



**TOGETHER**  
*for a sustainable future*

## OCCASION

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



**TOGETHER**  
*for a sustainable future*

## DISCLAIMER

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as “developed”, “industrialized” and “developing” are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

## FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

## CONTACT

Please contact [publications@unido.org](mailto:publications@unido.org) for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at [www.unido.org](http://www.unido.org)



05627

Distr.  
LIMITEDID/WG.483/5  
18 July 1974

United Nations Industrial Development Organization

ORIGINAL: ENGLISH

Seminar on Furniture  
and Joinery Industries

Lahti, Finland

29 July - 17 August 1974

THE FURNITURE AND JOINERY INDUSTRIES IN MAURITIUS 1/

by

A. Ganny Joonas \*  
Gaston Clarenc \*\*  
A. Rashid Jackaria \*\*\*

\* Joonas Industries Limited, Port Louis, Mauritius.

\*\* Noel Furniture Limited, Les Pailles, Mauritius.

\*\*\* A.R. Jackaria, Port Louis, Mauritius

1/ The views and opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the secretariat of UNIDO. This document has been reproduced without formal editing.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

## Introduction

The island of Mauritius is situated in the South Indian Ocean and is about 1250 miles from the African mainland and 550 miles from the east coast of Madagascar. The area of Mauritius, including the small islets round the coast, is 720 square miles and the population as at 31 December 1973 was 860,000.

The climate of the island falls naturally into two main types: the dominating factors being altitude and direction of prevailing winds.

In the upland regions the mean annual rainfall varies from 100 to 175 inches. As in the lowlands the maximum precipitation takes place in the summer months from December to April, but there is a second maximum in July to August due to orographic rains.

The lowland regions experience a dry season from May to November, that is during the cool months, with occasional light showers. However, in the uplands the dry season is less pronounced and is restricted to a short and variable period from mid-September to December.

The range of diurnal variation in temperature is very small in the hot season in the upland and lowland regions. The diurnal variation reaches a maximum in the dry season, when differences of 10°C are not uncommon. On the whole the most striking feature about the temperature is its uniformity. The highest daily maximum in the upland is 27°C and the lowest daily maximum is 23°C, whereas the highest daily minimum is 21°C and the lowest daily minimum is 18°C.

There is a marked difference between the relative humidity of the uplands and that of the lowlands. The difference is most evident on the leeward side of the island, where humidity is low (70%) throughout the year and reaches a minimum (65%) during the cool season. In the uplands the relative humidity remains high (90%) in all seasons, with two distinct maxima corresponding to the two rainfall peaks.

As the relative humidity in the uplands is high, the presence of moulds in the furniture is a problem. This is accentuated during cyclonic periods when the rainfall may be very high for very short periods. The temperature and the circulation of air within cabinets may have to be increased to avoid damage by moulds.

## Past and Present Situation of the Furniture and Joinery Industries

The furniture and joinery industries in Mauritius have always been on the move. They have evolved with time and are, as far as possible, keeping pace with latest techniques. However, these industries are faced with serious problems.

For a very long time the furniture industry was carried out by a large number of small units with one joiner and two or three apprentices. These were satisfying the local market. They were very rudimentary, with very few tools but the joiner had considerable skill. They were very proud of their work but were finding it fairly difficult to make both ends meet.

These gradually gave way to medium size units which started producing furniture on a medium scale. They timidly invested money in the industries but they organized sales to make the industry more viable. There were two types of those medium size units viz. those specializing in the manufacture of old classic types of furniture and those specializing in modern types of furniture. They then started to mechanize to reduce cost and to satisfy a more fastidious customer.

Recently, several small units have re-appeared along with medium size ones. The latter are more and more enterprising and are looking for export markets. They are investing a lot of money to mechanize and they want to produce high quality furniture for export.

The Development Bank of Mauritius and the Government of Mauritius help both the small and medium size furniture and joinery industries to improve by granting them loans at low interest rates.

### Timber and Other Materials

The export of our famous ebony to Batavia in the 17th century has given Mauritius a place of pride in the wood trade. Although this is well in the past it is still remembered as such. In addition to ebony, there are other nice indigenous and endemic woods, such as Makak (*Minusopa petiolaris*), Bois Cannelle (*Ocotea cupularis*), etc. which have been used to manufacture pieces of furniture. These can still be seen in auction sales or where antique furniture is collected. They fetch very high prices indeed and are, unfortunately, exported abroad.

Owing to the diversification of agriculture in Mauritius by the Ministry of Agriculture and Natural Resources and to the severe cyclone (Carol - 1960) that wrecked havoc to our forests, the country is facing a very acute shortage of wood. The Ministry of Agriculture and Natural Resources and the Environment is undertaking to replant about 2,000 acres per annum of quick growing softwoods and hardwoods for the production of timber. The shortage will persist for about 10 years or thereabouts. Moreover, the country will never be able to produce its entire requirement; it will have to rely on imports for about 70% of its needs.

As mentioned above, pieces of furniture used to be manufactured with high density, hard indigenous wood. They were of very fine grain but posed certain problems since they were difficult to work. As the Makak, Bois Cannelle, Bois de Cerfs (*Olea lanceolata*), etc. are becoming very scarce they give way to other timber. Some locally grown mahogany (*Swietenia mahogani*) has been used. It is a very beautiful timber with a nice figure and is fairly easy to work. Unfortunately this too is very limited.

