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PRESENT STATUS AND FUTURE PLANS OF THE  
DEVELOPMENT OF THE SYNTHETIC FIBRE INDUSTRY  
IN JAMAICA 1/

by

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## THE DEVELOPMENT OF THE SYNTHETIC FIBRE INDUSTRY IN JAMAICA

### I Historical Background:

The Synthetic Fibre Industry in Jamaica has grown steadily over the past fifteen years.

There are presently no local manufacturing facilities for man-made fibres but facilities exist for weaving polyester blends and for knitting and printing synthetic materials.

The earliest application of synthetic yarn was in the manufacture of hosiery. In the case of the leading Hosiery Company, production of men's socks has increased as follows:-

<u>1967</u>	<u>1975</u>
485,784 prs/year	686,400 prs/year

However, the production of ladies' hosiery has remained static from 1967 until the present time at 998,400 prs/year, due to the small demand for this commodity, even though the plant is capable of producing approximately 2.8 million pairs per year.

Over the past eight years, a number of factories have been involved in the printing of synthetic fabrics. Together, these factories are producing in excess of 630,000 yards of printed material per year.

There are three local manufacturers of synthetic fabrics. One of these factories has been in operation since 1973 and another started operations in September, 1974.

The former, manufactures Texturized Polyester, Texturized Nylon and Nylon Tricot.

Production figures for these synthetic materials over the past two and a half years were:-

<u>1973</u>	<u>1974</u>	<u>January-July 1975</u>
960,000 yds.	1,200,000 yds.	800,000 yds.

The other manufacturing company has produced 260,000 yards of Texturized Polyester Double Knits between September, 1974 and July, 1975.

The third factory is involved in the manufacture of polypropylene fabric and the dyeing and finishing of 65% Polyester and 35% cotton blends. Polypropylene fabric has been manufactured by this company since 1963 when 60,000 yards were produced. Production between 1964

and 1974 was between 100,000 and 120,000 yards per year and the projection for 1975 is 300,000 yards.

Other applications for synthetic fibres in Jamaica, are in the manufacture of carpets and polypropylene bags and ropes.

The following are the current production figures for these industries:

<u>Bags</u>	<u>Cordage</u>	<u>Carpets</u>
300,000 bags/year	75 tons/year	4.6 million sq.yds/year

**II Present Status and Future Prospects.**

**a) Hosiery Industry:**

Circular knitting of nylon hosiery is carried out by three manufacturing companies. One of these companies has recently begun knitting Orion Acrylic socks.

Together, these factories have a plant capacity of 6.3 million pairs per year, (based on a 6 day work week and 24 hours per day operation) whereas actual production is 3.4 million pairs per year.

Approximately 1.4 million dollars has been invested in this industry and all existing factories are privately owned.

One of these companies is licensed to Berkshire, U. S. A. for the production of Berkshire panty hose. No other products are manufactured under licenses to foreign companies.

In some cases, dyed yarn is imported and knitted but in the majority of cases the yarn is dyed locally.

Two of the three hosiery companies have no immediate plans for expansion or diversification, but the third has plans for increasing production.

Raw materials for this industry are obtained from the U. S. A., U. K., Canada, France, Italy, Germany, Switzerland and Guatemala.

Apart from during the recent oil crisis, no problems have been encountered in obtaining these raw materials.

**b) Textile Industry:**

Facilities exist for spinning, weaving, circular and warp knitting, dyeing and finishing synthetic materials.

The three factories which presently carry out varying stages of these processes, have a total capacity of 6.3 million yards per year (based on a 6 day work week and 24 hours per day operation).

However, present production is approximately 3.5 million yards per year.

Heat Transfer and Silk Screen Printing are carried out by five companies on polyester, polyester blends, nylon, acetate, terrylone and fibreglass. Together, these factories have a total plant capacity of approximately 7 million yards per year, (based on a 6 day work week and 24 hours per day operation) however, actual production figures total approximately 0.7 million yards per year.

Approximately 3.7 million dollars has been invested in the Synthetic Textile Industry in Jamaica. Seven of the abovementioned factories are privately owned, whereas the eighth is partly owned by the Jamaican Government. None of these factories have licensing arrangements with overseas firms.

Within the synthetic textile industry, the only plans for expansion are with respect to increased production.

