Technical Report 214: INTERIM REPORT Socioeconomic impacts of forest industry change: a baseline study of the Tasmanian forest industry by J Schirmer, C Dunn, E Loxton & M Dare

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Summary

Background

The Tasmanian forest industry is currently undergoing substantial change. Since 2008 a substantial downturn in industry activity—driven by the global financial crisis, appreciation of the Australian dollar and other factors—has resulted in the shedding of 3500 jobs in the industry. The impacts of the downturn on forest industry businesses, workers, their families, and communities dependent on the forest industry are profound. Many people have lost employment, many of those remaining in the industry have experienced a decline in income, and many members of the industry—including those working in businesses in which employment has remained stable report experiencing considerable stress and uncertainty about their future. The impacts of the downturn have reduced the capacity of businesses, workers, families and communities to adapt successfully to change in the industry. In 2010, negotiations between environmental nongovernmental organisations (ENGOs) and forest industry representatives, aimed at finding a resolution to ongoing conflict over the management of Tasmania's native forests, resulted in the signing of the Tasmanian Forests Statement of Principles to Lead to an Agreement (Principles Statement), a document that proposed significant future change to the industry. On 24 July 2011 an agreement was made in which the federal and Tasmanian governments committed to providing both short-term and long-term support to members of the forest industry and to industrydependent communities as part of supporting substantial reduction in native forest harvesting under the *Principles Statement*. To ensure this funding is used effectively to support those impacted by these changes, it is important to understand how the downturn is affecting those dependent on the industry (particularly how it has affected their capacity to adapt to change), and what types of assistance can best help those affected.

In recognition of the need to better understand the impacts of the downturn and how to assist those affected by it, as well as to understand the capacity of those dependent on the industry to adapt to further change, the 'Socioeconomic impacts of forest industry change' study was undertaken from January to June 2011. The study was funded by the Cooperative Research Centre for Forestry. It builds on and extends a series of surveys of the forest industry, undertaken since 2006, that have tracked employment and activity in the industry (Schirmer 2008, Schirmer 2010). After the study had begun, additional funding was provided by the Federal Department of Agriculture, Fisheries and Forestry (DAFF) to enable the study to form part of the due diligence assessment of the *Principles Statement*. The study was undertaken by researchers at the Fenner School of Environment and Society of the Australian National University.

This study provides a comprehensive overview of how recent changes in the forest industry have impacted forest industry businesses, workers, and to a lesser extent their families; and influenced their capacity to adapt to future change. It also identifies which communities are most exposed to change —in other words, which are most likely to experience negative impacts as a result of the downturn. Unfortunately, available resources did not permit a full analysis of the socioeconomic impacts of the downturn on Tasmanian communities—work which is urgently needed given the substantial loss of employment in many communities. This study can form a starting point from which to undertake such analysis. It also provides a 'baseline' understanding of the current circumstances and views of those dependent on the industry, which can be used to analyse the likely impacts of any future changes proposed for the industry once the nature of these changes is known.

Methods

This study drew on quantitative surveys of 126 forest industry businesses and 373 workers either employed in the forest industry, or who had left the industry since 2008; interviews with 53 business managers and workers; data from a comprehensive survey of the forest industry conducted in Tasmania in 2006, 2008 and 2010; and data from the Australian Bureau of Statistics (ABS).

The data gathered were analysed to identify:

- (i) impacts of the downturn on forest industry businesses and workers
- (ii) vulnerability of these groups to further change
- (iii) how exposed different communities are to change.

Impacts were defined for the purposes of this report as the social and economic changes resulting from the downturn, and the flow-on consequences these changes have had on the lives of forest industry workers and their families. Vulnerability to change was defined as the extent to which businesses and workers can cope with further change, and is a function of:

- (i) their exposure to that change (i.e. whether they are in a job or business or location likely to be affected)
- (ii) their sensitivity to that change (i.e. whether it will tip them over a 'threshold' of change)
- (iii) their ability to adapt successfully to change, affected by factors such as their human capital, financial capital, social capital and attachment to their community and the forest industry.

Impacts vary considerably from business to business, and from person to person. The results reported here highlight where members of any particular groups (e.g. processing businesses, or workers employed in harvest and haulage contracting) are more likely to experience negative impacts. This does not mean that every person or business in that group has experienced negative impacts, but that a greater proportion of them have experienced these impacts in comparison with people or businesses in other groups.

