

REPORT

Pressures facing harvesting contractors in the Tasmanian forest industry

Prepared for

**Department of Agriculture, Fisheries and
Forestry**

GPO Box 858
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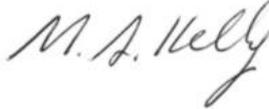
Project Manager:



.....
Bill Howley
Principal Consultant

URS Australia Pty Ltd
Level 6, 1 Southbank Boulevard
Southbank
VIC 3006
Australia
Tel: 61 3 8699 7500
Fax: 61 3 8699 7550

Project Director:



.....
Mark Kelly
Principal Consultant

Author:



.....
David Paul
Senior Consultant

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Executive Summary

Executive Summary	2
1 Introduction	1-1
2 Market for woodchips	2-1
2.1 Market demand for hardwood woodchips.....	2-1
2.1.1 Japan.....	2-1
2.1.2 China	2-2
2.1.3 Other markets.....	2-3
2.1.4 Tasmanian pulp mill.....	2-3
2.2 Supply of hardwood woodchips	2-3
2.2.1 Other hardwood woodchip suppliers	2-6
2.3 Hardwood woodchip prices	2-7
2.4 Woodchip market outlook.....	2-7
2.5 Implications for Tasmanian forest industry contractors	2-8
3 Characteristics of forest contracting businesses	3-1
3.1 Industry overview	3-1
3.1.1 Agricultural and civil construction contractors	3-3
3.2 Contract arrangements	3-3
3.2.1 Contracts in the agricultural and civil construction sectors	3-5
3.3 Key factors influencing contractor performance	3-5
3.3.1 Revenue	3-6
3.3.2 Cost structures	3-6
3.3.3 Returns	3-8
3.3.4 Other factors influencing returns	3-9
3.4 Rates of contractor failure	3-9
3.4.1 Factors influencing failure in forestry contractors.....	3-11
4 Long term viability of Tasmanian forest contractors.....	4-1
4.1 Impact of the downturn in woodchip demand on Tasmanian forest contractors	4-1
4.2 Outlook for Tasmanian forest contractors.....	4-1
4.3 Recommendations.....	4-2
5 References.....	5-1
6 Limitations	6-1

Executive Summary

In recent years a downturn in hardwood woodchip exports from Tasmania has created considerable pressure on Tasmanian forest industry contractors. This report examines those impacts, the situation and outlook for the hardwood woodchip market, the nature and structure of the contracting sector and implications for the future.

Market situation and outlook

Analysis of demand, supply and price trends in the hardwood woodchip market suggests that native forest hardwood woodchip exports are likely to face ongoing weakness in demand. Large increases in volumes of plantation hardwood pulpwood are a major source of competition for native hardwood woodchips. Japanese pulp and paper manufacturers, the dominant consumer of hardwood woodchip exports, have demonstrated clear preferences for plantation grown woodchips.

On the demand side Japanese consumption will at best remain relatively flat. Large increases in China's consumption of pulp and paper and consequent expansion in domestic processing capacity will provide increased demand for hardwood woodchips. However, this will be moderated by imports of pulp from low cost producers, particularly in South America. China's pulp and paper manufacturers have also demonstrated a desire to source woodchips from developing plantations in South East Asian countries at lower cost compared to Australian suppliers. Indonesia has occasionally taken volume from Australia, and India could also be a new market, however both are expected to be at lower prices than exports to Japan.

Real price declines in hardwood woodchip exports are expected to continue and as plantation supplies increase it is expected that export price differentials between plantation and native hardwood woodchips will widen. While consuming country preferences for plantations may limit the ability of native hardwood woodchip exporters to maintain markets, the need to maintain the viability of plantation investments will act to moderate declines in prices for plantation woodchips.

The development of a pulp mill in Tasmania would help mitigate some of the adverse market pressures for native forest woodchip exports by providing a new domestic market for Tasmanian pulpwood.

The Tasmanian forest contracting industry

The Tasmanian forest contracting industry encompasses a wide range of operations but the bulk of operators are generally small family based businesses with quotas of less than 50,000 cubic metres per annum. This is a similar structure to native forest contractors in NSW and Victoria. However, Queensland native forest contractors are even smaller while the WA contractors have consolidated into a few larger operators. In comparison to native forests, plantation harvesting is based on fully mechanised operations with larger volumes required to maintain viability.

Harvest contract volumes in Tasmania are based on pulpwood production with premiums paid for sawlogs. This is different to other states which generally set contractor volumes in terms of sawlogs. Contractor rates in Tasmania are generally negotiated annually based on performance. In many cases this has now occurred over a long period which means that base rates have not been adjusted beyond the movement in a range of cost indices. This tends to lock in current contractors. In other states and for plantation contractors it is more common to tender harvesting contracts typically for around 5 years and this could be expected to result in greater flexibility of contractors and their business operations.

As would be expected, forest contractors report a range of profitability and rates of return depending on individual circumstances and business structures. The nature of forest contracting requires large investments in machinery so that fixed costs associated with interest repayments and the relative level of equity are key influences on contractor profitability and rate of return. For smaller operators with high gearing, a reduction in quota volumes means less revenue with relatively small changes in costs thereby reducing profitability and returns significantly. On the other hand a larger operator with lower gearing could be expected to have greater flexibility to park machinery and reorganise crews so that there is more

Executive Summary

chance of maintaining short term profitability and providing some protection for rates of return in the longer term.

It appears that the rate of failure of forest contractors in Tasmania is not significantly different to that experienced by forest contractors in other states and it is not uncommon for contractors to exit when markets turn down. However, the rate of failure in the broader forest contracting industry, along with agricultural and civil contractors, appears to be at the high end of industries generally. While forest contractors are generally able to meet rates of return required to support market rates of interest on commercial finance vital to their operations, the rate of failure in the broader forest contracting industry and variation in profitability suggests that rates of return on owner equity for many contractors would be considerably less than the rate of interest paid on commercial loans.

As hardwood woodchip exports from Tasmania grew rapidly following the completion of the Tasmanian RFA in the mid 1990s, forest owners encouraged existing contractors to expand their operations and new contractors to enter the industry. As the market turned down pulpwood quotas were reduced and a number of harvesting contracts were not renewed. The reduction in quotas reduced profitability of contractors with generally adverse impacts, but the severity of the impacts varies across individual businesses. However, in general prevailing cost structures mean that smaller and highly geared operators have least flexibility to cope with these changes. Attempts to mitigate these impacts have included seeking new markets and shifting some contractors into forests with higher sawlog yields. However, the impact remains significant.

Implications for the future

In the longer term the market outlook for hardwood woodchips suggests that markets, particularly for native hardwood woodchip exports, will remain tight. In addition under the RFA native hardwood pulpwood availability will decline and volumes of hardwood plantations will increase significantly over the next decade. These factors are expected to drive ongoing adjustments in hardwood contracting. The development of a Tasmanian pulp mill has the potential to mitigate some of the adverse impacts of adjustment stemming from woodchip export markets, particularly for native forest contractors.

In these circumstances it is proposed the contracting industry would benefit from increased flexibility. Actions to help achieve this could include:

- More market based approaches to letting of harvesting contracts through open competitive tenders. This will allow the more efficient operators to secure additional resource, which in turn should allow them to better manage the peaks and troughs of the market. This would also facilitate opportunities for existing native contractors to move to plantations as new supply becomes available. It needs to be recognised that a move to tendering is likely to generate additional structural adjustment in the contracting sector. While some contractors perceive that tendering provides an opportunity for growers and processors to exert undue market power to lower rates, such power could also be exerted in the absence of tenders. In the long term it is in the interests of growers and processors to ensure that there is an efficient and viable contracting industry;
- Consolidation of the number of contractors would improve the ability of the remaining contractors to manage changes in market demand;
- Providing contracts with guaranteed base volumes (potentially with differential rates for base and marginal volumes) and/or compensation should actual volumes fall below base volumes;
- Addressing skills shortages e.g. through the provision of additional resources for training of machinery operators and mechanics; and
- Support for developing business management and planning skills of small contractors to assist structural adjustment and the development of more resilient businesses in the future.

At a broader level encouraging the development of new markets for hardwood woodchips would also assist the contracting industry. Recognising the costs of compliance with environmental and other

Executive Summary

statutory requirements and ensuring that associated costs are efficient would assist contractors in maintaining flexibility. Addressing skills shortages would also assist the competitiveness of the contracting industry.

Section 1

Introduction

The Department of Agriculture Fisheries and Forestry (“DAFF”) requested URS Forestry undertake this study in response to DAFF’s interest in the Tasmanian contracting industry. This interest includes the provision of grants through the Tasmanian Forest Industry Development Programme (“TFIDP”) to assist adjustment in response to changes in timber resources arising from the Tasmanian Community Forest Agreement and to support the continued development of a sustainable, efficient, value adding and competitive forest industry in Tasmania. The Terms of Reference for the study are at [Appendix 1](#).

This report provides an overview of the pressures facing harvesting contractors in the Tasmanian forest industry. It examines the current market situation and the outlook for hardwood woodchip markets that drive the businesses of Tasmanian forest contractors, the nature and structure of forest contracting businesses, the impact of the recent downturn in hardwood woodchip exports and implications for the future of Tasmanian forest contractors.

As part of completing this report a Senior Consultant from URS Forestry met with representatives from each of the major hardwood growers (Forestry Tasmania, Gunns Limited and Forest Enterprises Australia) as well as a representative from the Tasmanian Forest Contractors Association in Launceston. Subsequent discussions were held via telephone with the Australian Forest Contractors Association, Rayonier Tasmania as well as a number of contractors involved in the harvesting and haulage sector in Tasmania. URS Forestry also held discussions with other forest owners and contractors within Australia. Data on the agricultural sector was provided by the Tasmanian Agricultural Contractors Association and the Rice Growers Association. Information on the civil construction sector was provided by the Civil Contractors Federation.

