2006/07

AUSTRALIAN AGRIBUSINESS GROUP

MARKET OVERVIEW – THE AUSTRALIAN SOFTWOOD PLANTATION INDUSTRY

Independent Assessment – May **2007**

Industry Snapshot

- Australia has 1.72 million hectares of timber plantations with softwood comprising 990,000 hectares (57%) of this area (Section 1).
- Radiata Pine accounts for 75% of softwood timber in Australia with NSW being the state with the largest area (28%) of planted softwood (Section 2).
- The world produces 3.1 billion cubic metres of sawn softwood annually; the USA (21%) and Canada (19%) are the leading producers with Canada holding 38% of the worlds export market share and the USA accounting for 41% of the world's softwood imports (Section 3).
- The gross value of Australia's softwood products in 2006 was $838 million of which $610 million was accounted for by sawlog production making softwood worth 72% of total sawlog production in Australia (Section 4).
- Softwood sawlog prices have stabilised over the past few years and are now strengthening, whilst pulpwood prices have declined as a result of abundant supply and falling Japanese prices for this product (Section 5).

1 Introduction

With few types of softwood native to Australia, the majority of Australia's softwoods are imported tree species grown in plantations across all states. Softwoods generally come from coniferous and needle-leaved trees, with the term 'softwood' referring to the botanical classification, not the actual hardness of the wood [1].

In the 1870's the Victorian and South Australian Governments established the first softwood plantations in Australia, after realising that native forest resources would not be sustainable in the future. During the early 1900's, other states of Australia followed suit, with the first private investment plantations established in the 1920's [2].

Due to the increased demand for softwood products following the Second World War, the Commonwealth Government provided substantial loans to the State Governments during the 1960's 1980's, which significantly increased the amount of public softwood plantations [2]. Between the 1980's and the 1990's there was a steady increase in the growth of plantation area due to rising demand from both the domestic and international timber markets.

Since this period the 'Plantations of Australia: 2020 Vision' was introduced by the Australian Government, which has further encouraged private forestry investment. This policy was implemented to set an objective to treble the effective area of both hardwood and softwood plantations in Australia between 1996 and 2020.

In 2006 Australia produced 17.33 million m3 of plantation timber. 14.4 million m^3 (83%) of this production was softwood timber with no softwood timber being produced from native forest [3]. Softwood now represents 57% (990,000 ha) of total timber plantations, but just 9% of new plantation establishments in 2005 [4].

Softwood has various markets with pulpwood, unpruned and pruned sawnlog having a variety of uses. Pulpwood is produced for the use in woodchips, paper and board products and reconstituted timbers such as fibreboard and particleboard. The majority of sawn softwood is used for house framing, with it also being a valuable resource for its use in decking, fencing, furniture and joinery [19].

2 Growing Regions In Australia

Radiata Pine (*Pinus radiata*) is the main softwood plantation species grown in Australia, accounting for 75% of softwood area (Figure 1). Radiata Pine grows in temperate regions and is native to North America originating in California. It was first commercially grown in the mid 1910's with its production accelerating during the 1960's. The large amount of Radiata Pine plantations in Australia is due to the timber's superior light weight ease of use characteristic for structural applications compared to native softwood species. It is also a cheaper consumer good than hardwood [2].

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Southern Pine is the second most common softwood species grown in Australia (Figure 1). Caribbean and Slash Pine are the common varieties of this species with a hybrid of the two now being the preferred plantation species in sub-tropical and tropical Australia [4].

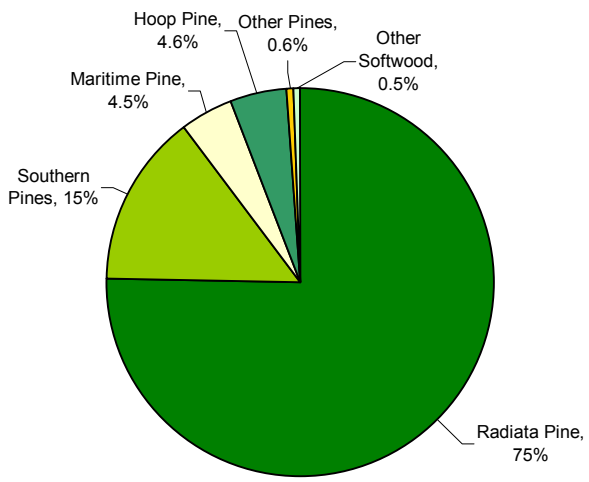

Figure 1 Australian softwood plantation species by area [4]

Maritime Pine is the next most common species (Figure 1) grown almost solely in Western Australia. This species was introduced from southern Europe and planted for sawlog production in lower rainfall, temperate climates ill-suited to radiata pine production [4]. It is most common in the drier wheat belt areas.