Results

Long-term trends influencing the industry

Long-term trends affecting the forest industry were identified, to better understand the 'baseline' trends influencing the industry prior to the downturn from 2008 onwards. These longer-term trends, occurring over the past one to two decades, include rapid expansion of Tasmania's eucalypt plantation estate, and some decline in the area of softwood plantations in recent years; while in the native forest sector, many businesses reported an ongoing fall in the quantity and quality of sawlogs available from native forests (both public and private). Markets for forest products have also changed: in the structural sawn timber market, softwood plantation timber has increasingly competed with timber sourced from native forests, while demand for appearance-grade products made from native forest species has remained relatively strong. In addition to changes in wood resources and markets, most businesses reported that business costs had grown more rapidly than revenue over the past 10 to 20 years, and that increasing regulatory requirements had contributed to increased operating costs.

Impacts of the downturn on forest industry businesses and employment

The downturn has substantially reduced business activity. The number of businesses operating in the Tasmanian forest industry declined from an estimated 464 in August 2008 to 372 in May 2011¹, while the total number of people employed fell from 6960 to 3460 people (6460 to 3260 full-time equivalents) during the same period. Based on public announcements regarding planned business sales and closures, a further 410 jobs at least will be lost by the end of July 2011. The rate of decline in employment has accelerated, with almost 1200 jobs lost in the nine months from September 2010 to May 2011, compared to 2300 in the 24 months prior to September 2010. These figures do not include the woodcraft sector, which in 2009 employed an estimated additional 1750 people (including those in retailing).

While much public debate focuses on the native forest sector, there has been extensive loss of jobs in the plantation sector: 60% of jobs dependent on hardwood (eucalypt) plantations and 42% of jobs dependent on softwood plantations have been lost since 2008, compared with 47% of jobs dependent on native forests.

In terms of numbers of jobs, the types of workers most likely to have lost their jobs are those employed in processing of timber products (e.g. sawmilling) and in harvest and haulage contracting, with both sectors having shed around 50% of employees. However, the proportion of jobs lost is highest for nurseries, where more than 84% of jobs have been shed, followed by silvicultural contracting with 79% of jobs shed, although these percentages reflect smaller numbers of individual workers as these sectors employ fewer people than the processing and harvest and haulage sectors.

Processing businesses

In total, there are 64 sites in Tasmania at which wood and paper products are produced, managed by 50 businesses. Of these sites, 47 process native forest timber, while the remainder either process only plantation timber, or wood sourced from both plantations and native forests. These processors—including sawmillers, veneer mills, woodchip and pulp and paper producers, as well as downstream processors of sawn timber into trusses, mouldings and a range of other products—employed more than 1600 workers in May 2011, as well as supporting considerable upstream and downstream employment.

(i) Impacts of the downturn

Employment in the processing sector has declined substantially since 2008, with more than 46% of all jobs lost due to the closure of some processing sites and the reduction of staff at others. Further job losses to take effect in June and July 2011 will reduce employment in this sector by up to another 20%. Working hours have also been affected, with 30% of currently operating processors reporting they have reduced staff numbers or staff working hours since 2008. Production volumes have fallen by more than 25% since 2008–09, the first year of the downturn, with much of this reduction occurring through closure of processors. Of currently operating processors, almost half were operating at more than 80% capacity at the time of this study in

¹ While this study was undertaken largely during March 2011, employment data were updated to include subsequent major job losses through to May 2011. Other than employment data, all information in the report was current as of March 2011.

March 2011, while almost 40% were operating at less than 60% capacity. Those least likely to have closed or to have downsized business activities are native forest sawmillers, with many of these businesses successfully maintaining their business activities despite the downturn.

Factors contributing to business stress during the downturn have included increasing operating costs, changes in wood quality (mostly reported by native forest sawmillers), and reduced demand for wood products (for some, associated with appreciation of the Australian dollar). Relatively few reported having difficulty accessing finance, although this was primarily because few had attempted to do so. Uncertainty about the future was also having negative impacts for many processors (in addition to the impacts of the downturn), with most reporting delaying expenditure and investment in their business as they lacked confidence about the future of the forest industry.

Strategies used by processing businesses to respond to these changes include improving business efficiency through reducing production costs; seeking new markets and diversifying business activities; downsizing the business; and drawing on equity held in both business and personal finances to fund operations.

(ii) Vulnerability to further change

To identify how vulnerable processing businesses are to further change in the forest industry, a range of characteristics of businesses were analysed, focusing on business management (stress, access to business planning advice and ability to manage workforce and capital requirements); markets and finance (debt, costs, access to finance and market prospects); confidence in the future; policies affecting the industry; social capital (ability to draw on support from others in the industry and local community); thresholds of change; and ability to adapt the business by utilising different wood inputs or other strategies.