With regard to diversification, plans include weaving, finishing and printing of synthetic fabrics by more factories, dyeing of yarn, weaving wider polyester/cotton looms for the manufacture of sheeting material, production of towelling material, production of paper for transfer printing and manufacture of garments from printed fabrics. Raw materials for this industry are obtained locally in the case of fabrics for printing as well as from the U. S. A., Mexico, Canada, U. K., Germany, Belgium and Japan. Dyes are obtained mainly from Germany, Switzerland and the United States of America. Problems are sometimes encountered with delivery of these raw materials.

c) Bags and Cordage:

One Jamaican Company produces woven polypropylene bags as well as polypropylene tape for the manufacture of cordage.

This plant has a capacity of 180 tons per year, (based on a 7 day work week and 24 hours per day operation) for producing tape to be used in the manufacture of bags and cordage.

The plant capacity for the production of woven bags is 2 million bags per year (based on the above operating time). Actual production however, is in the region of half a million bags per year.

Approximately 1 million dollars has been invested in this plant which is privately owned and is not operating under license to any foreign company.

Raw materials are obtained from the U.S.A. and U. K. and so far no problems have been encountered in obtaining these except during the recent oil crisis.

Another manufacturing company produces Cordage at the rate of 75 tons per year whereas the existing plant capacity is 1,200 tons per year, (based on a 7 day work week and 24 hours per day operation).

Approximately half a million dollars has been invested in this company which is privately owned and does not operate under licenses to any foreign company.

Raw materials are obtained from Jamaica Bags Limited and no problems have been encountered in obtaining these.

Neither of the above two factories have immediate plans for expansion or diversification.

#### d) Carpet Industry:

There is presently one local company, which is 4½ years old, producing carpets. Nylon, Olefin fibre and a small amount of polypropylene are used for the manufacture of carpets.

This plant has a capacity of 10.7 million square yards per year (based on a 6 day work week and 24 hours per day operation) and operates under license to an American Company. Plans for expansion and diversification are to increase production and to manufacture household rugs.

Raw materials are obtained from the U. S. A. and problems in obtaining these were experienced only during the recent oil crisis.

#### III Demand:

In Jamaica, the demand for synthetic fabrics has increased steadily over the past few years and this demand is expected to increase further.

The major end uses of synthetic fabrics are for the manufacture of clothing; utility products such as sheets, bedspreads, table cloths and napkins; curtains; underwear; upholstery for furniture and polypropylene fibre cloth for the Bauxite Industry.

The reason for the increased demand for synthetics appears to be the greater ease with which these fabrics may be cared, for example they often require no ironing.

However, the demand for fabrics made from natural fibres, for example cotton, is still in excess of the demand for synthetics.

This is probably due to the fact that cotton is more suitable for clothing in Jamaica as this material has a higher air permeability,

which is essential for the warm Jamaican climate.

Import figures for cotton and synthetics in 1973 and 1974 are as follows:-

<u>1973</u>	<u>1974</u>
Cotton (Unavailable)	19,398,457 sq. yds.
Synthetics 529,566 sq. yds.	1,645,454 sq. yds.
Valued at \$400,917	Valued at \$1,068,925.

**IV Infrastructure for Synthetic Fibre Industry:**

Facilities exist for technical research and development in the area of synthetic fibres at the Jamaica Scientific Research Council, but so far no work has been done in this area. Industrial research is carried out by the Jamaica Industrial Development Corporation in the form of industrial surveys and feasibility studies.

Technical Service is provided by the Bureau of Standards even though the Bureau's main function is that of preparing Jamaican Standards. In keeping with another function of the Bureau, which is to maintain high standards for products which are manufactured locally, regular sampling and testing of the products from the various industries listed in Section II, is carried out. Facilities exist for both physical and chemical testing of these products, at the Bureau.

Within the synthetic fibre industry, only six factories carry out any form of quality control apart from visual examination and this is carried out on a very small scale.

The general level of technical capability throughout the industry is relatively low as there is lack of trained personnel in many areas and a need for already trained personnel to be kept abreast of recent developments by means of refresher courses.

