books for the technical library have not arrived yet we would like to have them as soon as possible so some instruction can be given in there use.

We have a problem with the programme of the fabric strength testing machine which we think could be caused by electrical storms. To avoid this problem we have recommended that two surge boxes be installed one for the fabric testing machine and one for the word processor which should protect them.

Very good use is now being made of the video equipment in particular on the method study/work study workshop. It would be quite difficult to take ten or so students into a factory situation to practise using a stop watch it is much easier using the video. A tape has also been made now of the basic machine maintenance course and is available for use.

6. CONCLUSIONS.

During this eighth visit we successfully completed the planned work schedule. During the mission we have had full cooperation from all of the Department of Supply staff and the personnel in the factories.

The quality control programme is doing very well and there is a marked improvement in the standard of work now being delivered. However, as mentioned before in another report, I still do not think that enough visits are being made by the uniform unit staff to check quality levels with the suppliers. Five members of the unit are due shortly to go overseas for further training which will leave the unit very short of people to do any checking at all. Further very shortly the suppliers will be starting a sample run for the last major client department and I think that putting these two facts together makes it even more important.

The main emphasis on this mission has been on the running of workshops but some factory visits have taken place notably to Selebi-phikwe and the local factories.

A new course on method study and work study has been put into the workshop programme, so far two courses have been run and have been quite successful, it is a natural follow-on to the production planning course.

The suppliers are about to start the new sample contract which I believe the chosen suppliers have the ability to produce to the correct specification both in make-up and quality. When this has been successfully delivered negotiations should start for the manufacture of the large blue/grey uniform contract.

Some of the suppliers are really taking to heart what they are learning on the various courses to the extent that one supplier is using a pattern record book which follows the life of a pattern through cutting, grading and any alterations which is something that all factories should do but in practice don't.