Section 2 of this report reviews the market situation and outlook for hardwood woodchips and draws implications for the forest contracting industry in Tasmania. The key drivers of contractor businesses in Tasmania are outlined in Section 3. This also compares and contrasts the situation in Tasmania with other forest harvesting operations and with similar businesses in other industries. Section 4 draws together the market influences and the nature of forest contractor businesses to identify implications for the long term viability of Tasmanian forest contractors. This includes recommendations to promote an efficient and viable forest contracting industry in Tasmania.

Section 2

Market for woodchips

This section reviews supply, demand and price trends for hardwood woodchips. It includes an analysis of international market trends as well as the outlook for hardwood woodchip markets including implications for woodchip exports from Australia and Tasmania. The section concludes with an assessment of the implications for forest contractors in Tasmania.

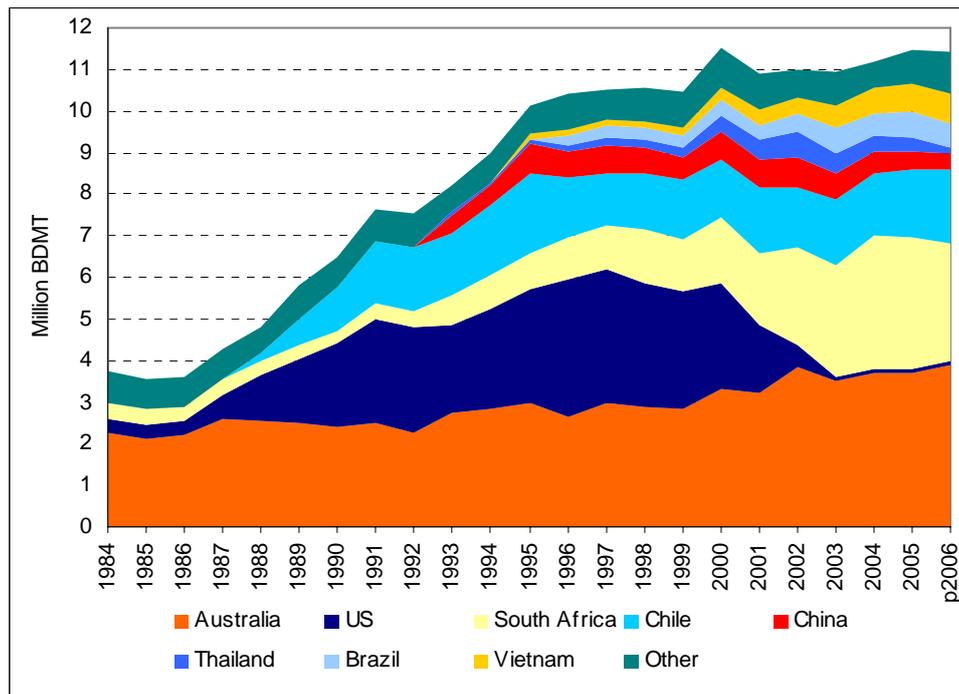
2.1 Market demand for hardwood woodchips

The global market for woodchips is principally driven by pulp, paper and paperboard production for which woodchips provide feedstock. Hardwood woodchips have a short fibre length suited to the production of high quality printing and writing papers. Softwood species such as radiata pine have a longer fibre length and are commonly used in lower value newsprint and packaging products. Demand for Australian hardwood woodchips is driven by export markets.

2.1.1 Japan

The global hardwood woodchip trade is dominated by Japan, which accounts for around 90% of that trade in the Asia Pacific region. The rapid increase in Japanese imports between 1986 and 1995 was driven by an expansion in domestic processing capacity and the replacement of locally sourced fibre with imported fibre.

Figure 2-1: Japanese hardwood woodchip imports by country of origin, 1984-2006



Source: Global Trade Atlas (2006)

Japanese demand for hardwood woodchips has grown at annualised rate of 1.4% over the past decade. This is largely a reflection of the slow economic growth in Japan over this period. URS Forestry expects that the level of demand from Japan will remain relatively static for the foreseeable future, as the industry is mature with few growth opportunities.

A key issue facing suppliers of woodchips sourced from native forests is substitution by woodchips sourced from plantations. The proportion of plantation grown timber imported by Japan has increased from less than 10% in 1990 to more than 70% (Wood Resources International 2005) in recent years. The three Japanese companies which account for the majority of hardwood woodchip procurement, Oji,

Section 2

Market for woodchips

Nippon and Mitsubishi have all published statements regarding procurement on their websites. All are actively pursuing a greater proportion of plantation and certified woodchips. Examples include:

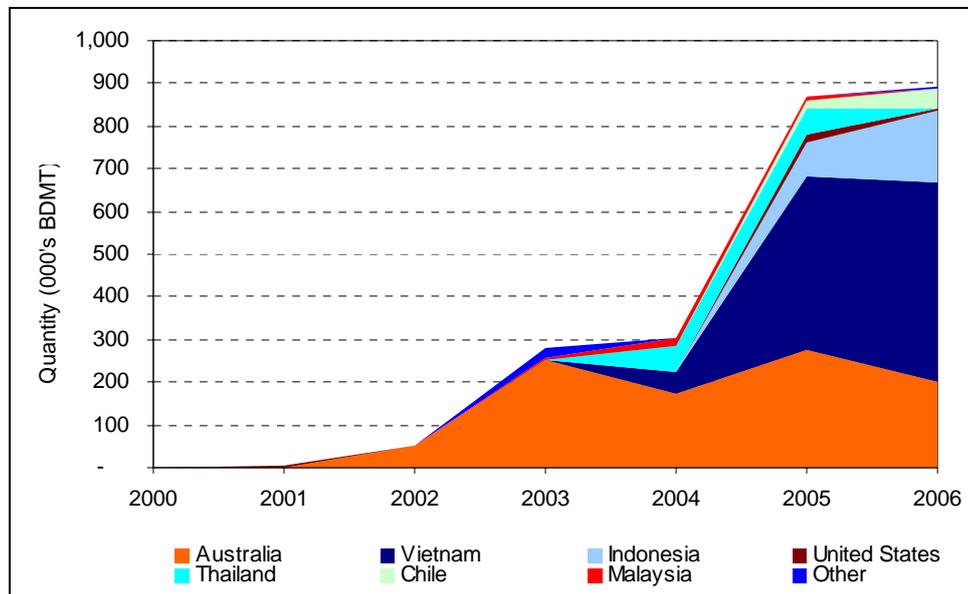
- In April 2005 Oji Paper made a commitment to expanding the procurement of wood from certified forests and to increase the proportion of plantation trees used as raw material;
- In its 2004 Sustainability Report, Nippon Paper Group stated a goal of acquiring FSC certification for the Group's forests and for importing all hardwood woodchips exclusively from afforested areas or other certified forests; and
- In 2002 Mitsubishi said it would endorse FSC certification on all its forest operations wherever practical. In 2005 the company announced it would no longer purchase woodchips sourced from 'old growth' forests.

While these statements do not preclude the companies from purchasing woodchips sourced from native forests in Tasmania, as these forests are certified under the Australian Forestry Standard, it demonstrates a clear intent to increase the consumption of woodchips from plantation forests. URS Forestry expects the Japanese preference for plantation grown hardwood woodchips to continue over time.

2.1.2 China

China's economic growth has driven large increases in its consumption of pulp and paper products which has led to increased imports as well as increased domestic production. China is expected to continue to source market pulp¹ and wastepaper, however it is also expected that the country will increase its own pulp production capacity. Pulp imports levelled off during 2005, as a result of major pulp capacity coming on stream on Hainan Island and in Shandong Rizhao. The commencement of these mills has also led to increases in imports of woodchips (Figure 2-2). In 2006 China imported just over 890,000 bone dry metric tonnes of hardwood woodchips, three times the volume that was imported in 2004.

Figure 2-2: Chinese hardwood chip imports by country of origin, 2000-2006



Source: Global Trade Atlas (2006)

¹ Market pulp is pulp produced for sale in open markets vs. production in integrated operations that produce both pulp and paper.

Section 2

Market for woodchips

As China's demand for woodchips has grown it has looked to vary its sources of imports. This has included a rapid increase in the share of imports from South East Asian countries, most notably Vietnam. Figure 2-2 shows that Australia has been an exporter of woodchips to China over recent years, primarily native forest hardwood from Tasmania and Victoria. The Hainan Island mill was the principal purchaser. However, Australia has been unable to retain market share and exporters have found increased competition from South East Asian suppliers.

Ongoing expansion of pulp production capacity in China is expected to lead to further increases in hardwood woodchip imports. China has an extensive plantation program and the success of this program, together with the ability of pulp mill proponents to access foreign capital, will be key factors in determining its future level of woodchip imports. The likelihood of ongoing growth in woodchip imports will also depend on the relative attractiveness of pulp imports compared to domestic pulp production.

2.1.3 Other markets

Other markets for Tasmanian woodchips include South Korea, Taiwan, and Indonesia. Each has a significant pulp or paper making capacity, with much of the resource currently sourced either domestically or from neighbouring South East Asian countries. India is still a relatively closed industry, however there are signs of potential interest in imported chip. These markets are substantially smaller than those of Japan and China and cannot pay prices equivalent to Japanese importers, however they could provide an export market for the lower grade volumes that arise from native forests. .

