

Implications of New Wood Supply Forecasts

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Introduction

The purpose of this article is to inform readers of some opportunities from, and implications of, an increase in the potentially available wood supply over the next five years.

Background

Forecasts show the potential sustainable wood supply available from New Zealand's planted production forests is able to increase from the current cut of about 18 million cubic metres to more than 30 million cubic metres by 2006. With a relatively static domestic market almost all of any increase in harvest will need to be exported. There are however significant issues for the forest industry concerning investment in wood processing and developing export markets for all of this increase in wood supply in the short term.

Situation

Demand for forest products was temporarily dampened by the Asian financial crisis in 1997. This led to a decline in the volume of timber harvested during the period from 1997 to 1999. For the year ended March 1999 the harvest was 15.7 million cubic metres.

Demand for New Zealand's forestry products is picking up with growth in export markets, particularly northern Asia and the USA.

In the year ended March 2000 the harvest increased to 18.3 million cubic metres. Export earnings for this period were NZ\$2.8 billion, an increase of 19 percent from the value of NZ\$2.4 billion exported in the March 1999 year. In its March 2000 forecasts for Treasury, MAF

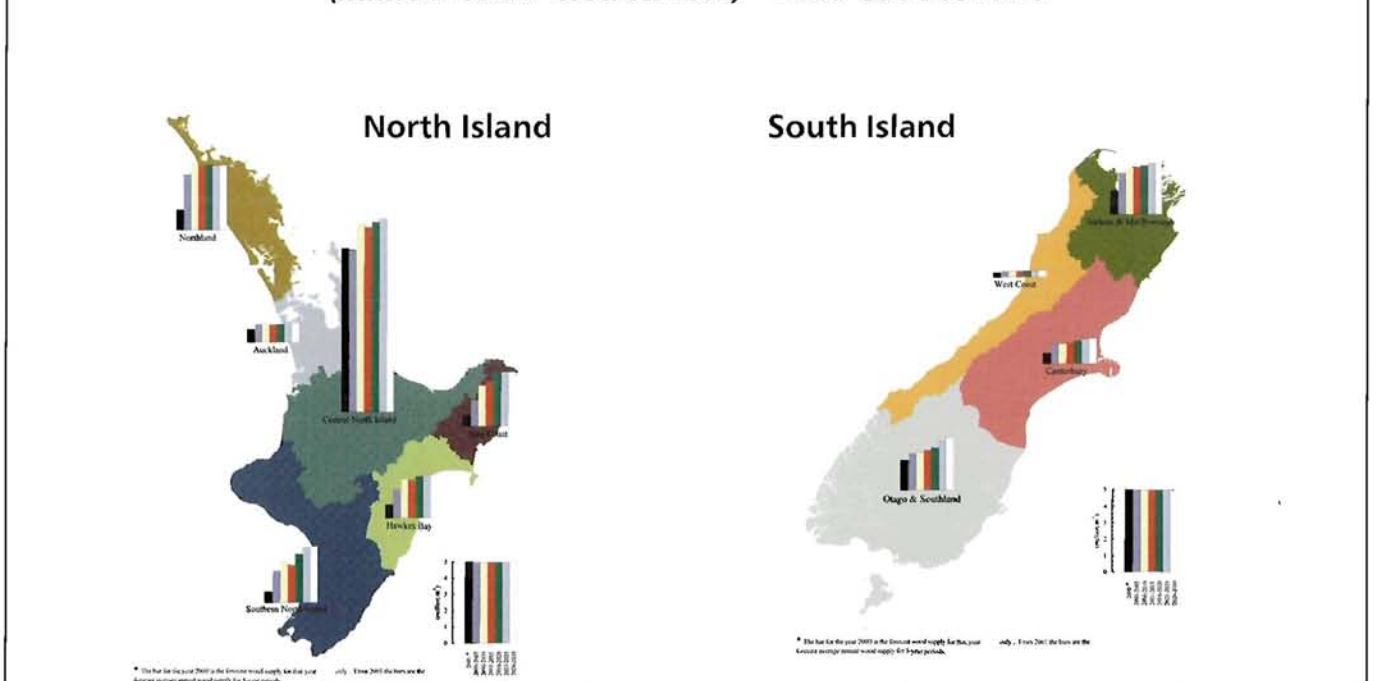
projected that export earnings from wood products will be \$4.2 billion by 2005.

Regional Development

The Central North Island is the dominant wood supply region in New Zealand. This region has a well-developed forest industry and was the pioneer region for developing an export industry based on Radiata pine. The region's infrastructure and wood processing industry has expanded over many years, in line with gradual increases in wood supply. Also, previous governments provided considerable assistance in that development.

