ANU Forestry Market Report

March 2002. Number 19 *Primarily for Australia's small-scale forest growers*

What's happening to consumption of sawnwood in Australia?

This report first examines the consumption of sawnwood. It next presents market trends for selected forest products and case studies of stumpage prices recently received by small-scale growers.

Changes in sawnwood consumption

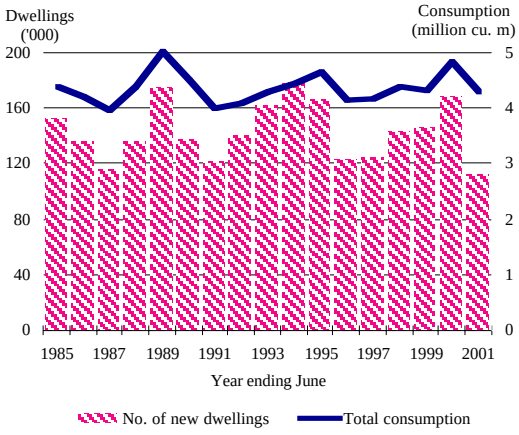
Data published by ABARE show that total volume of log removals from Australian forests (excluding firewood) is about 24 million cubic metres. Saw and veneer logs account for 46 per cent of the total removals. As Australia is a net importer of sawnwood, sawnwood produced from sawlog removals is in effect consumed in domestic market. The domestic market is therefore of particular interest to growers whose target products include sawnwood.

Information presented here focuses on selected aspects of the sawnwood market at the national level, and covers the seventeen-year period of 1984-85 to 2000-01

During the period, annual apparent consumption of sawnwood averaged 4.4 million cubic metres. However, annual consumption fluctuated between four and five million cubic meters. (The annual consumption is projected to remain within this range in the foreseeable future, according to an ABARE study by Graham Love and his colleagues.)

As 70 per cent of sawnwood is structural timber, fluctuations in sawnwood consumption follow the changes in commencements of construction of new dwellings (figure A) or overall construction activity.

A: Total sawnwood consumption and commencements of new dwellings, Australia



A preliminary analysis shows sawnwood consumption also fluctuates between seasons. The March quarters tend to have the lowest total sawnwood consumption as well as the lowest prices for structural timber (more on the prices later). Knowledge of seasonal patterns can help growers in identifying the best time for marketing their sawlogs and/ or sawnwood. However, seasonal patterns first deserve a thorough analysis—a subject of a separate project and a market report.

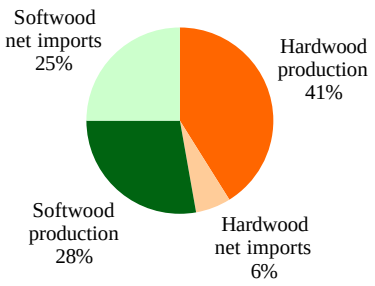
Over the seventeen years, the composition of total sawnwood consumption has changed radically.

Many indicators illustrate the change. For example, volume of net imports (ie imports *minus* exports) of sawnwood in Australia has fallen steadily. In 1984-85, net imports of sawn hardwood and softwood together accounted for 31 per cent of total sawnwood consumption (figure B). By 2000-01, they accounted for only 15 per cent of the total consumption. Thus Australian sawnwood production now effectively supplies 85 per cent of the total domestic consumption. (Looking ahead, the ABARE study projects that before the end of this decade, Australia will not only fully meet its domestic consumption needs but it will also transform from a net importer into a net exporter of sawnwood.)

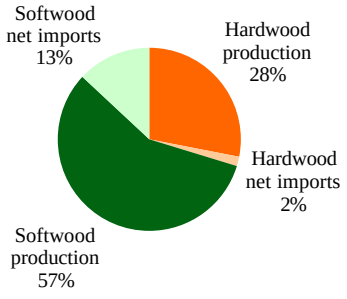
Production of sawn hardwood was 1.8 million cubic metres in 1984-85 and 1.2 million cubic metres in 2000-01. It shows a declining trend in production of sawn hardwood.

B: Components of sawnwood consumption, Australia

1984-85



2000-01



The opposite was, however, the case with sawn softwood. Its production rose from three million cubic metres in 1984-85 to nearly four million cubic metres in 2000-01.

In 1984-85, production and net imports of sawn hardwood jointly held 47 per cent share of the total consumption. By 2000-01 the share fell to 30 per cent (figure B). Put another way, the share of sawn softwood rose to a commanding height of 70 per cent.

The large share of softwood (or a small share of hardwood) in total consumption is due to changes in numerous factors, including timber prices. Based on Australian Bureau of Statistics data, figure C presents indexes of structural timber prices and consumer prices (CPI). Base year for the index: 1989-90 = 100. (Refer to ANU Forestry Market Report Number 9 for detailed background on the timber price indexes.)