2.1.4 Tasmanian pulp mill

The potential construction of a bleached kraft pulpmill by Gunns at Bell Bay in Tasmania would require around 3 million green tonnes of hardwood per annum. This would therefore act as a potential new market for native forest woodchips, and reduce the reliance on export markets and balance increasing competition from plantations.

The proposal is currently in the planning approval process and there is uncertainty over whether it will proceed. Gunns submitted its original Integrated Impact Statement to the Regional Planning and Development Commission ("RPDC") in July 2006. The RPDC reviewed the report and responded by requesting supplementary information. On 14 March 2007 Gunns withdrew from the RPDC process. In response the Tasmanian government has since introduced the *Pulp Mill Assessment Bill 2007* that establishes a new process of assessment. The timing of this new assessment process is not yet clear.

2.2 Supply of hardwood woodchips

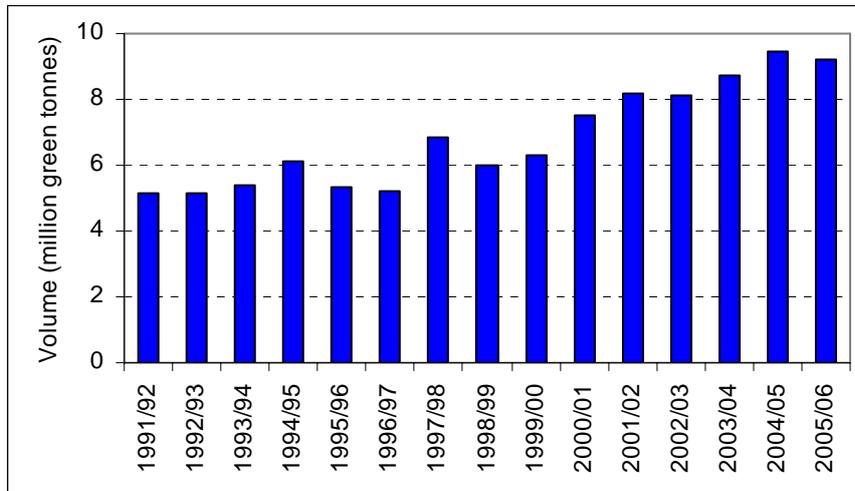
Australia and the USA have traditionally been the largest suppliers of hardwood woodchips to international markets. Native forests in the US South were a major source of hardwood chip exports as Japanese demand grew strongly in the late 1980s and throughout most of the 1990s. However, exports from the US South have decreased dramatically in the last few years as suppliers have been impacted by the strength of the USD against the Japanese Yen and domestic environmental pressures. It appears unlikely that the US South will re-enter the market due to the availability of alternative supplies from plantations and increasing restrictions on harvesting in the forests that formerly supplied this market.

Australia's hardwood chip exports have historically been based on native forests, with Tasmania being the major source. Exports were fairly constant at just under 5 million green tonnes per annum although Australia's share of the Japanese market generally declined as Japanese imports grew. While the Regional Forest Agreements resulted in a reduction in the area available for sawlog harvesting, they also led to the lifting of Commonwealth government restrictions on export woodchip volumes. Combined with the initial harvesting of the new plantation supplies, woodchip exports subsequently increased at an average rate of 6.7% per annum between 1997 and 2006, with 9.2 million green tonnes (around 4.6 million bone dry metric tonnes) exported in the year ended June 2006 (Figure 2-3).

Section 2

Market for woodchips

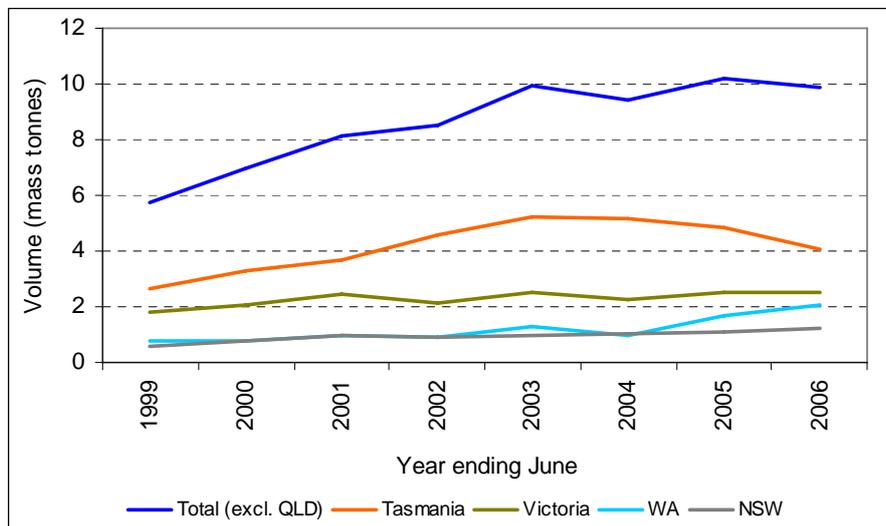
Figure 2-3: Australian hardwood chip exports 1991-2006



Source: ABARE (2006)

Information on hardwood woodchip exports from ABARE is not available at the state level between 2000 and 2005. The most comprehensive data available on woodchip exports by state over this period comes from the Association of Australian Ports and Marine Authorities ("AAPMA"). One of the limitations of the AAPMA data (Figure 2-4) is that it incorporates softwood and hardwood woodchip exports. While this is not significant for woodchip exports from Tasmania because softwood woodchips represent only 1–2 percent of the total volume, the volume shown for Victoria is approximately two thirds softwood woodchips. Queensland has been excluded as all woodchip exports are softwood.

Figure 2-4: Exports of hardwood and softwood woodchips by state (excl. Qld), 1999-2006¹



Source: AAPMA (2006)

¹ Volumes reports as mass tonnes assumed to be green tonnes

Key trends from the AAPMA data show that:

- Tasmania is the dominant supplier of Australia's hardwood woodchip exports, despite the recent downturn in demand, accounting for 49% of the total hardwood woodchip export volume in 2005/06;
- Tasmania's overall market share declined between 2003 and 2006;

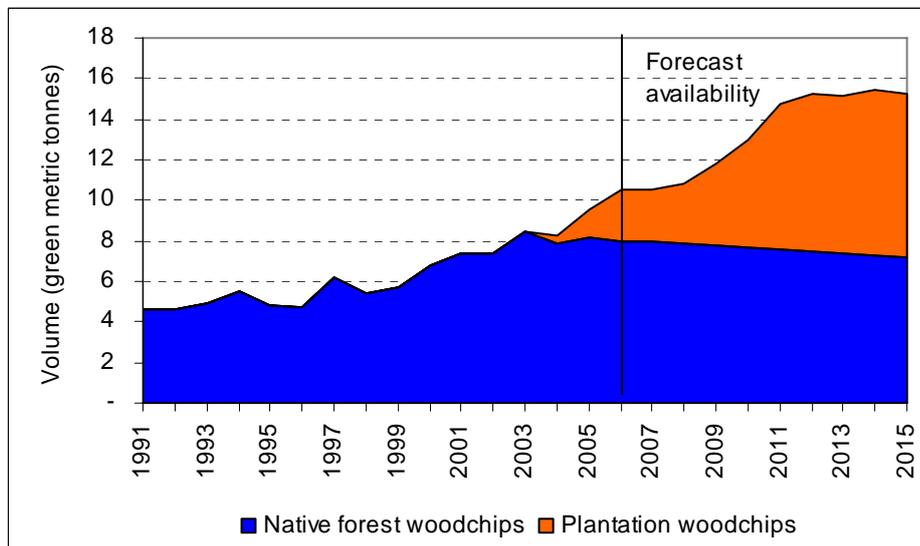
Section 2

Market for woodchips

- Between 1999 and the year ending June 2004, the supply of woodchips from Tasmania effectively doubled from 2.6 million tonnes to around 5.1 million tonnes;
- In the year ending June 2006, the supply of hardwood woodchips from Tasmania dropped by around 0.8 million tonnes to 4.0 million tonnes, a decline of 16 percent on the previous year; and
- Despite the decline in supply from Tasmania, supply from Australia has remained stable. This largely reflects increases in supply from maturing hardwood plantations in Western Australia in the past two years.

Projections of future Australian hardwood plantation woodchip supply vary with assumptions concerning the rate of plantation expansion and the growth rates of plantations. Figure 2-5 shows URS Forestry's expectations of future availability of native hardwood pulpwood and plantations for woodchip exports, in the absence of proposed domestic pulp mill developments.

Figure 2-5: Australian historical hardwood chip export volume & forecast available volume from native forests and hardwood plantations, 1991-2015



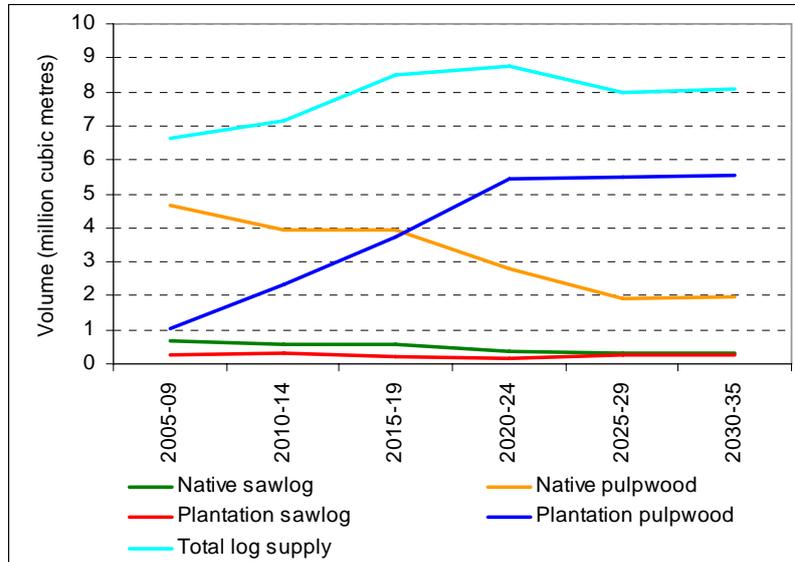
Source: ABARE & URS Forestry forecasts

While pulpwood available from native forests in Tasmania is forecast to decline over coming decades, this will be more than compensated for by increasing volumes from plantations (Figure 2-6).