The only native softwood plantation species grown in Australia on a significant scale is *Araucaria cunninghamii* (Hoop Pine), which is mostly found in Queensland [2]. Other softwood species grown in Australian plantations include *Pinus taeda* and *Pinus ponderosa,* with these mostly found in New South Wales [6].

Most of Australia's plantations are located in areas with reliable rainfall of more than 700mm (28 inches) a year and where soils are deep and well drained (Figure 2) [7].

Figure 2 Australian Softwood plantation areas [7]

NSW has the largest area (28%) of Australia's softwood plantations. Victoria holds 22% of plantation area, Queensland 19%, South Australia 12%, Western Australia 11%, Tasmania 7% with ACT and the Northern Territory making up the remaining 1% [4](

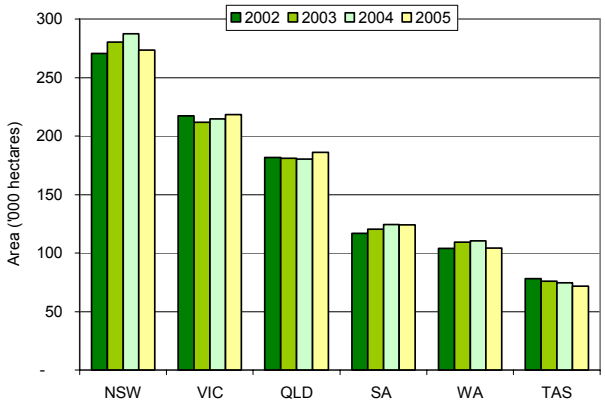

Figure 3 Total area of softwood plantations by state and territory from 2002 – 2005 [8, 4]

NSW's softwood plantation area, as with Western Australia's, had been steadily rising following 2002 before declining slightly in 2005. In 2005 both Victoria and Queensland increased their softwood plantation areas, with South Australia remaining steady and Tasmania's area declining for the fourth consecutive year (Figure 3). Tasmania's decline has been largely due to replanting harvested softwood plantations with hardwoods [3]. There was a total growth in establishment of Australia's softwood plantations of 6,477 ha in 2005. This represents 9% of total new plantation establishments in Australia [4].

The growth in new softwood plantations as a proportion of total new plantations has been declining. The growth of 9% in 2005 is down from the 14% growth rate recorded in 2004 which is a 33% reduction in growth from 2003 (Figure 4).

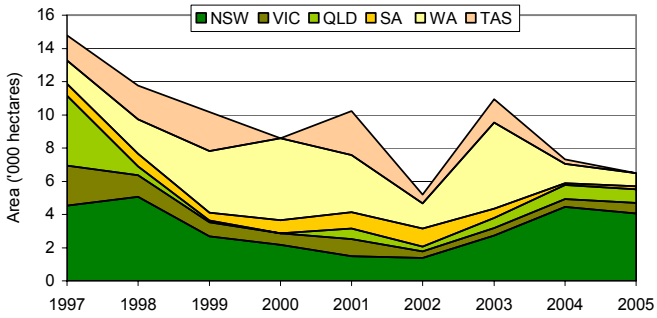

Figure 4 New areas planted to softwood from 1997 – 2005 [3]

One of the reasons behind the trend in reduced softwood plantation area is the attraction of hardwood plantations to investors in Managed Investment Schemes (MIS). Hardwoods are attractive to MIS investors as they have shorter rotation lengths.

3 International Supply and Demand

There are many producers of sawn softwood world-wide, with total world production being 3.1 billion cubic metres in 2004. The US and Canada are the worlds major producers, accounting for 21% and 19% respectively of world production (Figure 5) [9]. Other notable producers tend to be European countries, including Russia (6%), Germany (6%), Sweden (5%) and Finland (4%) along with Japan (4%). As is evidenced in Figure 5, Australia is a relatively small producer of sawn softwood, accounting for a minor 1% of production.