Businesses that were significantly more vulnerable to change in the forest industry typically had the following characteristics:

- (i) the business manager reported being under a high level of stress
- (ii) the business had experienced rapid growth in operating costs in recent years, and/or had high levels of debt
- (iii) the manager of the business lacked confidence in future security of access to wood supply.

In general, those operating native forest sawmills had higher vulnerability to change than other businesses (i.e. they were more likely to have characteristics indicating higher vulnerability to change). However, almost all processors, including those in the native forest sector, reported having strong support networks within the forest industry, reducing their vulnerability to change somewhat, and many (but not all) had low levels of debt. Different sized processors are vulnerable to change in different ways. Smaller processors, which almost all process native forest inputs, typically have less debt, but are more sensitive to change in the cost of inputs or loss of supply, and have substantial difficulty adapting business infrastructure. Larger businesses, which include both native forest and plantation processors, are more likely to have high debt levels, which makes them more sensitive to the impacts of reduced revenue, and rising business costs, and potentially reduces their ability to access finance and to adapt to change by diversifying into new business activities.

When thresholds were examined at which a business might 'tip' into taking action such as closing the business, most processing businesses were found to be highly sensitive to any further loss of wood supply, with the majority (58%) indicating they would close business operations in response

to a reduction in wood supply, or at least reduce their scale of operations (32%). Processors have little capacity to seek work outside the forest industry in response to change, but almost half would consider diversifying into producing different timber products, or into more importing and/or retailing of wood products, as a way of responding to a 20% drop in wood supply (beyond 20%, diversification was considered unviable by most).

A second critical threshold for native forest sawmillers was having a market for the woodchips and residues produced as part of the milling process. With average sawn-timber recovery rates of 36%, having an adequate return from woodchips and residues is critical to ongoing viability. In an industry with low margins, the financial return achieved from these by-products often makes the difference between a profit or a substantial loss. Loss of woodchip markets in particular is a tipping point that would lead to closure for many processors unless an alternative market was found for the residues from sawn-timber production currently processed into woodchips.

The majority of processors currently using native forest wood inputs (80%) reported it was unlikely they would use plantation-sourced wood if they lost access to supply from native forests, for a range of reasons including lack of available supply, and inability to use plantation timber for the types of processing they undertake.

Processing businesses indicated that the types of assistance they would find most useful in helping them adapt to any future change include having certainty of access to inputs for processing, ready access to finance, and assistance to develop and access new markets.

Contracting businesses

Forest industry contracting businesses include harvest and haulage, silvicultural, roading, nurseries and consultants. Contracting businesses differ to processors in that many undertake work both within and outside the forest industry, with silvicultural contractors, roading contractors and nurseries in particular often having some business activities outside the industry.

(i) Impacts of the downturn

The downturn has resulted in the loss of a substantial proportion of jobs generated by contracting businesses, with 47% of harvest and haulage jobs, 53% of roading contractor jobs, and around 80% of jobs in silvicultural contracting businesses and nurseries lost since 2008. Much of this job loss has been associated with closure of businesses, but those that have remained operating have typically experienced a large decrease in business activity: on average, contractors still operating in the industry reported a decline of between 30% and 50% of turnover since 2008, with nurseries and havest and haulage contractors reporting the greatest decline.

Managers of contracting businesses reported that factors contributing to business stress during the downturn include a reduction in demand for their services, rising operating costs, difficulty maintaining capital equipment, and increased regulation. Those working in hardwood plantations reported that the collapse of investment via managed investment schemes (MIS) had been a significant contributor to loss of business activity. The level of impact varied depending on the type of contracting business and its dependence on the forest industry. Harvest and haulage contractors and contracting businesses dependent on native forests typically reported a greater number of business stresses affecting their business, although many plantation-dependent businesses reported large decreases in turnover.

Contracting businesses used several strategies to respond to the changes in the forest industry. The most common were seeking new business opportunities either within or outside the forest industry, reducing business costs through downsizing and delaying expenditure, and accessing their business and personal financial reserves to keep the business operating. A large number had exited the industry completely, including a number of harvest contractors who received funding under the Tasmanian Forest Contractors Exit Assistance Program in 2010.