Section 2

Market for woodchips

Figure 2-6: Projected supply from Tasmania's hardwood forests



Source: Forestry Tasmania and Private Forests Tasmania

Continued harvesting in native forests is essential to Tasmania's solid wood processing industry for the foreseeable future. According to Forestry Tasmania, a minimum annual harvest of around 2 million cubic metres is required to generate 300,000 cubic metres of high value sawlogs and veneer logs that Forestry Tasmania have a statutory requirement to produce as part of the Regional Forest Agreement.

2.2.1 Other hardwood woodchip suppliers

In South America, Chile and Brazil both have rapidly developing hardwood plantation resources. Chile has been developing a eucalypt plantation resource since the mid 1980s. The current plantation area is around 437,000 ha and the total harvest of eucalypt plantations is around 4.5 million green tonnes per annum. Brazil has an estimated 3.2 million hectares of eucalypt plantations of which approximately 1.4 million hectares is controlled by the pulp and paper sector (the bulk of the remainder have been planted by steel companies for the production of charcoal for use in steel manufacturing). The volume of pulpwood harvested in these countries is expected to increase by 9 million cubic metres and over 20 million cubic metres respectively over the next decade. Although the cost of wood fibre in Brazil has increased substantially over the last three years, the country remains one of the lowest cost producers of pulp and is able to deliver at competitive prices to major regional markets. The additional volumes of pulp from Brazil are expected to go a long way towards meeting projected increases in global demand for market pulp over the next decade. The additional supply from Chile is more likely to compete with Australian suppliers for access to the Japanese woodchip market.

South East Asian countries are expanding their hardwood plantation resources and new areas of plantations are likely to be available over the next 5-10 years. The impact these countries will have in key Asian markets will largely depend on the cost of production and relative exchange rates.

South Africa has around 650,000 ha of hardwood plantations of which around 84% is being managed for the production of pulpwood. Other uses of hardwood include mining timbers, sawlogs and poles. The availability of woodchips from these plantations is partly linked to trends in these other industries. For example, the mining industry is using fewer timber poles, so woodchip availability has increased. Forestry South Africa (2004) has projected that supply of pulpwood will increase by 1 million green metric tonnes over the next decade. Whether this pulpwood is used to produce market pulp or exported as woodchips, it will also have an impact on regional markets for pulpwood.

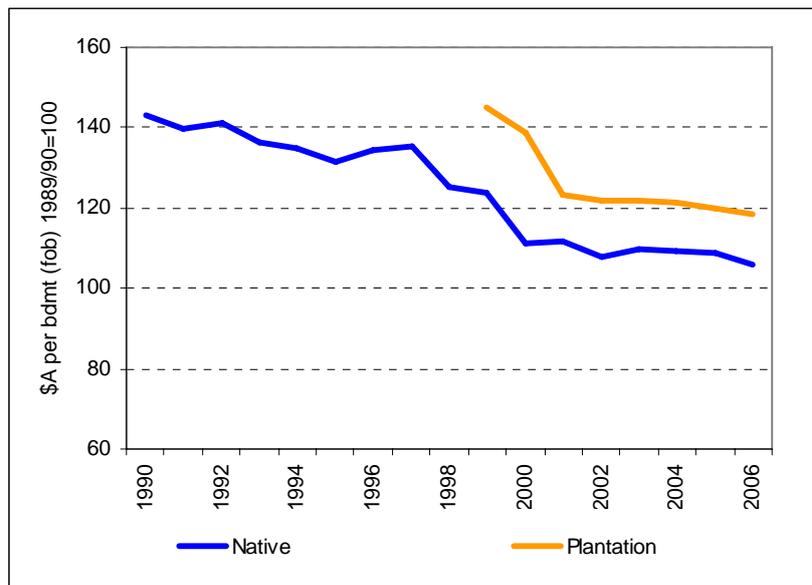
Section 2

Market for woodchips

2.3 Hardwood woodchip prices

Reflecting the overall demand and supply situation, prices for Australian hardwood woodchip exports have declined in real terms over the last 10-15 years. In Australia, plantation hardwoods (predominantly Tasmanian blue gum) typically attract a premium of 10-12% over native chips (Figure 2-7). The premium results from the preferred characteristics of Tasmanian blue gum fibre generated from plantations that make it ideal for high quality pulp production and allow cost savings in production through superior yields to most native forest resources. With increasing supply from plantations, price and volume pressure on native woodchips is likely to intensify, with an expectation that the price gap between woodchips sourced from plantations has the potential to increase over woodchips from native forests.

Figure 2-7: Australian hardwood woodchip prices (free on board), 1990-2006 (real)



Source: Gunns and URS Forestry

2.4 Woodchip market outlook

The critical drivers of future hardwood woodchip export markets will be:

- a. **Supply/demand balance:** The global supply of plantation hardwood chips is expected to increase substantially over the next decade. Supply from Australia is expected to increase by an additional 8 million green metric tonnes per annum. In South America supply from Chile has the potential to increase by around 9 million green metric tonnes per annum and production from Brazil has been forecast to increase by over 20 million green metric tonnes per annum. South Africa also has the potential to supply an extra 1 million green metric tonnes per annum and Indonesia may increase chip exports from plantations originally established to supply local mills.

This additional volume of plantation grown wood may be either exported as woodchips to markets such as Japan and China, or processed domestically to produce hardwood pulp. Hawkins Wright (2007) observe that the production of market Bleached Hardwood Kraft Pulp has been growing at an average 4.4% pa over the last decade and forecast a similar growth rate over the next 5-10 years.

- b. **Australian delivered competitiveness:** Australia has traditionally been amongst the lowest cost producers into Japan, however with recent exchange rate movements, this advantage has been lost. On a broader scale, costs of fibre production in Australia are also expected to be higher than in countries such as Brazil where the plantation area is growing rapidly, yields may be as much as twice those from hardwood plantations in Australia and costs, particularly relating to land charges, have the potential to remain highly competitive compared to Australia.

Section 2

Market for woodchips

- c. **Quality preferences:** In comparison to fibre from native eucalypt forests, plantation grown fibre generally produces a higher quality pulp with increased yields and lower chemical consumption.
- d. **Preference for certified and plantation wood:** The Japanese have demonstrated a clear preference for certified and plantation supplies. Several Australian hardwood plantation supplies are looking to secure this advantage through third-party certification processes such as Australian Forestry Standard or Forest Stewardship Council certification.
- e. **Exchange rate movements:** Australian contracts are negotiated in Australian dollars whereas supplies from other countries are typically negotiated in USD. Exchange rates can therefore have a significant impact on Australia's relative competitiveness.

It is very difficult to project year to year variations and future prices, given the range of influencing factors. However, it is expected that prices for Australian hardwood chip exports will continue to fall in real terms as a result of the underlying supply/demand balance. Similarly, Australia (and Tasmania) can expect to find increasing competitive pressure in international woodchip markets as the availability of plantation grown fibre increases. These pressures may be tempered by three primary factors:

- Continued growth of the Chinese economy will underpin demand in the Asia Pacific region by providing additional demand for market pulp. Whilst the Japanese market is expected to be the key price setter, and provide the best returns to Australian chip exporters, China should also draw on export chip volumes and provide a new market for increasing supplies;
- While native forests have the potential to continue to absorb downward price pressure, plantations require capital and the capital providers are expecting a competitive return on the investment. In many cases the plantations are developed on freehold land. There is an opportunity cost associated with the land and if prices decline beyond a certain point there is likely to be a change in land use away from plantation forestry that would impact on the future industry. The Japanese woodchip importers have traditionally been very much aware of this "switching point" beyond which, plantation establishment is no longer attractive to investors; and
- The quality and environmental credentials of plantation fibre versus native forests woodchips may lead to higher price differentials between the two sources.

2.5 Implications for Tasmanian forest industry contractors

URS Forestry believes that the current downturn in demand for hardwood woodchips from Tasmania reflects more than a short term market movement. In particular, the increasing availability of hardwood woodchips from plantations in Australia and other countries will potentially reduce demand for native hardwood woodchip exports.

Woodchip prices are expected to continue declining in real terms, with the premium paid for woodchips sourced from plantations to continue, if not increase. This will impact on the profitability of exporting hardwood woodchips sourced from native forests which in turn will increase the pressure on harvesting and haulage costs as growers try to reduce operating costs.

The construction of a pulp mill in Tasmania would provide domestic demand for around 3 million green metric tonnes which would balance the net expansion in supply in Tasmania from increasing plantation volumes and reductions in native forest volumes. Some of the key issues surrounding the pulp mill that are likely to impact on harvesting and haulage contractors in Tasmania include:

- Until a decision is made on whether the pulp mill will proceed, there will continue to be major uncertainty in the market over long term supply arrangements for woodchips in Tasmania;
- Should the pulp mill be approved it will take at least two years to commission. During this period, Tasmanian suppliers will still be reliant on export markets; and
- The impact of the pulp mill on the domestic market will be limited to forests that are within an economic haul distance of the mill. Regions outside the pulp mill supply catchment will continue to rely on woodchip exports.