C: Prices of structural timber, Australia

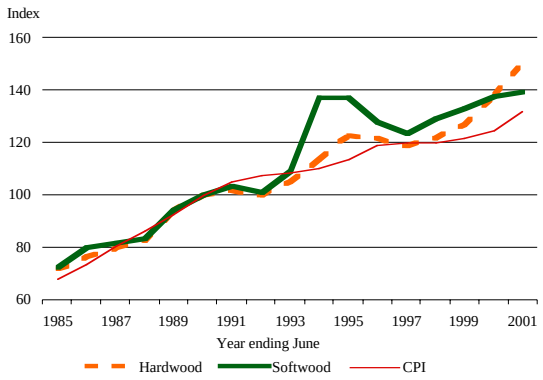


Figure C shows rising trends in the timber prices. From the benchmark of the base year, the timber prices have tended to rise faster than CPI. It means timber prices have generally increased in real terms.

Figure C also shows the price of softwood timber rose relatively faster for most of the period. But softwood timber is usually less expensive, and it performs as well as hardwood does in many uses. This partly explains why softwood has gained a dominant position in consumption of sawnwood.

Towards the end of the period, however, the price index of hardwood rose relatively sharply. If this development hints at what the future holds, then it will have a strong effect of further reducing the consumption of hardwood. In the event, use of hardwood will further shift towards the 'high value – low volume' end of the sawnwood market.

While softwood was replacing hardwood in many uses, consumption of some materials that substitute for sawnwood was also increasing. Examples of the substitute materials are particleboard, medium density fibreboard, aluminium, steel and concrete. As the substitutes are parts of the overall picture of sawnwood consumption, it is also relevant to looks at trends in their consumption and prices. They will, however, be the subjects of the next market report.

Main points

- Consumption of sawnwood fluctuates between 4–5 million cubic metres a year; the fluctuations have close links with fluctuations in the housing and other construction activity.
- Australia is projected to become a net exporter of sawnwood within the next ten years.
- Softwood dominates consumption of sawnwood.
- Prices of sawnwood have increased in real terms.

Market trends

New Zealand radiata pine log prices

NZ is a leading world producer and exporter of radiata pine logs. Hence, for Australian radiata pine growers, the NZ export and domestic log market prices are a window on the world market situation.

The NZ Ministry of Agriculture and Forestry collects the NZ price data from major NZ log suppliers and releases them quarterly as a range for each grade of logs. Export prices are per Japanese Agricultural Standard (JAS) cubic metre on a free on board (FOB) basis. Domestic prices are per tonne delivered at mill door. The prices are indicative. For more information on the NZ prices, see ANU Forestry Market Report Number 17.

The prices were originally in NZ dollars. They have been converted here into Australian dollars, using the exchange rates published by Reserve Bank of Australia. Average exchange rate for the December quarter 2001 was NZ$1.2351 = $1.00.

Table 1 has full set of prices for the quarter. Figures D and E show trends in the export and domestic prices for selected grades of logs up to the December quarter 2001. Trend line for each grade is based on the middle points of its quarterly price range.

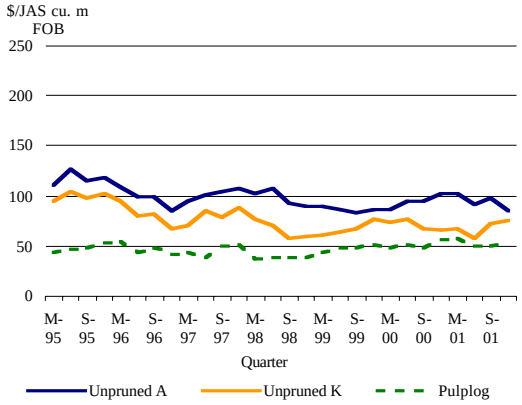
1: NZ radiata pine log prices: December quarter 2001

Export, FOB	**$/JAS cu. m**
Pruned peeler (300+ mm)	154–189
Unpruned A grade (200–340 mm)	76–93
Unpruned J grade (200–260 mm)	72–79
Unpruned K grade (200–260 mm)	70–81
Pulplog (100+ mm)	53–57
Domestic, mill door	
P1 pruned (400+ mm)	133–154
P2 pruned (300–399 mm)	86–86
S1 unpruned (400+ mm)	62–82
S2 unpruned (300–399 mm)	56–74
L1 & L2 unpruned (300+ mm)	50–65
S3 & L3 pruned/ unpruned (200–299 mm)	40–63
Pulplog (100 mm)	28–41

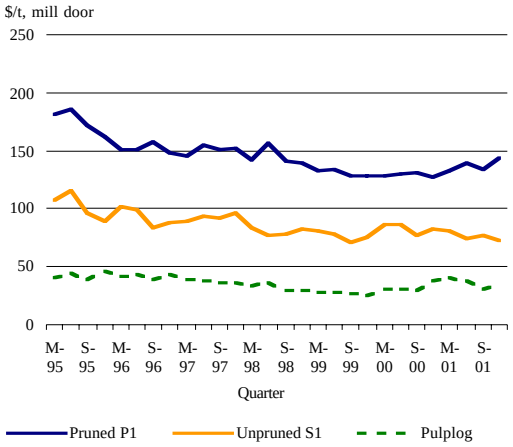
Note: Numbers in brackets are small end diameters (SED) of logs. SED and other features of a log jointly determine its grade. More information on the NZ log grades is available from U.N. Bhati. His contact details are at the end of the report.