(ii) Vulnerability to further change

Contracting businesses that had higher vulnerability to future change in the industry were typically experiencing a high level of financial and management stress; reported difficulty attracting and retaining skilled workers; had difficulty maintaining or replacing capital equipment; were experiencing increasing operating costs; and had a lack of confidence and certainty in the future of the forest industry. These issues were most commonly reported by silvicultural and harvest and haulage contractors, particularly those dependent on the native forest sector. In addition, the majority of contracting businesses reported having relatively little contact with or support from other contracting businesses, forest industry organisations, or their local community, reducing their social capital. This reduced social capital will increase vulnerability to change, as it means these businesses have fewer sources of support to assist them adapt to change. Overall, harvest and haulage contracting businesses are much more vulnerable to change than any other type of business (including processors), and roading contractors are least vulnerable. Harvest and haulage contractors are less likely than other businesses to be making a profit, are less likely to have confidence in the future, and are more likely to have infrastructure that is difficult to adapt to work outside the forest industry. In addition, contracting businesses dependent on native forests are generally more vulnerable to change than those in the plantation sector, typically having less ability to adapt to change through business diversification.

As well as increasing vulnerability to future change, the lack of confidence most business managers feel about the future is already having a substantial negative impact, with many putting investment and business planning 'on hold' until there is some feeling of certainty about the future. This has flow-on impacts due to reduced spending on capital equipment and other investment.

Many contracting businesses are highly sensitive to loss of business activity: a 20% loss on top of the reductions many have experienced in recent years is likely to 'tip' them into closure or substantial downsizing of the business. However, unlike processors, managers of most types of contracting businesses, with the exception of harvest and haulage contractors, indicated that they were likely to seek new business opportunities outside the forest industry as a way of coping with change. Most suggested they would shift into work in agriculture, construction, mining or transport-based industries—usually industries in which their existing skills and/or equipment could be readily utilised.

Woodcraft businesses

The woodcraft sector in Tasmania utilises special species timbers (SST) from native forests to produce specialist woodcraft products. While this sector was not studied in depth, a small number of interviews and a recent review of the sector (Farley et al. 2009) were drawn on to identify some key issues. Further work is needed to identify impacts of the downturn on this sector.

The woodcraft sector depends largely on the tourism market for sales. With tourism substantially impacted by the recent economic downturn and high Australian dollar, the sector has experienced decline in demand for products since 2008. Access to timber resources has also decreased in recent years, although the impacts of this have been ameliorated by access to stockpiles. A shift to certifying sources of timber has also reduced supply.

The woodcraft sector is highly vulnerable to future change in the forest industry. The harvesting of SST is only economically viable if it occurs as part of the activity of harvesting native forest eucalypts, due to the need for economies of scale to cover costs such as roading and transport of equipment. In addition, any loss of access to high conservation areas of native forest is likely to substantially impact supply to the industry as many SST areas are located in high conservation areas. Businesses are already experiencing stress due to the decline in tourism, and have limited financial capacity to adapt to change, as well as high reliance on a very specific wood resource that is not readily substitutable.

Impacts of the downturn on forest industry workers

Understanding how the downturn has impacted forest industry businesses, and their vulnerability to further change, provides some understanding of how workers in those businesses are affected by change. For example, it enables identification of when and why workers may lose their jobs, and what may help businesses to continue to operate and to continue to provide employment. In addition, it is important to examine how well workers in the industry are coping with change, including the impacts of the downturn on their lives, and the factors affecting their vulnerability to further change. This can then enable prediction of the likely social impacts of future change, and inform the design of strategies to improve the capacity of workers to adapt to that change.

Two groups of workers were included in the study: those currently employed in the forest industry, and those who had left a job in the forest industry since 2008.

Currently employed forest industry workers

In May 2011, approximately 3460 people were employed in the forest industry (including only direct employment and not the flow-on employment generated as a result of the forest industry, which likely add another one to two jobs for each direct job generated in the industry [Schirmer 2010]). These 3460 people, while still having employment, have often experienced negative impacts as a result of the downturn. In addition, many are highly vulnerable to future change, particularly if it leads to loss of employment.

(i) Impacts of the downturn

For those workers who remain employed in the industry, the downturn has had multiple impacts. A majority of workers and their families have experienced reduced financial wellbeing, a result of some workers (20%) experiencing a fall in income, and a further 68.3% of workers not having any significant pay increases since 2008, during which time living costs have risen significantly. Harvest and haulage contractors were most likely to report a decrease in income since 2008. An increase in stress levels was reported by almost 75% of study participants, and almost all reported that their job security had decreased. These changes were associated with many workers feeling their financial situation, standard of living, and satisfaction with their life overall had worsened since 2008. Other aspects of their lives, such as satisfaction with their personal relationships, were not typically reported to have worsened in association with the downturn.