Section 2

Market for woodchips

Regardless of whether or not the pulp mill proceeds, there will be continuing adjustment in the native harvest and haul sector as the volume of native forest pulpwood available for harvest declines and areas of hardwood plantations become available for harvest. However, construction of the pulp mill has the potential to provide an additional market for native woodchips that will help balance increased competition on export markets. If the pulp mill is not constructed the adjustment process is likely to be more significant, particularly for native forest contractors, as woodchip importers continue their preference shift towards plantation fibre.

Section 3

Characteristics of forest contracting businesses

This chapter provides an overview of forest contracting industry structures, business arrangements and key drivers of costs and viability for Tasmanian forest contractors. It also compares and contrasts these with other forest contracting operations around Australia and with agricultural and civil engineering contractors.

3.1 Industry overview

Harvesting and haulage operations in Tasmania are carried out by independent contractors. According to the Tasmanian Forest Contractors Association (“TFCA”) there are currently around 130 harvesting and haulage contractors working in Tasmania. The bulk of the contractors are employed by three main forestry organisations, Gunns Limited (“Gunns”), Forestry Tasmania and Rayonier Australia Pty Limited (“Rayonier”). Several contractors have operations working for more than one of these companies.

The number of contractors involved in the harvesting and haulage sector has increased since 2000 as the level of production from native forests and hardwood plantations increased from around 2.6 million tonnes in 1999 to 5.2 million tonnes in 2004. The expansion has been resourced by existing contractors acquiring new machinery and increasing production as well as new contractors entering the industry.

Harvesting crews are generally equipped to work in four main forest types. Table 3-1 shows the typical configuration used for harvesting each forest type. The bulk of the crews working in native forests operate in the young to mature native regrowth forests.

Table 3-1: Typical crew configuration for harvesting different types of hardwood forests in Tasmania

Forest type	Trend in harvesting crews	Typical machinery configuration
True ‘Old growth’ (tree age over 200 years)	Very specialised niche with small annual volumes of high value logs. Hand falling with large machinery required for stem extraction	Large skidder or cable hauler, 3 x 30 tonne excavators
Old growth (120 – 150 years old)	Hand falling generally still required due to safety over stem soundness, limited mechanisation. Skidder/ excavator combination used for extraction and log handling	Mid to large size skidder, 2 x 25 tonne excavators
Mature regrowth (> 60 – 80 years old)		
Young native regrowth selective logging/ thinning	Increasing trend toward mechanisation	Felling head mounted on a 25 tonne excavator, skidder, 20 – 25 tonne excavator
Hardwood plantation	Fully mechanised	Feller/ buncher mounted on an excavator for small operations, or a specialised felling unit for larger operations, skidder or forwarder, 20 tonne excavator used for loading trucks

Source: URS Forestry

One of the difficulties facing contractors harvesting mature native forests is that the machinery required for this forest type is not suited to the high production levels and degree of mechanisation required for plantation material. The machinery is more similar for contractors specialising in thinning of native forests where there is a trend toward mechanisation. As increasing areas of hardwood pulpwood plantations become available for harvesting there may be opportunity for some contractors currently working in native

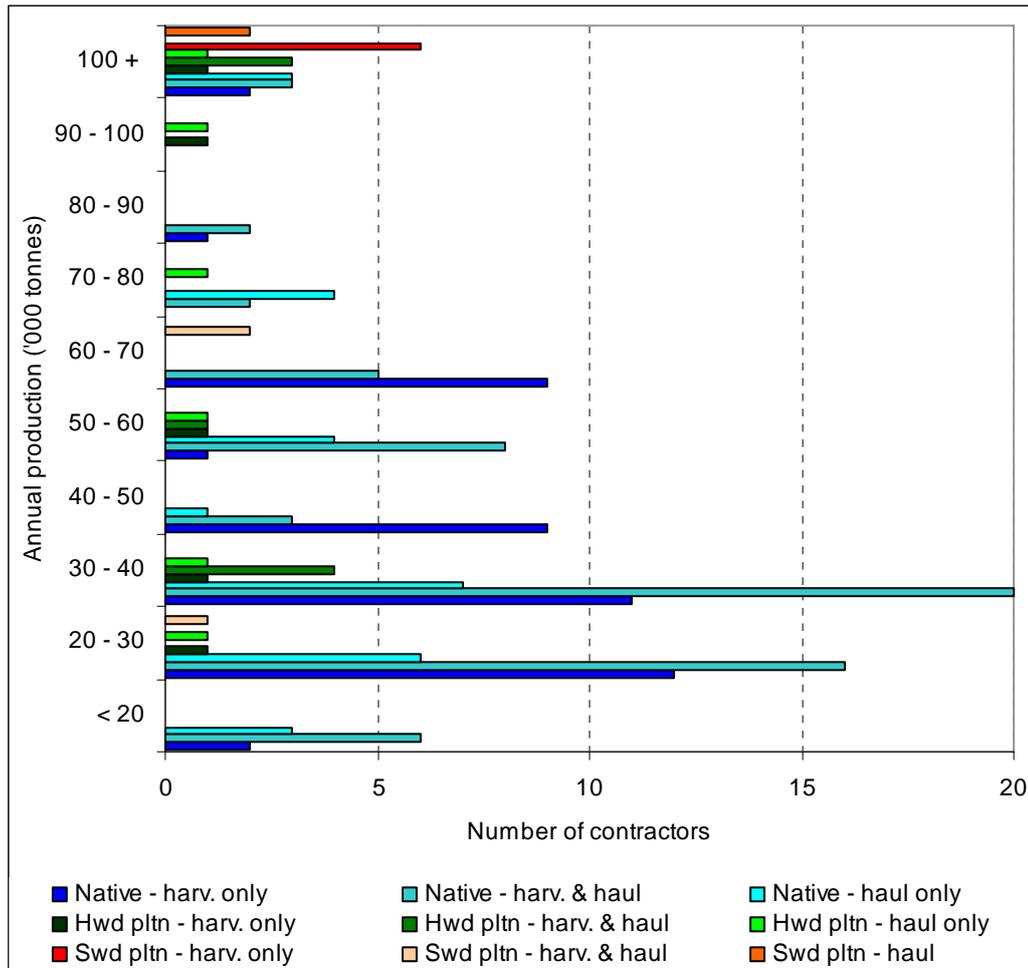
Section 3

Characteristics of forest contracting businesses

forests to move into plantation harvesting, but this will require new investment in plantation harvesting equipment.

URS Forestry surveyed the major forestry companies to determine the scale of harvesting and haulage operations in Tasmania's forestry sector. Figure 3-1 shows the scale of the contracting work force at a state level. The number of larger contractors may be over stated, as some of the largest contractors work for more than one forest owner, producing in excess of 100,000 tonnes per annum for each owner.

Figure 3-1: Scale of harvesting and haulage contractors in Tasmania



Source: Forestry Tasmania, Gunns, Rayonier Tasmania, Forest Enterprises Australia

The survey results show that:

- Harvesting in the softwood sector is carried out by a small number of contractors, each producing in excess of 100,000 tonnes per annum. Haulage operations are even more consolidated, with the bulk of softwood haulage carried out by two contractors;
- The scale of harvesting in hardwood forests is much more varied with production levels ranging from less than 20,000 tonnes per annum, to over 400,000 tonnes per annum (from multiple crews) for the largest contractors;
- Contractors working in native forests tend to have lower levels of production than contractors working in plantations. This reflects the harvest volume required in order to justify the capital investment in mechanisation;
- Haulage operations are dominated by a small number of large contractors; and

Section 3

Characteristics of forest contracting businesses

- Most of the production from native forests is also hauled by the harvesting contractor. In this situation haulage is contracted directly by the contractor but is often subcontracted to specialist haulage operators.

The Australian native forest hardwood sector has undergone significant structural reform over the past decade with a number of forest regions taken out of production by state governments. As part of the rationalisation process, contractors affected by these changes have received government assistance to exit the industry. Despite the rationalisation in contractor numbers, harvesting contractors in Victoria and New South Wales have continued to operate without any major consolidation of the remaining contractor workforce. As a result, the bulk of the harvesting in Tasmania, Victoria and New South Wales is carried out by a large number of small contractors (typically a family business) with an annual quota in the vicinity of 30,000 tonnes per annum.

In contrast, the vast majority of harvesting operations in hardwood and softwood plantations are entirely mechanised. In order to justify the capital investment required for mechanisation, harvesting contractors in the plantation sector generally require a minimum quota of at least 50,000 tonnes (in Tasmania), with volumes in excess of 100,000 tonnes more common on the mainland. For example, a typical production unit (including in-field chipping) harvesting around 125,000 tonnes per annum of hardwood plantation pulpwood in Western Australia consists of:

- Three harvesting machines;
- One forwarder;
- One in-field chipper; and
- A dedicated in-field truck for distributing approximately 15 trailer units.

The haulage industry in Tasmania is similar to the broader Australian native forest industry with logs delivered to the mill or wharf by a combination of harvesting contractors hauling their own production (which can be sub-contracted) and specialist haulage contractors.

3.1.1 Agricultural and civil construction contractors

Contractors in the agricultural sector tend to operate smaller business units than forest contractors, with most agricultural contractors owning and operating only one or two machines, usually a large tractor (with implements such as a baler or drilling unit) or specialised harvesting machinery. In general, agricultural contractors are also farmers and use the contracting business to expand their off-farm income. As such they tend to have a lower capitalisation than a forestry contractor.

The utilisation of agricultural machinery also tends to be low compared to a forest contractor due to the seasonal nature of farming. For example, a header may only be used 25% of the year, whereas a harvesting contractor will endeavour to have machinery operating as close to 100% capacity as possible. More specialised crop harvesting contractors have increased machinery utilisation by working across regions harvesting a range of crops including rice, barley corn and wheat as they mature at different times of the year.

