

Technical Information Sheet No. 4 Level 2

Overview

Global market forecasts of demand for forest and timber products vary from huge shortfalls, to sufficient fibre to supply demand. Of the significant reports, the United Nations FAO commissioned a report in 1996 ¹ that indicates that there will be adequate wood globally at least until 2010 to meet both industrial and fuelwood needs. Recent Pacific Rim events may overtake this at the regional level as China following the devastating 1998 floods has decided to lock up the majority of its native forest. This will have an almost immediate effect of creating a 15 million cubic metre shortfall in timber. By comparison, Tasmania's current sawn output is less than 500,000 cubic metres sawn. (Total hardwood and softwood log intake is about 1.2 million cubic metres annually).

The projections of wood availability and demand are complex issues and are even more complicated by the global market place and mass movement of funds creating unprecedented economic regional change. These events are unpredictable in the longer term and even world-renowned analysts misread the Asian warnings. Many market observers expected Asia to become the leader in global forest product trade, because it is a major deficit region for forest products and because the mature markets of Europe and North America are slowing. ²

The Unpredictable

Who could have predicted that the USA with its vast forest resources and a traditional exporter would be subject to a politically inspired conservation measure, turning the nation into an importer of wood products? This along with freer trade has created market opportunities in the USA for Australian wood and wood products.

This obvious difficulty in projected global growth and demand for wood products further supports the concept of quality outputs. The highest quality possible is the goal to aim for in all plantings. This should produce price premiums and sales in all but the worst economic situation. Quality presentation and production relates to all wood products whether firewood, pulpwood, pruned sawlogs, sawn output or some further value added product. Quality also relates to the use of systems and processes, which can be recognised by attaining systems accreditation under the International Standards Organisation (ISO) ratings. For example North Forest Products has achieved ISO 14001 Environmental Systems Accreditation.

Certification

Much debate of sustainability and certification has occurred at the international level. A number of organisations have promoted particular schemes, including the World Wildlife Fund's Forest Stewardship Council, and the ISO system. Many European countries are now developing their own schemes with elements of both systems.

Certification of the sustainability of forest management will soon be a requirement to trade forest products in most western economies. *The Federal Government in concert with Tasmania is acknowledging sustainability through the completed Regional Forest Agreement. Both State & Federal Governments have signed a document of sustainability, a first step towards governmental certification.*

Domestic Opportunities

While the Big Picture, may interest some, it is reasonable to ask, "Why concern yourself with

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that? My forest is in Tasmania; an isolated island state and forest products are bulky items.” This reasoning may have been valid before the General Agreement on Tariffs & Trade GATT and the Uruguay round but we now truly operate in the global market.

The three Tree Grower Cooperatives, under FARMWOOD their peak body, would not have become established if it were not for market opportunities in Asia. Furthermore, overseas markets can often be found for products that do not have a domestic sale. The woodchip export market is a classic example of this; however, the scale is sufficient to attract onshore processing. Other recent examples include the sale of old-pine shelterbelts, an increasing nuisance and danger on farms in an overmature limb dropping state. A single tree produced 53 tonnes and a total value of over \$2,000 and over \$400 to the grower. Previously shelter-belts of much better quality had been quoted at \$20,000 for removal but through Tree Grower Cooperative exports achieved a net return of \$13,000 to the landowner. These returns are considerable and dependent on global trade.

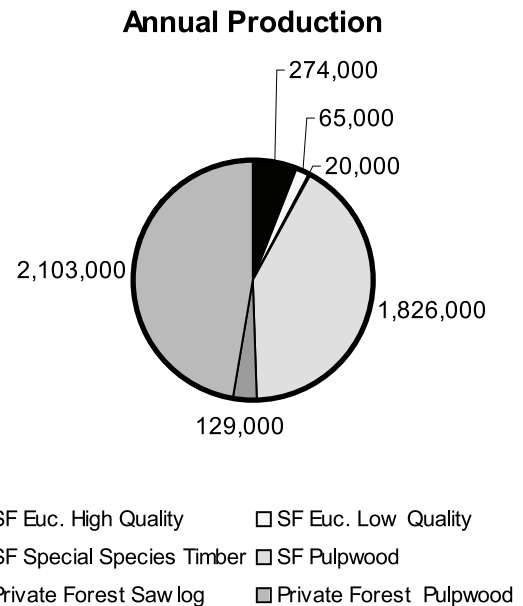
Much domestic value added production output is sent to mainland Australia; Adelaide, Melbourne, Sydney and Brisbane – traditional markets for Tasmania's excess production.

At the beginning of any forest planning and decision making process must be an understanding of currently available markets, some indication of market trends and include the regional availability of resource. In the case of special timbers or boutique plantings this information may not be generally available and will be a higher risk investment. However, given success, the gains for small plantations are likely to far exceed commodity based wood products; pulpwood, common hardwood products and softwood-sawn products. It must be emphasised that these are high risk options for appearance grade material with no history of using plantation grown material and no ready market for the lower grade material.

Significance of Private Forests

Tasmania is unique in the nation, with half the wood production forests being on private land.

They contribute more than half of the annual total pulpwood produced, (more than 2 million tonnes) and more than 100,000m³ of sawlog, perhaps as much as 300,000m³ depending on log quality.