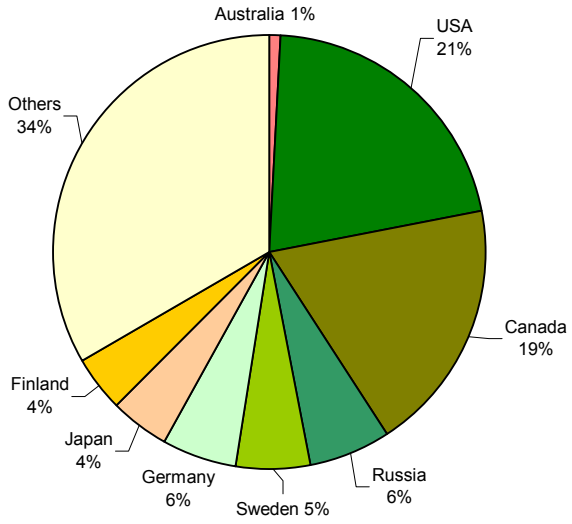

Figure 5 Major Producers of sawn softwood in 2004 [9]

In 2005 sawn softwood production in Europe increased by 4.2% on 2004's production levels. North America also experienced an increase in production in 2005, with production for the year being 1.7% above levels achieved in 2004 [10].

Global production of sawn softwood is triple that of sawn hardwood and is growing at a rate of 1% per annum. A distinguishing feature of softwood production is the relatively small proportion of plantation wood being used for the production of this timber [11]. However the rate of plantation softwood is growing significantly faster than that of native forest resources, with countries such as NZ and Chile having rapidly increased plantation production over the past decade. Chile alone has been able to increase its market share by 62% since 2000 and is likely to continue expanding.

The seven major sawn softwood exporting countries in the world are outline in Figure 6. Canada is clearly the industry leader with 37% of the world's softwood export market share. A significant yet much smaller supply is provided by Sweden (11%), Russia (10%) and Finland (8%) (Figure 6). Most of the USA's softwood production is used to supply domestic demand making the world's leading softwood producer a minor world exporter [9].

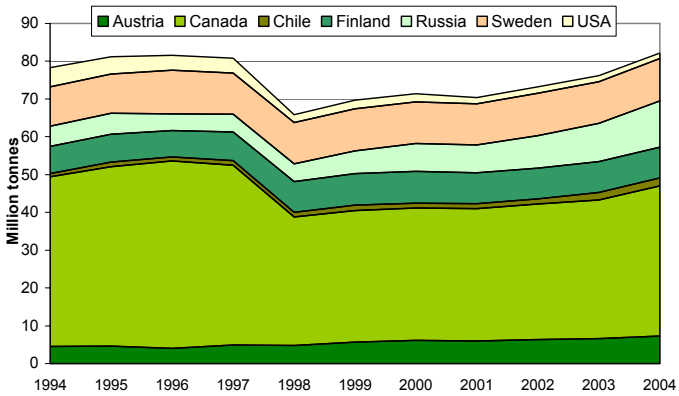

Figure 6 The word's major sawn softwood exporting countries (1994 – 2004) [9]

In 2004 the major markets for Canada's softwood exports were Japan, the USA and the UK. Major export markets for the European countries were the USA, Japan and Switzerland [12].

The world's major sawn softwood importing countries are outlined in Figure 7, with the USA dominating demand with 41% of the world's imports.

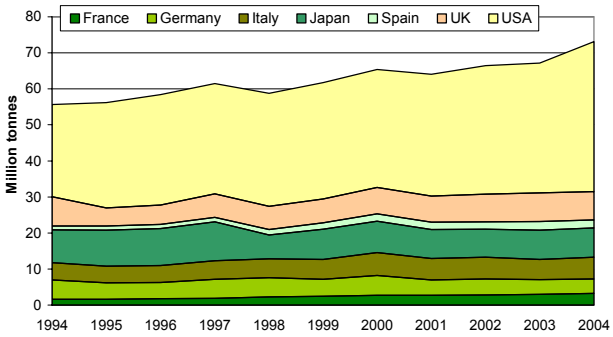

Figure 7 The world's major sawn softwood importing countries (1994 – 2004) [9]

Other significantly large importers include Japan (8%), the UK (8%) and Italy (6%) (Figure 7).

The USA sources most of its softwood timber from Chile and Canada with the European countries also sourcing large quantities of softwood from Canada. Russia is also a large supplier for European imports. The top three suppliers of softwood imports for Japan are Finland, Sweden and Canada [13].