Forecasts show large increases in potential wood supply in many other parts of New Zealand. The most significant over the next five to six years are in Northland, the East Coast, Hawkes Bay, and the Southern North Island regions. There are also increases Auckland, Nelson and Marlborough, West Coast and Canterbury. Some of these regions, for example Northland and the East Coast, are the most in need of infrastructure development (roads, rail, ports, and energy network) to accommodate increasing wood volumes. Unlike the gradual development of the Central North Island, the major increases will happen over a compressed time (less than five years). This will place major pressure on these regions. At the same time, Northland and the East Coast are regions most in need of economic development, which is a current government policy position. Wood harvesting and processing are regionally based activities well suited to enhancing regional wealth. In themselves they are not extensive employment generators but when associated service industries are included, there can be

Figure: Regional Wood Supply Forecasts (Average Annual Recoverable Volumes (Million Cubic Metres/Year) - Base Cut Scenario



significant employment opportunities. Certainly they can enhance overall economic well-being, with spin-off regional/rural benefits. Energy and transport (particularly roading) are the main regional infrastructure limitations.

Road safety concerns relating to an increasing number of trucks (mainly log trucks, but also those carrying processed wood products) and the training of new drivers are also issues.

Wood Processing Capacity

Announced investments (as at June 2000) in new wood processing plants and upgrades of existing facilities between 2000 and 2005 total \$467 million. MAF estimates that this investment will add about an extra 1.2 million cubic metres of log processing capacity. Because of operational constraints, plant is unlikely to be operated at over 95 per cent capacity. However incremental upgrades and efficiency gains can reasonably be expected to increase productivity from the current level of 80 per cent capacity to 90 per cent. Coupled with the new investments, MAF estimates that by 2005 this could increase wood processing input capacity to 13 million cubic metres of logs per year. As part of its March 2000 forecasts, MAF projected that by 2005 exports of processed wood products (lumber, pulp, paper and panels) would require approximately 14 million cubic metres of logs. These projections are based on modeling market demand from GDP growth in target export markets. There could be a shortfall between market

If the harvest remains at 22 million cubic metres this will have the effect of steadily increasing the average age of radiata pine at harvest. In itself that is not a bad thing as some aspects of radiata pine wood quality tend to improve with age. As unharvested trees will continue growing, there will also be a cumulatively increasing volume of wood potentially available. To fully realise the potential and utilise the annual balance of 8 million cubic metres, an increase in either log exports, or processed wood exports, or both, will be needed.

Investment in Wood Processing

Most of the wood available for processing over the next five to 10 years is owned or managed by a few companies, such as Carter Holt Harvey Forests (CHHF), Fletcher Challenge Forests (FCF), Rayonier, Weyerhaeuser, Juken Nissho, Ernslaw One and Wenita. These companies have their own wood processing capacity, and most are involved in the \$467 million of currently announced investment intentions.

To further increase on-shore wood processing these companies will have to make additional new investment decisions (some, like CHHF, are known to have the financial capacity), and/or make wood available to new or existing independent processing companies. In this regard, officials believe (but have not had confirmed) that CHHF is considering putting all its wood onto a contestable stumpage sale (as Rayonier do), which could encourage further new investment in wood processing.

Strategic Analysis/Planning

There are advantages in maximising the amount of on-shore wood processing, for example increased labour opportunities and higher revenues. There are also costs, such as those allied to avoiding or mitigating environmental implications (indirect, e.g. related to power generation, as well as those directly linked to wood processing plants).

At the national level, little public-good strategic analysis has been done to quantify the cost/benefits of on-shore wood processing since the 1992 NZ Forest Industry Strategy Study. It would seem reasonable to assume such analysis would be very useful to local government at the least, but there is scant evidence of other than ad-hoc work by councils in this area. Some work has been done by organisations with direct commercial interests (e.g. transport, forestry and power companies) which is generally not freely available and mostly fragmented.

Development of Export Markets

A fundamental issue in exporting the additional available wood supply is the development of new export markets and expansion of existing ones.

New Zealand forest product exports are currently confined to a small, although slowly expanding number of markets. The total value of forestry products exported in the year to March 2000 was NZ\$2.8 billion. Approximately 76 per cent of this came from the four key markets of Australia, Japan, Korea and the United

Table 1: Log Exports as a Percentage of Total Harvest

March Year	Log Exports
1985	4%
1990	19%
1995	30%
2000	35%

demand requiring 14 million cubic metres of logs and industry only having the capacity to process 13 million cubic metres.