The civil construction sector is much larger in scale and broader in terms of ownership than either the forestry or agricultural contracting sector. The industry is active across all Australian states with activity occurring in urban, rural and remote areas of Australia. Contractors vary in size from single machine operators through to major international companies. Machinery tends to be less specialised than the other sectors, with a much more liquid market for new and used machinery.

3.2 Contract arrangements

One of the major differences between the harvesting of native forests in Tasmania compared to the mainland states is that harvesting operations on the mainland focus on the recovery of sawlogs, whereas harvesting in Tasmania revolves around the production of pulpwood.

Section 3

Characteristics of forest contracting businesses

In Tasmania, most wood supply agreements are on a mill door basis. That is, the forest grower is responsible for harvesting and delivery of the logs to the mill. Where a company is vertically integrated (eg: Gunns and Forest Enterprises Australia) harvesting and haulage is organised internally but still carried out by contractors. Gunns also harvests a significant volume annually from native forests on Crown land managed by Forestry Tasmania. In this situation, the wood is sold on a stumpage basis and Gunns is responsible for harvesting and haulage. Irrespective of the supply arrangements between the grower and the processor, all of the main forestry organisations use contractors to carry out their harvesting and haulage.

Tendering is uncommon in Tasmania's hardwood forestry sector (for plantations and native forests). Most contracts are renegotiated near the end of the term, provided the forest grower has a firm supply agreement in place to cover the contract volume and that the contractor's past performance has been satisfactory. Contracts generally run for three to five years with contractor performance reviewed annually. This process has been in place for over 10 years and base costs have not been reset during that period.

The contract volume is based on the amount of pulpwood a contractor is expected to produce. Sawlogs and veneer logs are considered additional and do not count as part of the contract volume. Most contracts include a clause that allows the forest grower to periodically increase and decrease the contract volume to enable them to manage wood flows over time.

The contract rate for harvesting hardwood in Tasmania is also determined by the cost of producing pulpwood with negotiations based on a combination of:

- The prevailing market rate for similar operations;
- The previous contract rate (adjusted for changes in costs through indexation);
- Cost models are sometimes but not always used to test a contractor's cost of production, or a new machinery configuration; and
- In some instances contractors have presented prior financial results as part of the negotiation process.

A premium over and above the base pulpwood rate is paid for the production of higher value sawlogs and veneer logs. The size of the premium increases with log value.

Contract rates for haulage operations are determined by the distance from the forest to the market and the nature of the road conditions along the major haulage routes. These rates are also renegotiated at the end of the contract using the methodology described above, except that no distinction is made between pulp logs and sawlogs.

Contract rates are adjusted annually based on the movement in an agreed indexation formula. Each forestry company uses its own approach to indexation and the indices can include movements in labour costs, primary production costs and/or changes in the consumer price index. Fuel is generally indexed separately because of its volatility and importance to a contractor's cost structure. Adjustments for changes to fuel prices are made more regularly either through a quarterly adjustment or when fuel prices move between prescribed price thresholds.

Historically, harvest volumes from native forests on mainland Australia were allocated to sawmills, who then arranged harvesting and delivery. While this still occurs in Queensland, there has been a move by the forest managers in Victoria and New South Wales toward mill door sales. The lack of tendering for hardwood contracts in Tasmania represents a significant difference from the mainland states and the softwood industry especially. For example, Forestry SA recently tendered the harvesting and delivery of 1.3 million cubic metres (72% of total production) of softwood logs and woodchips. In the Hume region of New South Wales, Forests NSW conducts tenders periodically as existing contracts expire. In the native hardwood sector there is a trend away from the processor managing harvesting operations in favour of a competitive tendering process managed by the governing agency. Forests NSW recently shifted to a tender process on the North Coast of NSW and is in the process of implementing a similar process on the

Section 3

Characteristics of forest contracting businesses

South Coast. Tendering of harvesting and haulage operations is also due to be implemented in Victoria by VicForests around June 2008.

One of the benefits of tendering is that it facilitates increases in efficiency through competition. However, the outcome of tenders can be distorted if there is unequal competition. In general large growers/processors have more market power than individual contractors. There is evidence that some forest growers/processors have in the past exerted market power to the detriment of their contracting workforce. This has occurred as part of tender processes as well as in regular negotiations of contract conditions including indexation and unforeseen circumstances. Another drawback of tendering from a contractor's perspective is that the incumbent contractor has no guarantee of work beyond the current agreement. However, there is no reason to believe that the situation of contractors would be worsened by tenders. Open, competitive tender processes should provide a basis for greater transparency in the letting of contracts. Provided that market power is not abused tenders can help ensure that the forest owner/processor is paying a market rate for harvesting and haulage operations.

The ability of contractors to respond effectively to tender processes may be limited by their ability to prepare and present business proposals in a tender situation. This suggests that there would be benefits from access to business skills training in association with a move to increase tendering of harvesting and haulage contracts.

Most harvesting and haulage contracts in the wider Australian forest industry run for three to six years with an annual review of performance. The upper end of the term (four to six years) is usually preferred as it provides the contractor sufficient security to justify investing in new equipment. Rates are set through tender processes. It is standard practice for harvesting and haulage contracts with major forestry companies to be indexed to account for changes in costs over time, with fuel often indexed separately. The indices used to benchmark changes in harvesting and haulage costs on mainland Australia are similar to those used to adjust harvesting rates in Tasmania.

The ability to adjust harvest volumes is also standard in most harvesting contracts as it enables the forest grower to maintain operational flexibility in a dynamic market. The use of quota restrictions to constrain supply in Tasmania is consistent with the broader forest industry. In some instances, state agencies go one step further offering direct assistance to contractors to cover pre-agreed fixed costs, should the quota available be below the minimum contract quota for a sustained period.

3.2.1 Contracts in the agricultural and civil construction sectors

In the agricultural sector, the contractor is engaged by the farmer or farm manager. Tendering is relatively uncommon with the cost to do the work usually based on a verbal agreement. The agreement typically only consists of an agreed rate (either an hourly rate or unit rate) to undertake a job. Agricultural industry associations sometimes provide a recommended rate for undertaking certain operations. For example the Rice Growers Association uses a detailed cost model to determine a fair market rate for harvesting rice. The Association provides this information to its members to assist them when negotiating with rice harvesting contractors. Because the work is usually very short term (lasting only a matter of days at most), indexation is generally not required.

For the civil construction sector it is usually the site owner or site manager that engages the contractor on behalf of the owner. Because of the size of the construction market, contracts can vary from small contracts based on a handshake agreement through to large highly sophisticated contracts. Tendering is used for the majority of work, particularly large projects. The contract rate is set at the overall project cost and the contractor is expected to meet all of the project requirements within that cost. Indexation of the tendered rates to cost movements is uncommon as most projects do not usually last for more than one, sometimes two years. The market for tendering civil works is much more dynamic than for forestry with a much higher level of work available at any one time.

3.3 Key factors influencing contractor performance

Contractor profitability and rates of return are determined by two key factors, the ability to generate revenue and the costs required to operate equipment, including financing costs.

Section 3

Characteristics of forest contracting businesses

3.3.1 Revenue

The vast majority of harvesting and haulage contracts in Tasmania and in the broader forest sector are paid on a piece rate (i.e. by the volume of logs produced). For forestry contractors, there are two main factors that limit the rate of production:

- Most contracts have an upper volume limit that effectively caps a contractor's ability to generate additional revenue. The limit can be increased by the forest grower should additional production be required, but quota volumes are usually based on full utilisation of a contractor's existing machinery; and
- The level of variation of the resource being harvested. Native forests tend to be much more variable than plantations. The greater the level of variation, the more time that a contractor's equipment will be operating outside its optimal configuration which affects the rate of production.

Contract rates in forestry are generally fixed at the start of the contract term and are usually adjusted for movements in the contractor's major cost inputs. This leaves the contractor with little ability to increase the base contract rate over the term of agreement.

Civil contractors commonly work within an overall project budget, therefore all of the revenue is pre-determined and it is up to the contractor to manage the costs. General agricultural contractors are paid on an hourly rate or a piece rate (such as an agreed cost per hectare sown), while crop harvesting contractors are usually paid a piece rate (\$ per tonne harvested).

3.3.2 Cost structures

Harvesting and haulage of forest products is a capital intensive business that often requires specialised machinery. Table 3-2 provides a summary of the equipment used by a selection of contractors interviewed by URS Forestry. It shows that even a small contractor operating a single harvesting crew (Contractor A) requires a number of pieces of heavy equipment.

Table 3-2: Sample of machinery required by forestry contractors in Tasmania

Forest type	Contractor A	Contractor B	Contractor C	Contractor D
	Native regeneration/ small thinning 1 crew	Hardwood and softwood plantations 2 crews	Native old growth and regrowth 2 crews	Native old growth and regrowth 2 crews
Equipment				
Harvester	1	4	1	
Excavator	2	4	3	5
Forwarder		2		
Skidder				2
Dozer	1		2	
Crew vehicle	1	5	2	6
Truck and trailer		1	3	5
Workshop	0.5	1	1	1

Most of the costs associated with harvesting operations relate to the operation of plant and equipment. Table 3-3 provides a summary of the major fixed and variable costs of a harvesting contractor and an indication of the relative importance of each cost component. The range is based on data provided by Tasmanian contractors interviewed by URS Forestry. The table shows that both the fixed and variable costs vary substantially depending on the degree of mechanisation, the level of equipment ownership (equity), the business structure and financing arrangements.

