



OCCASION

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



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 <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

To regret that some of the pages in the microfiche copy of this report may not to up to the proper legiblitity standards, even though the best percible copy was used for property the mater fight.



D03139

負負D)

Pistr. LIMITUP IF '90.105'**20** 3 November 1971

ORIGINAL: UNGLISH

United Nations Industrial Development Organization

Secondary Food Processing Industries
Finland, 16 August - 11 September 1971

FURNITURE AND OTHER WOOD PROCESSING INDUSTRIES IN PAKISTAN

Country paper Submitted by

C. A. Hafeez

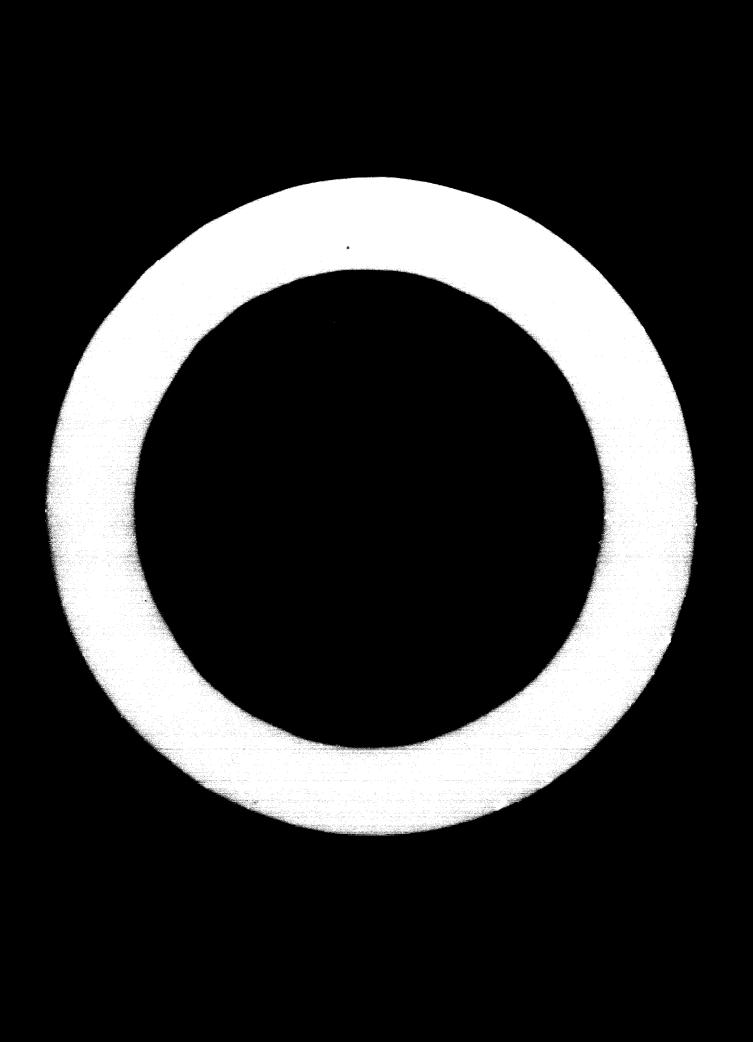
Manager (Technical)

Small Industries Advisory Service

West Pakistan Small Industries Corporation

Pakistan

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



Present Stage of Development:

The present furniture and secondary wood processing industry in Pakistan is in the initial development stage. The modern mass production in this particular sector is almost unknown. Although the demand for quality furniture and modern fixtures for building industry is growing in the urban areas, the present industry is not in a position to cater for this demand. At present furniture and joinery is made almost exclusively cut of the solid wood. Laterials like particle board, hard board, veneer, ply-wood and formica etc. which are used in the furniture industry in the industrialized countries have not found use in the furniture industry of Pakistan. This is evident from the fact that five particle board factories with an installed capacity of about 41,500 tons per annum are working in Pakistan but the total local consumption per annum is only about 8000 tons.

Except for a modest number of small and medium size semi-mechanized units in the major towns the entire industry is based on age-old methods of furniture-making with manual labour and hand tools. This results in high wastage percentage thus draining the already meagre forest resources of Pakistan.

In the rural areas there is not much demand of quality furniture and joinery. This is due to the low standard of living and low per capita income of the rural population. The entire demand for furniture in the rural areas is met by the village carpenters who make furniture manually with the help of hand tools. The modern machinery and designs are almost unknown to the rural population.

