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The Current Status of the Furniture
Industries in Sri Lanka^{1/}

by

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The Government of Sri Lanka has launched an accelerated programme for building 100,000 houses to solve the housing problem of middle and lower classes. The next major problem is the furnishing of these 100,000 houses. As the demand for furniture has consequently been raised the Government has decided to give the trend for further impetus for the development of furniture manufacturing.

The ban on felling of timber, the energy crisis, the scarcity of raw materials, and the non-availability of superior quality wood working tools has led to an incredible increase in the cost of manufacture of furniture. As a result of this, prices of wood products started escalating. The Government has taken further steps to minimize the cost of production, such as lifting the restrictions prevailed for issuing of timber from the State Timber Corporation, liberalizing the import of wood working tools and fittings, and the imports of timber to fulfill the goal set at reasonable cost.

Most of the household furniture is manufactured by the craftsmen scattered all over the country. There are some traders maintaining attractive show-rooms, collecting the items from rural craftsmen, and selling them after finishing, i.e. after sanding and polishing. Some manufacturers are having small wood working factories, not modernised, producing their own designs. Most of the work in the privately owned enterprises manufacturing furniture is done by hand using skilled workers available at low cost. All this furniture is for the local market and a few manufacturers have started producing for export. As kiln seasoning facilities are not available, the timber consumed by them is air seasoned following traditional methods of seasoning. Most of the joints of their items produced are confined to mortise and tenon as they are reluctant to deviate from traditional methods, and to follow modern technology.

The Private Sector saw mills consist of outdated circular saws for sawing of logs. This is the starting point of the wastage of timber. After sawing the correct drying methods are not followed for

drying the timber. Hence, as the moisture is dried timber is not evenly distributed, the properties as well as the durability of timber used by the rural craftsmen is always below standards. As most of the craftsmen cannot afford to buy modern machine tools, they are always far away from the more technical and economical methods for the manufacture of furniture. This results in the continuation of further catastrophic wastage of timber.

Manufacturing of furniture out of cane plays a prominent role in Sri Lanka. Easy chairs, sitting room sets, circular tables are the main items manufactured out of cane.

Furniture made out of steel and fibre-glass has made its appearance as a small scale industry.

Practical courses on wood working are conducted by the Junior Technical Institute under the jurisdiction of the Department of Education, producing skilled craftsmen. There are some vocational training centres under the jurisdiction of the Department of Labour to give practical training in wood working.

Brief description of the largest wood-working organization sponsored by the Government of Sri Lanka:

Ceylon-Plywoods Corporation is the largest Wood-working Organization in Sri Lanka, which comprises the following units:

- i) Plywood Factory at Gintota
- ii) Wood-working Complex at Kosgama
- iii) Two carpentry units situated at Moratuwa and Kandy
- iv) Logging project at Kanneliya (24,000 acres)

i) Plywood factory at Gintota:

This factory produces mainly tea chests required for the tea industry consuming about 50,000 cu.ft. of timber per month. In addition to tea chests it produces furniture items such as office tables, table tennis tables, plywood doors, and picking sticks required by the Textile Industry.

ii) Wood-working complex at Kosgama:

This constitutes of the following units;

- a) Veneer and plywood factory
- b) Particle board plant
- c) Saw mill
- d) Fully mechanised furniture plant.

All these units are integrated to get the optimum utilization of the available raw material and other resources. The furniture factory consists of modern machinery required for wood working. The basic semi-finished raw material required by the Furniture Plant is supplied from the other units of the Wood-working Complex.

Plywood doors, door frames, office furniture, house-hold furniture, wall panelling, veneered particle board and school furniture are the main items produced by the Furniture Factory, It started tentative production of shuttles and experiments are still being carried out by the Research Department of the Complex with the assistance of the Ceylon Institute of Scientific Board (I.D.B.). The research carried out by the I.D.B. showed that the species growing in Sri Lanka do not have the required properties for the manufacture of shuttles.

