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# ESTABLISHMENT OF A KNITWEAR FACTORY IN LOBATSE

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BOTSWANA

Technical report: Wool knitwear\*
(Second visit)

Prepared for the Government of Botswana

by the United Nations Industrial Development Organization,

acting as executing agency for the United Nations Development Programme

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<sup>\*</sup>This document has not been edited.

# INTRODUCTION

The consultant arrived in Botswana on 2 August 1989 and the design programme was completed on 13 September.

A work plan was drawn up on arrival with the factory manager and the following report outlines the application of this work plan and the consultant's views on some aspects of the project, particularly relating to design. Some recommendations for improvements are put forward.

# STAFF SKILLS

A very close working relationship was established with make-up staff, knitting area staff and the knitting mechanic.

Satisfaction must be expressed with the standard of workmanship in the factory. This was commented upon in last year's report and at that point in time it was stated that in some areas, most notably the make-up, existing skills are as good as would be expected in Europe. However, now it was noted that the level of competence in the knitting area both by the machine operators and in particular the knitting mechanic has improved considerably. The knitting mechanic is now quite capable of interpreting designs from sketches and in processing samples through the production unit. The quality and workmanship is now good throughout the mill. The standard is good enough to present to any market.

Improvements in productivity should come with an increase in order levels and a bonus scheme. It may be advisable in a review of equipment to purchase a

bartacking machine as this would improve productivity in the finishing area. It is desirable to look at present capacity available in the area of Intarsia as it is probably inadequate to meet potential market requirements. This would need to be re-examined after the market response to the new range.

## YARNS:

The knitwear project has experienced difficulties in acquiring deliveries of wool from the spinning mill due to present reorganizational problems within Tiro Ya Diatla and has to consider potential long term developments. It is not intended here to comment on those difficulties but to concentrate on yarn qualities.

#### A. Corriedale

The normal Corriedale wool has got a soft handle even through colours. This is desirable as a market requirement and also from a consumer point of view. However, caution has to be observed because this softness, as so often happens, can also be to the detriment of the functional aspects of the finished garment, leading to pilling during wear. It is recommended not to subject most of the corriedale garments to a milling process. Milling may adversely affect the surface appearance, stitch definition, and even colour. In accordance with fashion trends for 1990/91 a new colour range was worked out and a programme for dyeing agreed.

#### B. Theed

Tweed yarn from U.K. was introduced last year. This tied in well with the Intarsia range. New shade cards were obtained and a programme for its use developed.

### C. Cotton

Since the factory had established itself in Southern African markets and requests had been made for cotton it was decided to include a small programme for this market. A consignment of natural cotton was purchased. It was planned to use small quantities of coloured yans for highlight effects.

### D. Acrylic

It was considered that the company might, at least in the initial stages, have to concentrate on Southern African markets. In this position it would probably be drawn into acrylics in some form or other. According to local requirements a small programme of acrylics was considered.

### WORK UNDERTAKEN

A comprehensive design collection was worked out. In all 30 garments were put into the Autumn/Winter 1990/91 collection in wool. Colour swatches were developed for all these. Also 4 styles were developed for cotton and 3 for acrylic. The garment range included men's and ladies' styles, round and v-neck sweaters, cardigans, lumber jackets, and jackets. Specifications were presented for each style. All these covered different areas:

#### a) Basics

Present basic styles were updated and new stitches and styles added.

## b) Intarsia

Mainly tweed was used in this group.

# c) Intarsia/stitch

This look was introduced successfully last season and developed further this season. These styles were developed by combining the knitting of both existing machine types (i.e. Immea v-bed 3G/Protti Intarsia) together with special linking techniques to provide not only garment of high technical input but also with aesthetic appeal. This again was expertly done by the staff.

## d) Ethnic

Ethnic look is very much part of present fashion trends. A group of styles were developed to provide a local ethnic look, but also one that would tie in with international fashion requirements.

There was a concentration by the consultant producing a range of garments for Autumn/Winter 1990/91.

This was processed by interpreting international fashion trends to the particular equipment used by Tiro Ya Diatla. This is in line with the recommendations of the feasibility study. The groups of designs worked on, as shown in the attached sketches, were deliberate in covering the different aspects of expected trends. The combination of Intarsia and structured effects, most notably in combination were not only done to exploit technical advantages of the project but more importantly to translate fashion trends.

Some pasic styles were included as these had been lacking already particularly in the area of Intarsia.

The Intarsia equipment had previously been underutilized. However, now with the imminent arrival of Tweed wool from the U.K., large strides may be expected in this area, with possible further investment required.

Swatches and garment specifications were drawn up and a future design plan was discussed with the factory manager.

### CONCLUSIONS AND RECOMMENDATIONS

The project has excellent potential. Standards have improved throughout the mill and the factory is capable of producing goods to international market standards.

Increases of productivity can be expected with higher order levels and productivity schemes including the introduction of extra equipment.

Caution must be expressed about the quality of th Corriedale wool. Although it has the softness required by the market it may be prone to pilling. For most of the Corriedale styles developed it is not recommended to mill.

A comprehensive range of products was developed and provided price is right should be easily marketable. The range is probably at least twice that what would be expected from this size of company. However, until market penetration is established it is desirable to offer an extended range as now presented. Also there is a lot which could be built upon for future seasons.

International design consultancy plan for future years requires to be addressed. This is not something which can be quickly localised.

Increases of productivity can be expected with higher order levels and productivity schemes including the introduction of extra equipment.

It is only when a major international marketing exercise is undertaken, and orders secured, that the company can realize its full potential.