The wood handicrafts industry, although not properly organized, is doing well due to the high standard of craftsmanship and low wages. Products of high quality, carved or inlaid with ivory, metal and bone, are being produced. These handicrafts attract the tourists and have export potential as well.

In general wood based industries are scarcely developed in Pakistan. There are eight plywood factories with a maximum total output of 0.7 million cubic ft. per annum. Hardly 25 per cent of the capacity is utilized at present because of shortage of raw material supplies. Five plants exist for the manufacture of particle board and other semi-manufactured boards from wood waste and bagasse. The total capacity of these is 41,500 tons per annum. The saw milling industry consists of small, mostly primitive units spread all over the country, and their total product is worth 2.5 million US dollars only.

The pulp, paper and paperboard industry comprises seven units, and the installed capacity is 164,250 tons per annum. Four more units are under completion.

In addition to this, a number of small wood-working units manufacturing furniture and joinery exist in the country, having their total production worth roughly 40 million US dollars. Approximately 195 million match boxes and 0.7 million tea chests are also manufactured.

At present the contribution of wood based industries to the GNP is only to the extent of 3.3 per cent. It can be concluded that wood based industries at present only play a modest role in the over-all national economy but are likely to expand considerably in future.

Problems:

The furniture and secondary wood-working industry in Pakistan at present is full of problems, the most vital being:

- (1) Due to lack of know-how the industry is not in a posit_on to create, develop and use modern designs to meet the requirements of materials like veneer, plywood, particle board, formica, etc.;
- (2) There is a shortage of technical workers capable of operating modern machinery needed for the production of modern furniture and joinery;
- (3) Modern wood-working machinery is not being manufactured in the country and its import increases the initial capital outlay which has a discouraging effect on the growth of industries;
- (4) The sizes and designs of doors and windows in the building industry have not yet been standardized, which dampens mass production of standard sizes and designs, thus leading to increase in cost.

Puture Trends:

In order to utilize the available material resources of wood to the highest extent, the Government of Pakistan has set up a research institute at Peshawar in West Pakistan.

In order to meet the requirements of technical personnel, training and advisory cum production service centres are being set up. These centres are expected to:

- (a) Cater for the demand for quality furniture and joinery;
- (b) Design furniture and wood handicrafts goods such as ivory, metal and bone inlaid or carved products keeping in view the latest development in this trade and according to the most modern production methods;
- (c) Undertake proper pre-calculations, production flow charts, layout plans and organizational set-up for wood-working units to be set up in the private sector:
- (d) Introduce modern working methods, modern wood joints and design of modern furniture, doors, windows and other fixtures;
- (e) Provide wood seasoning facilities, tool sharpening facilities and production facilities for components requiring expensive machinery which a small-size concern cannot afford to install in its own factory due to financial reasons;
- (f) Organize short term evening courses for foremen and skilled workers to develop the following skills:
 - 1. Proper handling of machinery;
 - 2. Machine tools service and maintenance;
 - 3. Modern working methods;

- 4. Use of materials like synthetic glues, varnish, spray painting and plastic sheets etc.;
- 5. The optimum utilization of the basic raw material (wood);
- 6. Selection of the best material for different products;
- 7. Correct utilization of particle board, plywood, veneer, hardboard and other wood substitutes;
- 8. Organizational set-up and cost calculations in wood-working factories:
- 9. Design of modern furniture;
- 10. Design of modern doors and windows:
- 11. Introduction of the metric system;
- 12. Artificial seasoning of wood.
- (g) Long-term training courses for supervisors to meet the shortage and to help the private sector in development of the industry through training of their staff in the modern techniques in these centres.

These centres will thus help in setting the furniture and secondary wood working industry in Pakistan on a modern and scientific footing.

Two wood complexes for the production of sawn timber, plywood, veneer and particle board are planned to be installed in the near future with an estimated raw material consumption of 6.5 million cubic feet annually.

In addition a number of smaller wood-working industries are in the process of being created.

In the current five year development plan covering the period up to 30 June 1975, a financial allocation of US\$ 137.31 million has been made for the development of wood-based industries. Out of this allocation US\$ 123.31 million have been provided for projects in the medium and large sector and US\$ 14 million have been provided for projects in the small sector having a total financial outlay not exceeding US\$ 0.25 million each.