**V Problems and Needs for Technical Assistance:**

The major problems being experienced by the synthetic fibre industry in Jamaica have been identified as follows:-

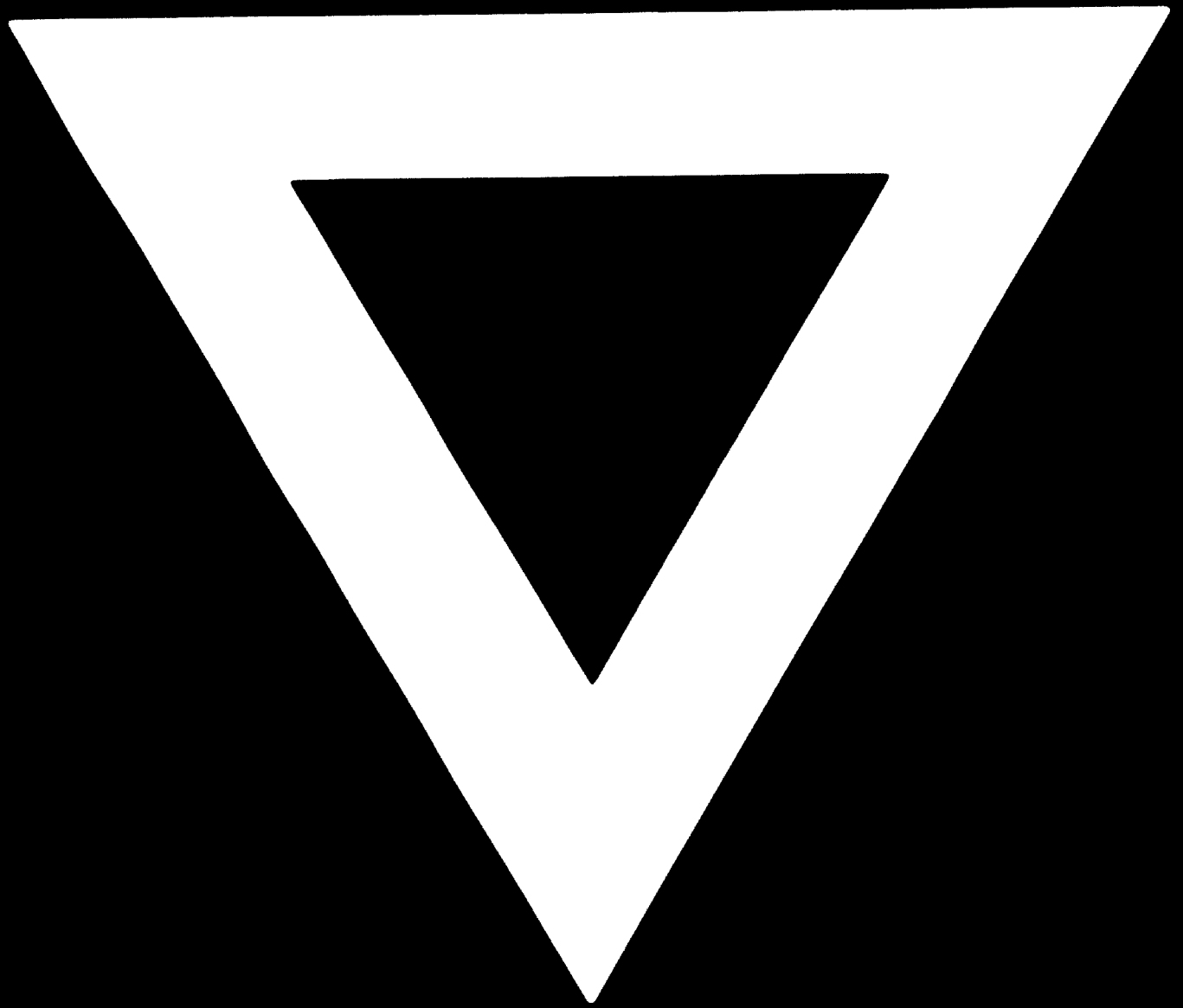
- a) Lack of technically trained personnel;
- b) Having to import a high percentage of the raw materials needed, for example, in the case of the textile industry where large amounts of fabric are imported for printing and finishing - Here there is need for local production of these knitted fabrics on a larger scale.
- c) Problems of a technical nature;



- d) Inadequate utilization of existing manufacturing plant capacity;
- e) Inadequate supply of certain public utilities e.g. water and electricity.

UNIDO assistance in any of the above areas would be most beneficial as would be help in establishing new product lines, providing expertise in the various industries which utilize synthetic fibres and providing information on modern manufacturing techniques.





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