Section 3

Characteristics of forest contracting businesses

Table 3-3: Typical range of fixed and variable costs for a harvesting contractor

	Cost range (%of total costs)
Fixed costs	
Machine repayments	18% – 52%
Registration and insurance	2% - 3%
Variable costs	
Wages	25% - 38%
Fuel	15% - 40%
Repairs and maintenance	12% - 34%

Key characteristics of fixed costs include:

- Contractors that had been in the industry for more than twenty years had relatively low levels of debt, as they had been able to build up their equity over time;
- Purchasing of new equipment was usually financed using debt, with some contractors borrowing up to 95 percent of the machine's value; and
- Financing is typically done through a bank or finance company. Interest rates are similar to commercial lending rates with contractors currently paying around 7–8 percent interest.

Most of the contractors expressed more concern about the increases in their major variable costs. Some of the main issues identified were:

- Over the past few years upward pressure on wages, with manual fallers and skilled machine operators in short supply. It was also reported that machine operators are leaving Tasmania once they reach a certain skill level;
- Fuel prices were also raised as a major concern. Although contracts make an adjustment for movements in fuel prices, the adjustments are not applied retrospectively. Therefore, in recent years when fuel prices have been increasing, contractors' costs have increased with a lag (reducing the profit margin) before the contract rate is adjusted; and
- A number of contractors have deferred purchasing new equipment until the situation in Tasmania becomes more certain. As a consequence the costs for repairs and maintenance have been increasing rapidly. In addition, the cost of mechanics has also increased significantly.

A review of harvesting and haulage operations in the native forests of Victoria in 2002 found that the capital required for a standard hand felling harvesting operation utilising an excavator, skidder and a bulldozer was estimated to be approximately \$690,000. A specialised mechanical harvester would cost an additional \$450,000. Truck units require a similar level of investment, with a conventional tri-axle truck costing around \$350,000, with larger B-double units costing a further \$100,000 (DNRE 2002)². It is worth noting that this example would be considered a relatively small operation (utilising only three pieces of machinery) in the context of today's contract workforce and that the capitalisation of most contractors working in the forest industry in Australia today would be in excess of \$1 million per harvesting crew. This figure would be significantly higher for a fully mechanised harvesting operation.

In the construction sector, it is much less onerous to become a contractor. It is possible for someone to start out in the sector by leasing or hiring a single piece of second hand machinery. However, most civil

² The Department of Natural Resources and Environment has since been split into two organisations, the Department for Sustainability and the Environment and VicForests.

Section 3

Characteristics of forest contracting businesses

contractors of any scale are in a similar position to forestry contractors in that they often require more than one piece of machinery.

The capital required to enter the agricultural contracting business is also lower than that required for forest harvesting. Data provided by the Rice Growers Association shows that the cost of a new header or a truck and trailer is in the vicinity of \$400,000 each, a tractor with a chaser bin cost around \$200,000. The breakdown between the fixed and variable costs for the three machine types is shown in Table 3-4.

Table 3-4: Example of the major fixed and variable costs for an agricultural harvesting contractor

	Header	Truck and trailer	Tractor with chaser bin
Assumed utilisation	12 weeks	50 weeks	25 weeks
Fixed costs			
Machine repayments	45%	18%	33%
Registration and insurance	4%	4%	3%
Variable costs			
Wages	14%	20%	19%
Fuel	18%	43%	34%
Repairs and maintenance	19%	15%	11%

Source: Data based on a cost model developed by the Rice Growers Association of Australia

Contractors in all three sectors operate in an outdoor environment that is particularly harsh on equipment. This means that the longer machinery is used, the more it costs in terms of repairs and maintenance. The increasing cost of maintenance through wear and tear also puts pressure on the contractor to renew equipment.

3.3.3 Returns

Most of the contractors contacted by URS Forestry were reluctant to discuss their profitability or rate of return on investment. The comments of those contractors that were prepared to do so (in general terms) are summarised below:

- One operator was unaffected by the downturn and continued to maintain profitability. Surplus machinery was currently being leased to another contractor;
- A number of contractors commented that while they were marginal to profitable, their earnings had remained stable or declined in recent years. When prompted on why their earnings had declined, most commented that some costs, particularly variable costs, had increased faster than contract rates;
- One contractor said that he was operating on a restricted quota and was currently losing money; and
- Another contractor said that his rates were similar to what they were 10 years ago and that he now had an overdraft which had not been necessary in previous years;

This is probably a fair representation of the forestry sector in Tasmania i.e. profitability and rates of return are likely to vary significantly depending on individual circumstances. As already noted, machine repayments for a forest contracting business can account for up to half of the total costs of production. This means that contractors can generally meet commercial rates of return required to support market rates of interest on commercial finance vital to their operations. However, rates of return on owner equity vary depending on individual circumstances.

Section 3

Characteristics of forest contracting businesses

The results from a private study of logging contractors working in the Central Highlands region of Victoria showed that of seven contracting businesses sampled, only one made a small profit. The consolidated loss across the group was nearly \$370,000, based on a gross income of \$3.25 million and expenses of \$3.6 million. Investment in necessary equipment totalled more than \$5 million (DNRE 2002). The report also noted that during the review of harvesting and haulage operations in Victoria in 2001, a number of contractors across the state included their business and personal tax returns that reflected either substantial losses or at best, a small profit. This suggests that rates of return on owner equity for many contractors would be considerably less than the rate of interest paid on commercial loans vital to the operation of most forest contracting businesses.

3.3.4 Other factors influencing returns

In addition to the costs of operating machinery, a number of respondents identified other factors that were affecting, or had the potential to affect their returns. Some of these factors include:

- Limited recognition of the cost increases associated with changes in harvesting practices due to changes to Occupational Health and Safety requirements (such as the costs of implementing a Drug and Alcohol policy) as well as increasing environmental constraints. Examples of changes to environmental practices include the management of streamside reserves which are not available for production and the incremental increase in the level of site rehabilitation that is required as part of the Forest Practices Plan;
- Skilled labour availability, particularly manual fallers and trained machine operators, and training costs. There is price pressure for staff with key skills that are not picked up by the broader labour indices used to benchmark cost movements;
- Cost of insurance, particularly insurance costs for property damage;
- Delays in the regulatory approval process that hold up production despite the contractor having no control over the process. One example included contractors shifting equipment onto a coupe and having to wait for an approved Forest Practices Plan; and
- Poor markets for second hand equipment as other contractors are also putting surplus machinery on the market. This can make exiting the industry difficult.

The recent Wielangta decision by the Federal Court is contributing to further to uncertainty over the availability of future volume from native forests. The decision raises questions over the planning process used by Forestry Tasmania to determine the area available for harvesting in relation to the identification and protection of threatened species.

3.4 Rates of contractor failure

As most harvesting and haulage contractors are private companies, little information is available on the failure rate of these businesses within Australia. According to the TFCA in the past 12 months:

- Three contractors have been placed in receivership;
- Five contractors have not had their contracts renewed; and
- Two contractors have moved interstate.

Based on the information gathered for this report, there is no reason to believe that the rate of contractor failure in Tasmania is significantly different than in other states. While the failure rate over the past 12 months has been high, the reduction in contractor numbers is consistent with other major structural or market adjustments that have occurred in other parts of the forestry sector in the recent past in Australasia. It is useful to include New Zealand in this comparison, as the softwood market there is also heavily reliant on export markets in Asia. Recent examples of these major structural changes include:

Section 3

Characteristics of forest contracting businesses

- In response to a series of major down turns in demand for log exports from New Zealand in 1998, 2001 and 2004 a number of forestry companies scaled back harvesting capacity significantly to constrain supply. In the most recent market adjustment, roundwood removals decreased by 3 million cubic metres between 2003 and 2006;
- In 2004, a strategic decision by Kaingaroa Timberlands, the managers of a 165,000 hectare softwood estate in New Zealand, to build up its forest age profile resulted in 8 harvesting contractors having their contracts terminated and the closure of its central stem processing yard; and
- All of the major forest owners contacted by URS Forestry were aware of at least one contractor that had gone into receivership in the past three to five years;
- In response to a decision to halt production in a number of state forests, the state and federal governments have provided exit assistance packages to a number of contractors; and
- In a major tender held recently by one major forest grower, four contractors did not have their contracts renewed.

The most comprehensive statistics on business failure are published by the Insolvency and Trustee Service Australia ("ITSA"). Table 3-5 shows the results of an analysis of business insolvency rates in Victoria that was carried out as part of review of owner drivers and forestry contractors by Industrial Relations Victoria in February 2005. One of the limitations of the ITSA data is that forestry contractors do not sit within a defined occupational category. The classification process depends on the information provided and the operator processing the information. The ITSA commented to URS Forestry that forestry contractors are most likely to be included in the 'Skilled agricultural and horticultural' classification, but could also be classified within other categories. Haulage contractors were most likely to be classified as 'Road and rail transport drivers' but could also be included other categories.

Even though the data are limited, they suggest that the group in which includes forestry contractors, agricultural and horticultural and construction contractors, has the highest rate of business failure per number of people employed compared to other sectors.