Workers who reported greater impacts as a result of the downturn in the industry were significantly more likely to report a decrease in satisfaction with most aspects of their work since 2008. In particular, they were more likely to report that their job security, the perceived fairness of decisions made about the forest industry, and their work-related stress levels had worsened.

People involved in some types of work were much more likely than others to report a moderate or large impact of the downturn on their lives. Harvest and haulage contractors were significantly more likely than other groups to report negative impacts, followed by silvicultural contractors, while workers employed in processing or growing/managing forests were least likely to report negative impacts.

Uncertainty about the future was often discussed by workers as having impacts beyond the effects of the current downturn. In addition to the ongoing stress associated with uncertainty about the future, the low job security accompanying uncertainty makes it difficult for workers and their families to plan for their future, with many putting off decisions about large purchases such as a new car or a house, or whether they can afford expenses such as private schooling for children.

(ii) Vulnerability to further change

The vulnerability of workers to future change was evaluated by firstly identifying whether workers with particular characteristics were more likely to have experienced negative impacts as a result of the downturn (focusing not on exogenous characteristics, such as whether they were in jobs more affected by the downturn, but on endogenous factors, such as the family responsibilities, skills and resources of the worker). The characteristics most commonly associated with negative impacts were considered then as indicators of high vulnerability to further change. The characteristics examined were a worker's human capital, financial capital, social capital, socio-demographic characteristics, attachment to place, attachment to the forest industry, certainty about the future, and beliefs about forest industry policy.

A worker's human capital—their own individual skills and resources, including psychological and physical wellbeing, education levels, and overall confidence and outlook—has a significant influence on their ability to adapt to change, and hence their vulnerability to change. Workers who lacked confidence in their ability to find new work were more likely to report negative impacts of the downturn, while those who felt confident in their ability to find new employment reported fewer impacts. Confidence in the ability to find new employment is therefore an important predictor of vulnerability to change. Around 50% of workers lacked this confidence, particularly amongst harvest and haulage contractors and silvicultural contractors. Interestingly, a majority of workers were highly confident of their ability to learn new skills and cope with unforeseen situations, with this relatively positive psychological outlook likely to assist them in adapting to change.

Many forest industry workers have low levels of formal education, particularly those employed in processing, harvest and haulage contracting, and silvicultural contracting. While not associated with greater self-reported impacts from the downturn, this is typically associated with more limited ability to adapt to change, as lack of education restricts the range of alternative jobs available to a worker either within or outside the industry. The relatively low level of education for workers is therefore a key vulnerability.

When financial capital was examined, unsurprisingly, those who were more vulnerable to change were the 41% of workers under moderate to high financial stress—defined as those who felt they were unable to easily cover living costs, irrespective of household income level. Those employed in processing were particularly likely to report this type of financial stress.

Social capital is also an important factor in coping with change, with the amount of support available to a person from their social networks often an important predictor of ability to adapt successfully. Consistent with this, workers who felt they had support from others in the forest industry were less likely to experience negative impacts. However, those with strong family attachments to the industry—predominantly harvest and haulage contractors—were much more vulnerable to change. They were also more likely to be living in communities in which people had shifted away due to the downturn—another factor that has reduced available social capital for some people and hence increased their vulnerability to change.

When socio-demographic characteristics were examined, workers with one or more people financially dependent on them were more vulnerable to change. Interestingly, gender and age were not associated with differences in vulnerability.

A worker's attachment to the community in which they live appears to matter, with workers who had lived in their local community for a long time typically more vulnerable to change and vice versa. Similarly, attachment to the forest industry—measured based on time spent working in the industry—made a difference, with harvest and haulage contractors and processing workers in particular more likely to have worked a long time in the industry, and to be more vulnerable to change.

Finally, certainty about the future of the forest industry appears important. Workers with low confidence in the future of the forest industry or in the future of their job in the industry, or who felt proposed future changes for the industry would not be positive, were more likely to be vulnerable to change.

Workers who had left a job in the forest industry since 2008

In addition to surveying workers currently employed in the industry, a number of workers who had voluntarily or involuntarily left jobs in the industry since 2008—referred to as 'ex-workers'—were surveyed and interviewed, to identify how they were impacted by the downturn, and what had happened to them since leaving their job in the forest industry.