Source: NZ Ministry of Agriculture and Forestry.

D: Export prices of radiata pine logs, NZ



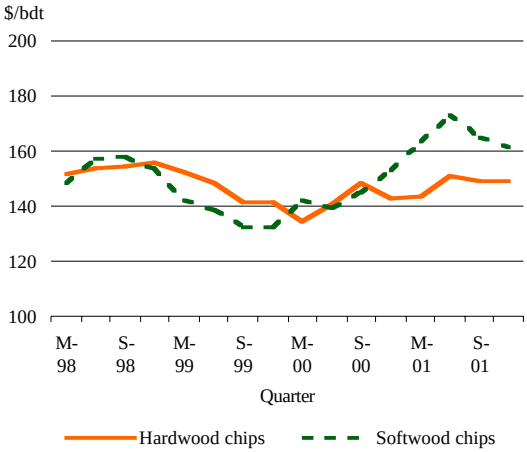
E: Domestic prices of radiata pine logs, NZ



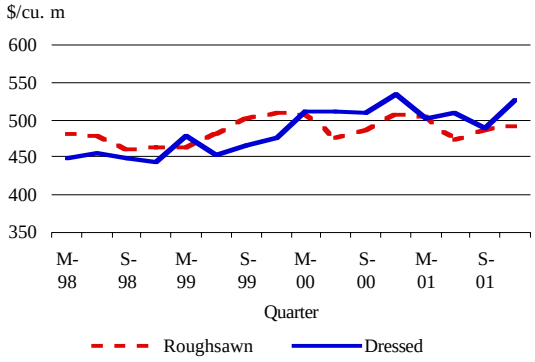
Australian export–import prices

Price trends in figures F and G for selected Australian exports and imports of forest products provide another useful window on the market situation.

F: FOB export prices of woodchips, Australia



G: FOB import prices of NZ radiata pine sawnwood, Australia



Stumpage for small-scale growers

ANU Forestry has collected information on actual stumpage prices recently received by small-scale growers in various regions of Australia. As the collected information was insufficient for deriving averages and trends, it is presented in case study format in table 2.

Users should exercise due care in using it for assessing stumpage for a particular situation.

2: Stumpage case studies

Region/ State	Period 2001	Type of log	Stumpage	Comments
Central tablelands, NSW	May-December	Pine:		
		Sawlogs	$8.50/t	4,530 t; 25–170 km to mill
		Preservation logs	$5.00/t	1,165 t; 70 km to mill
		Pulplogs	$1.50/t	1,452 t; 25 km to mill
Central tablelands, NSW	March–May	Pine:		Clearfell; 22 hectares; age 28:
		Sawlogs, sort 4	$55.39/t	281 t; SEDUB of logs 34.1–40 cm
		Sawlogs, sort 3	$47.80/t	1,213 t; SEDUB of logs 26.1–34 cm
		Sawlogs, sort 2	$20.11/t	2,549 t; SEDUB of logs 18–26 cm
		Preservation-case logs	$11.07/t	1,322 t
		Pulplogs	$6.22/t	1,037 t

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Region/ State	Period 2001	Type of log	Stumpage	Comments
Central highlands, Victoria	March	Pine: Sawlogs, A grade Sawlogs, B grade Case logs Pulplogs	 $65/t $39/t $25/t $4/t	Final crop: Over 50 t; 40–50 km to mill; $95/t* Over 200 t; 40–50 km to mill; $65/t* Over 100 t; 40–50 km to mill; $55/t* 70 t; 40 km to mill; $30/t*
Central Victoria	October–November	Douglas-fir: Sawlogs Sawlogs, low grade	 $108.50/t $63.50/t	Clearfell; age 79; good site: 821 t; 25 km to mill; $125/t* 102 t; 25 km to mill; $80/t*
South Australia	November	Pine: Veneer logs Sawlogs Sawlog residual Pulplog standard Hardwood: Pulplog standard	 $61–$83/cu. m $19–$83/ cu. m $5–$27/ cu. m $2–$12/t $20–$29/t	
S-W, Western Australia	August	Native forest eucalypt, karri (*E. diversicolor*)	$25/t	Regrowth logs, 112 t; 220 km to mill; $75+GST*

* Mill door price. SEDUB, Small end diameter under bark

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