The USA has increased its softwood imports by 64% over the past decade due primarily to growing domestic demand. With much of their production from native forests unable to match their domestic consumption, this high demand of sawn softwood from the USA is set to continue in the future.

4 Australian Supply and Demand

Australia's softwood plantations harvested for domestic use are generally directed to the sawlog market, with pulpwood products (such as woodchips) and wood based panels produced in smaller amounts.

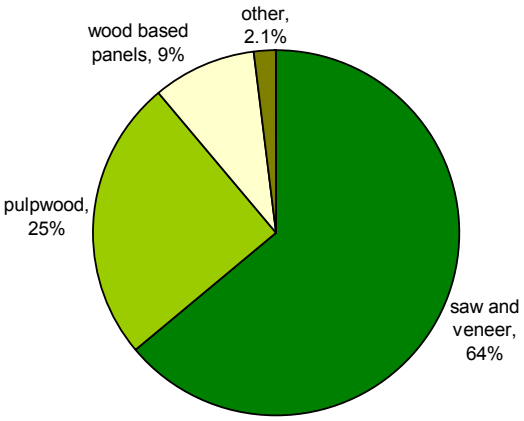

Figure 8 Australia's softwood resource production [3]

The gross value of Australia's Softwood products in 2006 was $838 million which is 51% of the total value of Australian forest products. Softwood sawlog production is worth $610 million and accounts for 72% of sawlog production in Australia. Softwood pulpwood production accounts for 28% of Australia's total pulpwood production [3].

Australian sawn softwood log production has increased by 30% since 2000/01. This growth in production has significantly helped expand Australia's softwood export market with the value of exports increasing by roughly $45 million between 2002/03 and 2005/06. Imports have also declined with a reduction in the volume of sawn softwood imports of almost 50% since 1990/91 [14].

Australia's major export destinations of softwood are Korea (45%), Japan (25%), Indonesia (10%), China (7%), Vietnam (5%) and Middle Eastern countries (mainly Dubai, 8%) [2].

In the early 1980's, Australia started exporting woodchips to Japan with volumes having increased by 168% over the past decade. Australia now holds a 43% market share of the Japanese softwood woodchip market. All of Australia's softwood woodchip exports are now sent to Japan and predictions are that Japanese demand for this production will remain relatively constant over the coming decade [11].

Production of softwood in Australia has recently been promoted by a number of companies with plantation interests developing new processing plants. This has been particularly predominant in the Murray Valley where an increase in processing capacity has significantly helped the industry in the local region. The development of sawnwood processing plants is particularly important for the softwood market with demand for this type of processed timber growing rapidly over the past few years and expected to continue in the future. Boosting sawnwood production in Australia will create significant import replacement opportunities for domestic producers.

Softwood is increasingly becoming the timber of choice in the majority of new homes and renovations in Australia. Demand for sawnwood softwood was significantly boosted with the introduction of the first home owner grant scheme by the federal government and continued demand by the Australian building sector is assured provided GDP and population growth also continue. Figures from the past decade indicate that for every 1% increase in GDP, apparent softwood consumption has increased by 0.6% [22].

5 Possible Price and Yield Scenarios

Softwood log prices vary greatly between growers, contractors, throughout regions and due to size. The main factors that have influenced domestic softwood prices over the past few years have included a decline in export market conditions leading to reduced prices, an increase in logging costs and the consequences of the 2003 bushfires that have affected many Australian timber growing regions [15].

In the 1990's softwood sawlog prices were very strong due to limited availability of the timber. Prices have since declined and due to lower production costs and contract amendments, the last couple of years have generally seen a more stable average price in the domestic sawn softwood market (Figure 9) [15]. The strengthening of the softwood sawlog industry is also due to the gradual replacement of hardwood with softwood in various markets, the most important being house framing and other construction activities (eg. wall and roof framing, trusses and flooring) [16].

