THE TIMBER INDUSTRY IN THE TERRITORY OF NEW GUINEA.

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The timber industry in the Territory is as yet only in the developmental stages. The *Timber Ordinance* 1922-1931 was repealed and a new ordinance, known as the *Forestry Ordinance* 1936-1937, came into force on the 15th September, 1937. Two forestry officers were appointed early in 1938, in order to assist in the administration of the new Ordinance.

The timber industry has had a rapid growth. Two or three years ago it was practically nil. Prior to the year 1933, there is no mention of timber in the listed exports; in the year 1933-34 timber in the log form was exported to the value of £180; in 1934-35, to the value of £705; in 1935-36, to the value of £360. For the year 1937-38, this figure jumped to £6,030 for logs, and £480 for sawn timber. The timber in logs, for this year, measured 3,103,996 super. feet. This was all exported to Australia—a little eventually finding its way onto overseas markets. Approximately 1,300,000 super. feet of sawn timber were produced in the Territory during the same period—this, however, was absorbed by the local market. At the end of 1938, there were some nine mills in operation, while approximately 23,500 hectares of Administration land was held under forest permits to cut and remove timber; while, in addition, a considerable amount of cutting was taking place on private property.

Due to a high tariff against sawn timber entering Australia, timber has been exported from this Territory mainly in the log form. Log export operations are confined, at present, to the island of New Britain, where, in addition, some five saw-mills are located, supplying the local market and an occasional small shipment of sawn timber for overseas. Apart from a few small mission saw-mills in various parts of the Territory, the only other timber operations of any importance are confined to the vicinity of Kavieng and Wau. These centres, however, supply only to local markets.

In the vicinity of Wau, several small saw-mills cutting in the best-known stand of hoop pine, klinkii pine and cedar in the Territory, supply—due to the obvious restrictions imposed by air transport—only the gold-mining industry centred about Wau. It is hoped, however, following the construction of a road to the coast, to start an export trade in these timbers, to be run in conjunction with a planting programme on a scale sufficiently large to ensure a sustained yield.

The industry has experienced numerous setbacks in the past, due to several causes, the most obvious of which was due to the shipment to Australia of logs of poor quality—no selection or discrimination having been exercised in this matter. The species exported were unknown in Australia, and often even untried in the Territory. Timber of types not then known to the "trade" were upon occasions dumped in Australia, and, due to lack of selection and care in handling, many of these logs were pipy, of bad shape and often riddled with borers. This did incalculable harm to the reputation of some of the best New Guinea species.

It is realized, I think, by the chief exporters that care must be taken to correct these mistakes. The value of creosote as a useful preventative against borer infection is beginning to be appreciated. The creosoting of all logs exported from the Territory is now compulsory, unless special exemption has been obtained. Furthermore, facilities for export inspection by qualified officers are provided by the Administration for those who desire to avail themselves of this service. The importance of this inspection by an independent third party, between seller and buyer, cannot be stressed too strongly; for it will be necessary to live down the past by maintaining a high standard for the future. The regaining of this lost ground will be slow. It will be particularly important to study the requirements of the Australian and overseas markets, and regulate export to conform to demand, and not vice versa.

Australia's average annual softwood requirements amount to approximately 500,000,000 super. feet. Of this total she herself has supplied, during the last twelve years or so, an average of, approximately, 90,000,000 super. feet, which came almost entirely from Queensland, where it is now realized that the supply cannot last at this rate for many more years. It is apparent that an extra 90,000,000 super. feet will soon have to be procured from elsewhere. Promoters of this Queensland industry are eager to obtain hoop pine, or hoop pine substitutes, so they are naturally turning their eyes to New Guinea's hoop and klinkii pine resources as a means of supplying timber to enable them to carry on their established businesses. As already pointed out, the New Guinea pine stands are situated in the inaccessible highland regions of the mainland, where they will remain inaccessible until the construction of a road to the coast opens up this area.

Meanwhile, Erima (*Octomeles sumatrana*), a light-weight, light-coloured timber, from the readily accessible coastal forests, is proving to be a fairly general utility plywood proposition. Several other light-coloured, light-weight timbers from the coastal regions should also command a ready market, but they appear to be very susceptible to blue mould attack, which will debar them from export, until such time as a satisfactory technique for the prevention of blue stain in logs has been evolved, or tariff reductions allow the export of sawn timber on a profitable basis, when preventative measures could be taken here, immediately after sawing, to ensure that these timbers maintain their colour. Under such conditions, a new era should open up in the utilization of the coastal white scrub-woods.

Regarding hardwoods of the Territory, suitable for structural purposes, prospects are not so bright. It is most unlikely that an export trade to Australia will develop in these types; for Australia is the home of some of the world's best hardwoods. Apart from this the Territory's better hardwoods, i.e., kamarere (*Eucalyptus deglupta*) and kwila (*Afzelia bijuga*), do not occur in sufficiently large stands to warrant export. If the existing stands are not conserved for local use (for there is a definite need for durable hardwoods), it will be found in a few years that we will have to import all our building timbers from Australia—a quantity being already drawn from that source.

European markets have not been thoroughly explored, but there are indications that it may be possible to market in the United Kingdom a certain quantity of Taun (*Pometia pinnata*) as hardwood flooring. However, for medium-class hardwood timbers, such as this—of which there is no lack—the Far Eastern and South African markets are worthy of investigation. Considerable quantities of second-class Australian hardwoods are shipped to the Far East each year;

therefore, New Guinea—half way there—should be in an excellent position to supply this market. For those of our harder timbers possessing sufficient figure for cabinet work, there is hope that they may find favour in this guise in Australia and overseas.

Amongst those timbers suitable for cabinet work, there is one outstanding species, namely, laup, or New Guinea walnut (*Dracontomelum mangiferum*). The prospects regarding this species are particularly good. Once again, owing to the failing supplies of a Queensland timber—in this case, walnut—the "trade" now requires a new source of supply of this species, or else a satisfactory substitute, in order to meet the demand created by the popular Queensland walnut. This Territory is fortunate in having an excellent substitute for Queensland walnut in laup (*Dracontomelum mangiferum*). When carefully selected, it is a very handsome cabinet wood, of almost equal value as Queensland walnut. It is creating a considerable amount of interest in Australia and also in the United Kingdom and the United States of America. The market for this timber is already made; all that need now be done is to take sufficient care to maintain a satisfactory export standard in order to maintain it.

Other cabinet woods exist, but they will have to win popularity for themselves before they can become established on the markets of the world. This process will be slow and it can best be done by those firms in close touch with markets and having their own marketing organizations in Australia and overseas.

In view of this state of affairs, it is obvious, unfortunately, that selective logging—for the near future at least—is going to be a feature of the timber industry in this country, where, as is the case with most tropical rain forests, the mixture of species is a marked feature. This means that extraction costs will be relatively high. Also, due to the scattered and limited nature of felling operations, it will make the regeneration of economic species in exploited forests a difficult matter for the newly-created Forest Service. This, however, is only one of the many problems which have to be tackled and overcome. The future appears to hold considerable promise for the New Guinea timber trade; however, it does not do to be over-optimistic. It is necessary to face the fact that many difficulties will have to be overcome, and that it may be necessary to make haste slowly. However, with full co-operation between private enterprise and the Administration, these difficulties should prove to be by no means insuperable, and it should be possible to build up on a sound basis an industry which promises to rank timber with gold and copra, as being one of the Territory's foremost products.