Units: Sawlog volumes are cubic metres
Pulpwood is in tonnes
SF (State Forest)

Radiata Pine Plantations & Shelterbelts

Traditionally the larger sawmills with supply contracts with the state forest service have dominated the market for radiata pine. Even if wood could be sold it was generally considerably undervalued. Pulpwood sales were difficult as there were few buyers, again dominated by contracts to the state forest service. The smaller scattered nature of the private plantation estate was unattractive to operators used to larger scale operations. This created a period, in the 60's and 70's, when only growers with a vision and even a passion for planting trees invested in plantations. Since the mid 1980's Northern Woodchips (now Boral Forest Resources) and APPM (now North Forest Products) played a significant role in establishing eucalypt plantations for pulpwood, many as joint ventures or some contract arrangement with growers.

Since 1992 North West Tree Growers Cooperative and subsequently FARMWOOD and

two other cooperatives in the NE & South working together, created whole log export opportunities for Tasmania's private growers. This benefited growers in a number of ways, provided a market for small unmanaged woodlots and otherwise unsaleable overmature pine shelterbelts. It also had the direct effect of increasing the return to growers by up to 100% for domestic sales of better quality knotty logs. The cooperatives and now FARMWOOD have provided a much-needed breakthrough for the smaller independent private resource. However, as the recent Asian crisis has shown, a reliance on export spot markets to continually realise a premium is unsustainable. While sales may continue, they are subject to large price fluctuations. It must be emphasised that the main markets for lower grade material from native forest rely on two major companies, North Forest Products and Boral Forest Resources.

These examples emphasise the need for quality, both in planning and process to produce the highest quality forest products possible. This will provide the best insurance against market downturn. Quality products should achieve price premiums in buoyant markets, both domestically and export and should at least be saleable in a depressed market. Recent New Zealand experience has demonstrated this, with pruned logs generally maintaining their price and all other products experiencing large price falls. The establishment of a log export market has provided private growers with mill door delivered prices and the opportunity to divert log grades to specific markets providing the potential to achieve maximum returns.³

Hardwood Plantations

The more recently planted hardwood plantations of the late 80's are just starting to produce thinnings with prices up to 3 times the pine pulpwood price. This generally relates to the woodchip export market and the need for companies to maintain a pulp yield of 50% or better. The majority of hardwood plantations are of *Eucalyptus globulus* at lower altitudes and *Eucalyptus nitens* in frost areas and higher altitudes. The majority of these plantings have been short rotation pulpwood, with a relatively certain market. Some private growers and more recently Forestry Tasmania, have been managing

hardwood plantations for future veneer and sawlog production. This requires pruning and thinning.

New markets are being explored for eucalypt plantation thinnings as treated post material. Eucalypt posts have better strength characteristics than pine; but are not as easy to pressure treat. The rapidly expanding state and national wine industry has created an unprecedented demand for treated posts.

Market Opportunities

There are many unexplored market opportunities for forest products both known and yet to be developed. It is very important to plan for a resource large enough to attract a continuing sale to either a domestic producer or export. Difficulties with establishing any new market relate to;

- the available resource - continuing or spot sale
- the cost of market entry - samples, market visit, promotion
- reliability - credibility of the customer
- price of the product and return to the grower.

These challenges and Bass Strait have often limited our vision and ability to take risks. Some emerging products, while only using small pieces of wood, rely on expensive, high tech manufacturing processes. This is a global trend and unless we innovate and lead we will either follow this path we will simply be a supplier of raw material. This is not inherently wrong, but value adding may provide a more saleable product. An example of this is composite flooring, effectively a tongue and grooved plywood sheet with small section eucalypt, 6mm thick as a feature surface. A rapidly emerging product preferred in shop fitouts with the potential to replace solid wood flooring, at the same time expanding the possibilities for resource use with expanding markets. Other composite wood products that may use plantation-grown material include, medium density fibreboard (MDF), and laminated veneer lumber, (LVL).

Purpose planting of ground durable post species may also have a special timber value. This would have the benefit of providing posts that do not require treating, (appealing to a *clean, green, image*) and a final crop of special timbers sawlog.

This may also present a mixed species plantation or shelterbelt opportunity. Some suitable Tasmanian species may include Oyster Bay Pine, a naturally durable species with an attractive timber, Circular Head Tallowwood, *Phebalium squameum*, again, naturally durable and traditionally used as a post with a very attractive dense timber, which is sold on the mainland as Satin Box.

Cupressus macrocarpa, Macrocarpa, has the potential, when high pruned in plantations, to produce highly valued cabinet, boat building and exterior cladding material. It has often been called poor man's Huon Pine, however, price reports from New Zealand indicate high returns, e.g. greater than \$200/m³.

Native Forests, the Big Challenge

The most significant existing volume of private property wood in Tasmania is represented in the native forests. A large percentage of the private native forests contain species producing lower quality wood, in terms of shape, form, timber qualities and pulp yield. With the failure of the hardwood framing market and market pressure to improve the pulp yield of chip exports there are decreasing opportunities for this resource.

The challenge is to find new markets, products and ways of managing the forest. A move from the dependence of the sawn output on the structural market while having a devastating effect on small sawmills should cause a refocus. There is an increasing market for *Natural Feature Grade (NFG)* product both within Australia and North America. NFG reflects the natural growing conditions, with wood containing gum and grain features. Appearance grade products do not require the same strength characteristics as framing material. This represents an opportunity

to explore new products and markets for the often more featured woods from the lower rainfall more difficult environments.

The large volume of unmillable material is both a challenge and an opportunity. The national private forest estate is estimated to produce 20 million tonnes of silvicultural thinnings of low quality wood annually. In the Tasmanian context this is likely to be more than 1 million tonnes, enough feedstock for a significant investment or series of regional investments in processing. Products currently being discussed include ethanol as liquid fuel and wood for energy production.

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