The Tecona (*Tabebuia pallida*, *T. pentaphylla*) is used on a fairly large scale in the furniture industries. It is a beautiful timber, whitish in colour and fairly easy to work. The wood is very stable and of a moderately fine grain. Other hardwoods are used, but to a limited extent.

Locally grown softwoods like *Pinus elliottii*, *Cryptomeria japonica* are also used to make pieces of furniture. Both have very nice figures. The former is whitish in colour, whereas the latter is darkish. They can satisfy most tastes.

Disterocarps like Meranti, Gurjun, etc. are imported from Singapore to help the industries. They form most of the framework of furniture produced locally. Meranti is preferred as it is more stable and does not twist or bend. Our locally grown pine, if well seasoned and pressure treated, can replace these. Teak is also imported on a large scale to manufacture sophisticated furniture for local market and for export.

Plywoods imported from Singapore and Taiwan are also used by the industries. Sometimes they are veneered to add to the finish of the furniture.

Of late, a bagasse board industry has come into existence in Mauritius. The boards made of bagasse, a by-product of the sugar industry, are of high quality, three-ply, i.e. two fine grain ones on the outside and a coarse grain one in the middle. The boards are sold in varying thicknesses and are treated both with fungicides and insecticides. They are replacing plywood on a limited scale in the manufacturing of furniture, but its future in the industry is quite bright, as it is much cheaper.

Our labour is very versatile and can be easily trained to work in the furniture and allied industries. Moreover, they are employing more and more people and are thus helping the unemployment problems.

Both the University of Mauritius and the Technical Schools are running courses to guide young Mauritians into the techniques of woodwork. This is helping to improve the skill of joiners and designers and to make sure that first class furniture is put on the market.

### The Problems Faced by the Industries

#### Wood

Wood is getting very scarce in Mauritius, so much so that sawmillers are purchasing individual trees from private yards. In order for the furniture and joinery industries to survive they have to rely on imports of wood. This too poses certain problems, viz. high costs of wood. The cost of import has not ceased to increase.

Besides this, it is getting more and more difficult to get cargoes to transport the wood. Thus regular supply is hampered.

#### Wood Seasoning

All wood used in the furniture industry is air seasoned. This takes a lot of time and causes many defects in the timber. To avoid the inconvenience caused by air seasoning, all the industries will have to join together to put up a kiln seasoning plant. This is the only way that such a plant can be run economically.

#### Freight

Since Mauritius is far from most centres, it has to spend considerable amounts in freight for both the imports of wood and the export of pieces of furniture.

It is very difficult to give precise dates of deliveries of exports and thus some firms are reluctant to place firm orders. One of the industries is specialising in the manufacture of flat-pack furniture for export.

#### Glues

The bagasse board industry as well as the furniture and joinery industries is faced with the problem of a shortage of glues on the market. Its cost, too, has gone up.

### Marketing

Market research should be undertaken both at home and abroad (South Africa, Australia, Reunion) and some European countries for reproduction furniture.

### Future Trends

The future of the furniture and joinery industries is quite bright. They are sure of the local market but they must organize themselves for wood import.

As regards export, the future lies in the export of first class furniture as well as carved items. This uses alot of labour and can fetch a high price on the foreign market. It will justify the cost of freight and the conversion of a small amount of imported raw material for the production of a highly prized product.

### Assistance Required

- Technical assistance in the setting up of a kiln seasoning plant for the furniture and joinery industries.
- Technical assistance in the purchase of machinery and layout.
- Reduction of customs duties on furniture, raw materials, most of which are imported.
- Persuasion of smaller manufacturers to stick to certain production standards.
- Technical assistance regarding the establishment of a structure to serve the furniture industry both to buy its raw materials under bulk purchase arrangements and to assist in export marketing.
- Quality control facilities for both raw materials and finished pieces of furniture for export.

APPENDIX I

There are about 315 small units employing 600 people.

B1- Annual Survey of Employment in the  
Furniture and Joinery Industries

<u>September</u>	<u>No. of People Employed</u>	<u>Medium Size Units Employing more than 10</u>
1969	189	7
1970	204	6
1971	258	11
1972	383	13
1973	574	15

Wages

Skilled-	Rs.20.00.	Daily
Semi- Skilled-	Rs. 8.00.	Daily

( Cl. = Rs.13.40.)



## APPENDIX II

### Mauritius Export Processing Zones

#### Financial Incentives

- Corporate income tax holiday from 5 to 20 years
- No income tax on dividends over a period of 5 years
- Exemption from import and excise duties on raw materials and capital goods
- Free repatriation of capital
- Remittance abroad of corporate profits and dividends
- Issue of Residence Permits - permanent for promoters and temporary for expatriate staff
- Free repatriation of salary and gratuity of expatriate staff
- Long- and short-term loans at preferential rates
- Utilities at preferential rates
- Leasing of standard factory buildings at preferential rates
- Government's guarantee against expropriation plus OPIC investment guarantee and political risk insurance

#### A Modern Infrastructure

- Factory sites
- A comprehensive range of industrial services, including E.D.P. back-up
- An excellent road network
- A sheltered harbour, now being enlarged, deepened, modernised and containerised
- A modern airport accessible to heavy transports

These advantages and incentives will have a special attraction for:

- Large industrial concerns in search of new labour resources and new bases to implement their development strategies
- Small- and medium-sized firms in search of a socio-economic environment favourable to sustained growth, possibly through joint-venturing with Mauritian partners

