New Zealand export logs

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Abstract

New Zealand log exports have increased significantly over the last few years as harvest levels have comfortably exceeded domestic requirements. Log export volumes will continue to be significant, due to strong demand and prices paid by Pacific Rim importers.

Currently the total world wood harvest is approximately 3.5 billion cubic metres, with over 92% of this wood coming from natural rather than plantation forests. Total traded volume in log form is approximately 120 million cubic metres, or 7% of production.

The potential sustainable wood supply available from New Zealand's plantation forests is forecast to rise from the current level of approximately 16 million cubic metres to over 27 million cubic metres by 2005, rising to almost 60 million cubic metres by 2040 (Graph one). This scenario is based on average new forest plantings of 50,000 hectares per year. Current planting levels are almost double that figure. The New Zealand Forest Industries Council has estimated that over the next ten years the increased harvest could support 31 additional world-scale sawmills and four plywood mills.

The New Zealand forest products industry is a substantial global, highly integrated sector of the New Zealand economy. The product range is extremely wide, encompassing construction, appearance, communication, packaging, chemical, energy, and pulp and paper products.

While New Zealand’s forestry production is relatively small in global output terms, it is of rapidly increasing importance in Pacific Rim trade terms – particularly in softwood markets.

The domestic market for New Zealand forest products is already one of the highest in the world on a per capita basis, offering little opportunity for further domestic consumption growth. Lumber consumption, for example, is forecast to increase by only 1% over the next ten years. Consequently there is a substantial forest surplus which must be exported in either log or further processed form. Especially during periods of rapid regional expansion of resource availability, where processing infrastructure may still be being developed, log exports will continue to be an extremely important segment of the New Zealand forest product market mix.

Log export volume has increased steadily over the last seven years, accounting for just over a quarter of the total harvest in 1994. Log exports at over $NZ731 million, make up 33 per cent by value, of total forest product exports out of a total of $NZ2.2 billion.

Log exports have been used to introduce target markets to radiata pine. New Zealand is at the forefront of radiata pine technology. We know how to process and treat the timber to optimise its performance in various applications. As part of the marketing process we must show our customers how to use our logs to produce the optimum product – where suitable, repositioning radiata to achieve maximum returns to the New Zealand exporter and the processor.

As traditional Pacific Rim log supply areas reduce their harvest due to past overcutting, environmental issues, legislative changes, etc., opportunities are occurring to reposition radiata into new markets. For example, with the reduction in supply of tropical hardwoods, as illustrated in graph four, there are good opportunities in Asia to increase the use of radiata in plywood, for both core stock and face veneers. Similar opportunities are available in North America as restrictions are placed upon Pacific Northwest resources.

New Zealand's access to Japan's value-added solid wood products sector, due to tariff protection for the Spruce-Pine-Fir (SPF) group, including larch, is limited, and has not improved since 1989. It is only recently that lumber imports have substituted significantly for log imports. Interestingly, imports of lumber from tropical hardwoods Douglas fir (a “false” fir) and others get in duty free – arguably discriminatory.

It is likely that global log exports will decline in volume as countries increasingly move towards processing in the country of resource origin. This combined with regional log shortages will cause log supply shortages – thereby intensifying the trend shown in graph five.

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New Zealand Log Exports
By Country of Destination
Year Ended 30 September 1994

Japan 39.3%
Korea 44.1%
China 8.5%
Other 0%
U.S. 2.5%
Turkey 2.5%
Thailand 0.1%
Taiwan 2.3%
Singapore 0%
Philippines 0.3%

Total Volume: 4,548,586m³
Total Value: NZ$731,264,000

Source: Statistics New Zealand

Graph five presents an index for Douglas fir log and lumber prices in the Japanese market, with the base being 1000 in 1988. The price for logs has increased considerably more than has the price for lumber, as the volume of Douglas fir logs available for export from the Pacific Northwest has declined. This is likely to be a consistent trend as log supply restrictions over the next 20 or more years force rationalisation of processing facilities.

In addition to genetic and phenotypic variation, the properties of radiata are changing as logs from a range of tending regimes become available. The wider range of log types facilitates greater segregation of wood properties to match emerging market and product opportunities. Technology is now available to allow the "adding of value" to log sorts, by segregating logs by wood properties such as density, height up the stem (wood age/knot characteristics), pruning history, regime, etc.

Being able to supply logs to processing plants with consistent wood properties suited to specific end uses can improve plant conversions, particularly for target products. For example – high-density logs (450 kg/m³+) can significantly improve machine stress graded lumber grade out-turns. This can translate through to a premium for the log sort, or give an edge over competing log mixes.

A significant log export market is an essential component in realising the true value of a resource, by setting benchmark price levels free of domestic market distortions (processing capacity constraints, government policy, etc.). The major tropical wood exporters, Indonesia and Malaysia have maintained log export bans or prohibitive export taxes on raw logs, forcing down domestic input prices. While this gives their domestic processing industry a cost advantage in marketing value-added products to countries such as Japan, Korea and Taiwan, it depresses investment in forest resources.

Allowing forest owners to market their product to achieve the best returns for their efforts helps to ensure ongoing investment in the forestry sector.

Log exports and domestic processing operate as complementary businesses, helping to achieve a balance in production from the bush, with processing and market requirements. The challenge for the industry is to continue positioning and repositioning radiata pine in a range of markets and segments, to give an acceptable risk profile while maximising returns to both growers and processors.

In the Pacific Rim, although the percentage of the wood product trade represented by logs is likely to decline over the next 10 to 20 years, log exports will continue to be an important part of the wood product market mix.