Log Exports

Log exports as a percentage of the total harvested volume have been increasing (see Table 1).

Log exports will remain an important part of the export product mix. In its March 2000 forecasts, MAF projected that log exports would increase to approximately 40 percent of the harvest (nearly 9 million cubic meters) by 2005.

Supply and Demand

By 2005/06 the demand (under current assumptions) for logs for on-shore processing (13 million cubic metres) and log exports (9 million cubic metres) is likely to be 22 million cubic metres of logs per year.

The potentially available supply will be 30 million cubic metres (assuming a harvest age of 28 years for Radiata pine, which is the present industry average).

States.

Overall, the forest industry lacks an internationally significant marketing presence. Some individual companies are placing more resources into export marketing, with the larger ones opening offices in Japan and China, while a few smaller ones have entered joint venture supply arrangements with market outlets. Marketing activities tend however to be uncoordinated, company-orientated and thereby lacking the critical mass needed to "make an impact".

It has to be remembered that in global terms New Zealand is a small player, accounting for just 1.2 per cent of the world's trade in forest products. In comparison, Sweden accounts for 8.2 per cent of trade and Canada 18.8 per cent. Even with the increased wood supply, by 2010 New Zealand will still only account for about 2 per cent of trade. Individual New Zealand companies, even the big ones, are small players on the world marketing stage. To make an impact they need to have either disproportionately large marketing efforts or co-operative marketing. By and large they have neither.

Some of the larger companies have individual corporate and/or product brands, but these tend not to identify New Zealand. There is not a pan-industry brand (e.g. "NZ Pine") that other (particularly smaller) companies can readily utilise. It is interesting to note that forestry commentators frequently remark on the desirability of a more united approach to exporting wood products (a "NZ Inc" approach). They then modify this by saying they are not advocating single-desk selling, while not elaborating on what they do mean.

The Wood New Zealand concept (a market development company formed with both industry and Government funding) could offer generic NZ Inc style "front offices" located in export destinations, feeding back sales information to members who then compete to fill the orders. Wood New Zealand has opened an office in China but continues to struggle for financial support to develop its activities. Generic marketing is touted as a good idea, but companies who have their own marketing efforts seem unwilling to engage in generic activities that they perceive may compromise their competitive advantage.

In addition to individual market development activities, some industry associations such as the Pine Manufacturers Association and Timber Industry Federation, often assisted with Trade New Zealand funding, have undertaken some market promotional initiatives.

Shortages of Skilled Labour

Labour shortages could be a constraint on the expansion of the forestry sector over the next three to six years.

Shortages are developing in the forest growing and harvesting sectors, and to a lesser degree in the wood-processing sector, which will be exacerbated with the increasing wood supply. Employment opportunities are rising, particularly in harvesting, but forestry is seen as

an unattractive industry because of low wage rates, hard physical work, and high accident rates.

While the industry is aware of the labour problems, there does not appear to be a concerted or co-ordinated effort to address it. Training systems are in place but the level of new recruitment needed to maximise the harvesting and processing potential of the increased wood supply should be higher.

The forest growing and harvesting sector has, over the last few years, successfully set out to be a low cost industry. This has contributed to a system so lean that there are only limited opportunities for contractors to take on new workers and "carry them" until they become fully effective. Some in the industry have suggested that government-assisted "training gangs" would be a big help. Another view is that the industry generated the problem, so should provide the solution. Government's regional development goals might provide a middle ground.

A major labour problem is a lack of life skills and work ethics among many potential employees. Unfortunately this is most serious in Northland and the East Coast, where there are the largest employment "pools" and the largest forestry-related employment opportunities.

Possible Implications for Government

There are a number of means by which government input could contribute to economic, social and regional development opportunities arising from the increased volume of wood. These include (inter alia): increasing the forestry and wood products capability of Trade NZ;

- facilitating trade through government-to-government work on issues such as tariffs, non-tariff barriers and international transport matters;
- facilitating development of international standards for wood products;
- supporting greater research and development efforts to create new products and markets;
- maintaining an economic environment conducive to investment;
- implementing the Minister of Transport's policy proposals for land transport (including the cost allocation review, the issue of the proportion of the petrol excise tax that is dedicated to land transport, new charging technologies and the appropriateness of rates for funding roads);
- augmenting existing efforts (such as Wood NZ) in technology transfer on how to process radiata pine and promote its use in higher value products;
- facilitating foreign direct investment into wood processing (e.g. through the provision of authoritative information). Government has announced its intention to become more active in attracting strategic investment;
- encouraging a more collaborative approach to generic marketing of New Zealand's wood products.