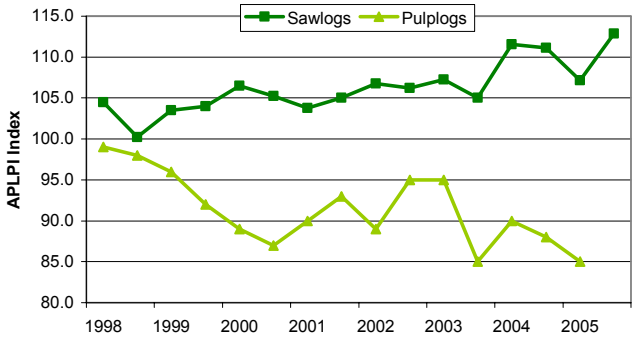

Figure 9 Average APLPI Index (real) prices for domestic softwood sawlogs and pulplogs, (1998 – June 2006) [14]

Contrary to sawn softwood prices, pulpwood prices have decreased substantially over the past 7 years as a result of abundant supply (Figure 9). Nevertheless, in late 2004, due to an improvement in the export chip price and a reduction in logging costs, the pulpwood industry saw a rise in prices. Increased domestic demand through increased processing capacity has also assisted. With increased demand expected in the foreseeable future, current prices are not expected to continue declining. However, according to URS, increase is unlikely to be substantial in real terms due to the commodity nature of the industry and competitiveness of processors [17].

Since 1997, the area of Australian plantation estates has increased by 60% with establishment rates averaging 74,000 ha per year. Hardwood plantations are expected to expand at a more rapid rate than softwood plantations over the coming years due to the declining availability of native hardwood resources and the attraction towards investors by this timber [18]. This is evidenced with the fact that in 2004, approximately 89% of new privately-invested plantings were hardwoods compared to only 11% being softwood [3]. However increased availability of hardwood timber is likely to be concentrated towards pulpwood purposes with softwood continuing its increasing dominance in the sawnwood market place where the use of hardwood is declining. Hardwood sawn timber is tending to be directed towards high value appearance uses leaving a large market opening for softwood in structural markets [18].

Figure 10 demonstrates the expected trend of sawlog production increasing for softwood resulting from declining hardwood supplies for this market segment. Softwood pulpwood production is likely to decline as hardwood resources are directed into this market area.

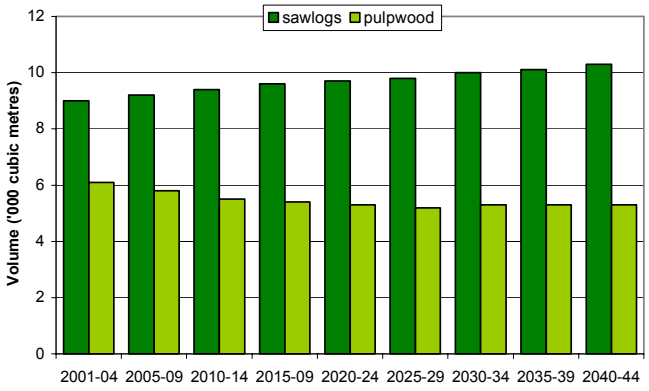

Figure 10 Forecast of Australian softwood plantation supply from 2001 to 2044 [2]

Softwood appears to be an industry that has changed from having increasing supplies to being one of constrained opportunity for expansion [19]. New investment into the softwood industry to some degree has been limited by the state governments who by obscuring markets signals by making cheap administratively-priced logs available, have made it less attractive for private investors to invest in the softwood industry [11]. Future outlooks do however demonstrate that softwood supplies are likely to increase in Australia in the future (Figure 10).

6 Future Outlook and Conclusions

Future drivers of the Australian softwood plantation industry include the changing import demand in China due to the growing economy and increased imports of sawn softwood by the USA [2]. Domestic demand for softwood is also strong with *Pinus radiata* having captured the bulk of the house framing market and consumption of the wood is trending upwards.

China represents an important market destination for Australian sawn softwood in the future as it is a country with growing needs for timber and paper goods and has recently reduced its access to domestic timber resources as part of the Natural Forest Protection Program [20]. It is predicted that China will need to import 125 million m^3 of wood per year by 2010 [18]. Additionally the dwindling supply of USA's native forest resources has led Australian softwood exports to the USA to more than double over the past five years. Combined with the developing trade relationship the USA market may provide a further boost to exports in the future [21].

The softwood industry is currently not in a position to have a major impact on export markets due to domestic supply not yet being able to meet all domestic needs. The only way Australia can meet expanding international and domestic demand for the timber and consequently capitalise on the profit potential of the industry, particularly from export markets, is to expand the softwood estate. In order to do this the industry needs to continually work at improving the attractiveness of the softwood industry to investors.

7 References

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