The manufacturing of a new range of house-hold furniture was introduced by a UNIDO Expert who was attached at the Furniture Plant on an assignment. During his period of service new production line for furniture manufacturing, alternations to improve the production line of plywood doors, were implemented. He also introduced new designs of furniture fitted with modern metal fittings and opened up an attractive show-room in Colombo.

Worn out cutting tools are sent to central grinding rooms for sharpening. Another UNIDO Expert on Saw doctoring who was attached to the central grinding room to introduce the modern technology of grinding and subsequently improved the standard of tool maintenance.

Mechanical Engineering Department was also developed and re-organized by yet another UNIDO Expert.

Presently another UNIDO Expert is attached to the wood-working complex. He has already started on an experimental basis, manufacture of block boards utilizing off cuts and rejected timber.

The furniture factory is fed with both air seasoned and kiln seasoned timber. Most of the timber received is classified as Class II, which contains local hard timber as well as imported timber. Boron treated rubber wood (*Hevea braziliensis*) is also consumed as a raw material for the manufacture of school furniture. House-hold furniture and office furniture are made out of the combination of veneered particle board and timber.

There had been some expert order for doors, dining chairs, dining tables and office tables carried out successfully.

The mechanical processing of school furniture items is done at the Furniture Plant and sent to the carpentry units at Moratuwa and Kandy for assembling.

Fittings:

Most of the metal fittings required for furniture production are extensively produced by the small scale industrialists and their quality has to be further improved. As the local metal fittings are of inferior quality, imported fittings are used for office and household furniture.

Finishing Materials:

French polish is extensively used by the private enterprises for finishing work, as the petroleum based products are very expensive. Two methods for polishing office furniture and household furniture are adopted in the Furniture Plant. Teak oil and wax polishing is used for the office furniture and lacquer polishing is used for the latter.

Upholstery Material:

Foam rubber, synthetic leather cloth, and coir mattresses are procured locally.

Further development and research:

For further development of the furniture industry research work has been carried out by the Industrial Development Board. As a result of this a wood-working factory was started to manufacture furniture out of boron treated rubber wood (*Hevea braziliensis*). An exhibition of furniture manufactured out of boron treated timber was held recently. This was acclaimed as one of the best of its kind, in that inferior timber was utilized in the manufacture of furniture.

Sri Lanka is a small Island of 25,000 sq. miles. The people of Sri Lanka have been blessed with abundant solid timber in the past. They show a great reluctance to abandon. This traditional raw material and used plywood and particle board for household items. However we are compelled to break
9 this trend and introduce them into the use of plywood and particle board as our forest resources are dwindling fast.

The task before us is monumental. However, with proper advertising and market surveys, we should be able to overcome the odds.

As the manufacture of particle boards was only started recently, the craftsmen scattered over the country have a scant knowledge and little experience on the applications and characteristic qualities of these panel products. It is also found that the difficulties of buying them due to inadequate supply has adversely effected further application of panel products in the furniture industry. As most of the craftsmen in Sri Lanka are traditionally used to the mortise and tenon joint is the only joint considered to be applicable and reliable by the furniture industry. It is found difficult to introduce the modern joinery methods such as glue and dowel joint. It is very important to take further steps for the development of furniture industry in Sri Lanka as it is one of the major necessities of the people.

Further research and development should be done to introduce more substitutes to replace wood as far as possible in furniture production.

The Government of Sri Lanka carried out a feasibility study to make use of the great amount of fallen coconut trees from the cyclone affected areas. It is intended to produce fibre boards out of coconut trees.

Assistance necessarily required from UNIDO:

1. To introduce modern methods of product design. To train the technological personnel to up-grade production and quality in the plants of the Ceylon Plywood Corporation.
2. It is advisable to get the service of an eminently qualified creative designer for further development of furniture industry and to train local personnel.
3. To explore the export markets, particularly in the Asian market.
4. To study an alternate method for the manufacture of plywood doors to minimize the material cost.
5. To research on an indigenous substitute for the expensive Urea-foamaldihyde glue presently used.
6. To assist in carrying out research on the production of shuttles.



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