Table 3-5: Business bankruptcies in Victoria by selected occupational categories, 2002 - 2003

Rank	Occupational category	Business related bankruptcies	Workforce (000's)	Ratio (1: X)
1	Skilled agricultural and horticultural	13	15.3	1,177
2	Construction	67	82.0	1,224
3	Food	15	20.0	1,333
4	Road and rail transport drivers	43	74.3	1,728
5	Intermediate sales and related workers	17	30.5	1,794
6	Elementary clerks	9	16.6	1,844
7	Automotive	14	28.5	2,036
8	Other tradespersons and related workers	27	55.0	2,037
9	Generalist managers	20	41.8	2,090
10	Elementary service workers	11	23.1	2,100

Source: Industrial Relations Victoria (based on unpublished Insolvency and Trustee Service Australia data)

Section 3

Characteristics of forest contracting businesses

3.4.1 Factors influencing failure in forestry contractors

Some of the factors influencing the viability of harvesting and haulage contractors compared to other sectors include:

- The capital required to establish even a small harvesting operation is over \$1 million, leading to high fixed costs;
- The forest grower is able to reduce a contractor's quota volume, which can place significant strain on operating cash flows;
- Many contractors are reliant on a single customer;
- Exposure to the outdoor environment is hard on machinery which creates pressure to renew equipment as machinery reaches the end of its useful life; and
- Adverse climatic conditions can limit the number of days a contractor can conduct operations.

Section 4**Long term viability of Tasmanian forest
contractors**

This section examines the impact of the current downturn in woodchip demand on Tasmanian forest contractors. Key issues relevant to future of the Tasmanian forest contractors are then identified based on the expected market outlook and the nature of industry and business structures for forest contracting. Recommendations to promote an efficient and viable forest contracting industry in Tasmania are also made.

4.1 Impact of the downturn in woodchip demand on Tasmanian forest contractors

After a period of significant growth where existing contractors added additional capacity and new entrants were encouraged, the downturn in demand for native hardwood woodchips from Tasmania has had a significant impact on Tasmania's forest contracting industry. Forestry Tasmania and Gunns responded to the downturn by:

- Restricting pulpwood quotas for its harvesting and haulage contractors; and
- Not renewing a number of contracts or rolling over contracts on a short term (typically 12 months) basis until future woodchip orders are confirmed.

These actions have forced forest contractors to adjust their businesses by parking, selling or leasing surplus machinery. Some contractors with multiple crews are also combining teams into fewer crews. According to the TCFA, three contractors have exited, five have not had their contract renewed and two others have moved elsewhere. These impacts are significant given the total number of contractors.

Contractors who continue to operate on reduced quotas are finding that their profitability has been reduced. It is likely that smaller single crew contractors have more difficulty in rationalising their operations as all of the equipment is usually required to maintain a viable level of production. The number of smaller operators has increased over the 5-10 years as new entrants were encouraged to meet the then increasing sales of woodchip exports. Similarly, the impact of reduced quotas on profitability is also likely to be more severe in small businesses and those with higher levels of gearing.

Forestry Tasmania and Gunns have attempted to mitigate some of these impacts from reduced pulpwood sales by shifting harvesting operations into coupes producing a higher proportion of sawlogs and veneer logs. These log types are not considered part of the contract quota, therefore the contractor can reduce the proportion of pulpwood produced while continuing to operate at a normal level of production. However, this is only a short term strategy and cannot be continued indefinitely due to the log allocation process within Tasmania's native forests and the requirements of the Forest Practice Plans. Forestry Tasmania and Gunns have also pursued new markets for native pulpwood but to date these have had a limited impact.

Added to the immediate impact, it appears that the contract rate setting process in Tasmania has reduced the flexibility of contractor businesses. In particular, rolling over contracts with rates negotiated based on movements in key indexes over a long period without rebasing contractors' rates can be expected to have reduced flexibility and meant that contractor rates may not reflect fundamental changes in cost structures.

4.2 Outlook for Tasmanian forest contractors

The market outlook for hardwood woodchips and especially from native forests suggests that demand will continue to weaken as the supply of plantation hardwood woodchips increases both in Australia and overseas, and consuming countries continue to exhibit a preference for plantation grown woodchips.

Over the next 15-20 years supplies of pulpwood from hardwood plantations in Tasmania are forecast to increase to around 5.5 million cubic metres per annum, an increase of around 4.5 million cubic metres per annum. At the same time native forest supplies are forecast to decline to around 3 million cubic metres per annum, a decline of around 2 million cubic metres per annum. This amounts to a net increase in supplies of hardwood pulpwood in Tasmania of 2.5 million cubic metres per annum. The market outlook

Section 4**Long term viability of Tasmanian forest contractors**

suggests that it will be difficult sell all of this additional volume on export woodchip markets without adversely impacting native woodchip markets.

The potential construction of the Gunns' kraft pulp mill could provide increased demand for hardwood pulpwood, particularly native forest pulpwood, of around 3 million cubic metres per annum. For native forests within economic haulage distance of the mill this would help relieve some of the pressure that plantation supplies will create in export markets. Delays in the assessment process for the pulp mill are causing uncertainty in the contracting work force as harvesting contracts are being rolled over on a short term basis.

In the absence of new or expanded markets, such as the pulp mill, the outlook for the Tasmanian forest contracting industry is likely to remain difficult. This will particularly be the case for those contractors involved in native forests.

Regardless of the overall level of sales, there will continue to be a move to plantations and the contracting industry will become increasingly mechanised. Depending on how the expansion of harvesting in plantations is managed by the forest owners, there may be opportunities for contractors currently harvesting in native forests to transition to plantations. In some instances a significant capital investment is likely to be required as much of the machinery used for harvesting native forests is not compatible with the high degree of mechanisation required for harvesting plantations.

The expansion of hardwood pulpwood plantation harvesting on mainland Australia could provide opportunities for Tasmanian contractors but such moves would also require significant capital investment. Opportunities in the mainland native forest sector would be limited by the similar contracting industry structure in many states and the limited volumes of wood available.

There may be opportunities for contractors to enter the softwood sector in Tasmania but forecast increases in available volumes suggest there would only be room for relatively small increases and the existing contractor workforce is well established and largely consolidated.

4.3 Recommendations

In these circumstances it is proposed the Tasmanian hardwood contracting industry would benefit from increased flexibility. Actions to help achieve this could include:

- More market based approaches to letting of harvesting contracts through open competitive tenders. This will allow the more efficient operators to secure additional resource, which in turn should allow them to better manage the peaks and troughs of the market. This would also facilitate opportunities for existing native contractors to move to plantations as new supply becomes available. It needs to be recognised that a move to tendering is likely to generate additional structural adjustment in the contracting sector. While some contractors perceive that tendering provides an opportunity for growers and processors to exert undue market power to lower rates, such power could also be exerted in the absence of tenders. In the long term it is in the interests of growers and processors to ensure that there is an efficient and viable contracting industry;
- Consolidation of the number of contractors would improve the ability of the remaining contractors to manage changes in market demand;
- Providing contracts with guaranteed base volumes (potentially with differential rates for base and marginal volumes) and/or compensation should actual volumes fall below base volumes;
- Addressing skills shortages e.g. through the provision of additional resources for training of machinery operators and mechanics; and
- Support for developing business management and planning skills of small contractors to assist structural adjustment and the development of more resilient businesses in the future.

Section 4

Long term viability of Tasmanian forest contractors

At a broader level encouraging the development of new markets for hardwood woodchips would also assist the contracting industry. Similarly recognising the costs of compliance and ensuring that compliance costs are efficient would assist contractors in maintaining flexibility.

Section 5

References

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Section 6

Limitations

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of Department of Agriculture, Fisheries and Forestry and only those third parties who have been authorised in writing by URS to rely on the report. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal dated 24 November 2006.

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared between 24 November 2006 and 16 March 2007 and is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

Appendix A

Terms of reference

Through the Tasmanian Forest Industry Development Programme (TFIDP), the Australian Government is providing grants totalling \$42 million over three years to assist investment in the Tasmanian forest industry. The objectives of the TFIDP are to assist the industry to adjust to changes in timber resources arising from the Tasmanian Community Forest Agreement and to support the continued development of a sustainable, efficient, value-adding and competitive industry.

Amongst other things, the programme provides financial assistance to harvesting contractors to purchase mechanical harvesting equipment. As the grants generally represent 25% of the total cost of equipment, the Australian Government is making a significant financial contribution towards the purchase of the new equipment.

Over the past year there has been a significant decline in the volume of hardwood woodchips exported from Tasmania, due largely to a reduction in demand from Japanese paper makers. As a consequence, harvesting quotas have been significantly reduced, putting some harvesting and haulage contractors under financial pressure. Press reports suggest that at least one harvesting contractor has gone into liquidation in recent weeks. The native forest sector appears to be worse affected than the softwood sector.

The Australian Government wishes to ensure that the TFIDP funds achieve the programme's objectives, and in particular to ensure that the funds are directed to businesses that have a long-term future in the industry. However, there is a lack of data on the impact of the current downturn in woodchip exports on harvesting and haulage contractors.

The Department of Agriculture, Fisheries and Forestry (DAFF) is therefore seeking a consultant to gather data and report on this issue.

The consultant is to submit a report to DAFF covering the following issues:

1. What data is available on the reduction in woodchip exports from Tasmania?
2. What data is available on the impact of the reduction on harvesting and haulage contractors?
3. Are there other factors placing financial pressure on harvesting and haulage contractors at present?
4. Are there any prospective developments that could alleviate the current pressures on harvesting and haulage contractors?
5. Does the failure rate of harvesting and haulage contractors in the Tasmanian forest industry differ significantly from the failure rate of harvesting and haulage contractors in the forest industry on the mainland?
6. Are harvesting and haulage contractors in the softwood sector facing similar financial pressures to those facing the native forest contractors?
7. Does the failure rate of harvesting and haulage contractors in Tasmania differ significantly from the failure rate of contractors in other similar industries (e.g. mining, agriculture)?
8. What factors might be influencing the failure rate of harvesting and haulage contractors in Tasmania and elsewhere, compared to other small businesses?
9. What information can be ascertained on the general profitability of forest harvesting and haulage contractors, including the apparent rates of return on investment?
10. Can any recommendations be made on actions to improve the viability of forest contractors?