(i) Impacts of the downturn

The most obvious impact of the downturn on ex-workers was that it had led to either forced or voluntary loss of their employment in the forest industry. Loss of a job is often associated with loss of financial security, as well as stress, depression or anxiety, and loss of self-esteem. As a first step, ex-workers were asked if they had found new work since leaving the industry. Approximately 65% to 68% of ex-workers had found new jobs (depending on which dataset was used). The new jobs were usually outside the forest industry. Between 11% and 14% had left the labour force (retiring or on illness benefits), and the remainder (approximately 18–22%) were unemployed and seeking work. A similar proportion of those who had left jobs voluntarily and involuntarily had found new work. The average time taken to find a new job (4.3 months) was also similar irrespective of whether a worker had left their job voluntarily or involuntarily, with the majority of those who found new work doing so within one to three months of leaving their forest industry job, and a small number taking up to two years to find new work. Those who had

found new work often reported that their new employment had poorer working conditions, particularly lower job security and lower income, than their previous work in the forest industry. Their new jobs were most commonly in the construction, agriculture, transport, manufacturing and mining industries. A large proportion of ex-workers found work outside the forest industry, involving different tasks to those previously undertaken in the forest industry, although some also found new employment in the forest industry.

Factors that assisted ex-workers to find new employment included having jobs available locally for people with their skill sets, accessible training courses enabling them to gain new skills or formalise their existing skills (in particular through obtaining machinery operator tickets), and being able to access job opportunities through their social networks. The latter was particularly important for those who had little experience in formally applying for jobs.

Barriers to gaining new employment included ex-workers' perceptions about their eligibility for work, with many feeling that older workers had little chance of gaining employment, or lack of confidence in their ability to get a new job; costs associated with looking for new employment (e.g. telephone and fuel costs for travelling to job interviews); and lack of available local employment. Skills and education were commonly reported barriers, with many ex-workers having relatively low levels of formal education, and little work experience outside the forest industry, and as a result feeling they had limited skills to use outside the forest industry, as well as limited knowledge of how to successfully apply for a job.

In addition, many ex-workers found it difficult to access assistance from the government, whether it was assistance to gain new employment or other assistance such as accessing welfare benefits. They typically reported confusion or lack of knowledge about what assistance they were eligible for, and how to access it.

Ex-workers had typically been offered at most one or two forms of formal assistance after losing their job in the forest industry, from either their previous employer or government-provided services, with many provided access to services via their union or a third-party support agency. These included assistance in preparing a CV, redundancy payments, retraining opportunities, financial planning advice, counselling and career referral services, amongst others. Ex-workers who had accessed assistance reported that redundancy payments, retraining opportunities and financial planning advice were the most effective forms of assistance received.

Loss of employment was typically associated with increased personal and financial stress, and increased uncertainty about the future. However, some ex-workers reported an improvement in some aspects of their life, including increased time spent with family and friends, and improved health. Some also reported that redundancy payments had enabled them to pay off debts such as mortgages, although others found that redundancy payments were barely sufficient to cover living expenses during the period before they were eligible for unemployment benefits.

(ii) Vulnerability to further change

Vulnerability to further change was evaluated for ex-workers using the same approach as that described for workers currently employed in the industry. Overall, results were highly similar. In particular, workers who reported low confidence in their ability to find new employment or adapt to changed situations typically adapted less successfully to their loss of employment. Those with lower levels of formal education were significantly less likely to have obtained new employment compared to those with higher levels. Those with lower financial and social capital also found it more difficult to adapt successfully to losing their job in the forest industry. In one surprising

difference to the results for those currently employed in the industry, the length of time a person had spent working in the forest industry was not a predictor of their ability to adapt successfully to loss of their employment, with those who had worked a long time in the industry no more likely to report negative impacts. This is likely to be because they were older, were more likely to have paid off mortgages and were less likely to have children financially dependent on them, as well as being more likely to be eligible for larger redundancy payments—all factors that reduced negative impacts that may be associated with high dependence on the forest industry.

Workers who had left jobs voluntarily experienced fewer negative impacts compared to those who left jobs involuntarily, which was not surprising considering they typically left their job only when a new opportunity had arisen, and of their own volition.

Those who had been employed in harvest, haulage and silvicultural contracting reported the greatest negative impacts resulting from their loss of employment, and those who had been employed in managing forests/plantations the least.

Based on the analysis of both currently employed and ex-workers, it is clear that harvest and haulage contractors and processing workers are more highly vulnerable to change than those working in silvicultural contracting or managing native forest or plantations. Similar to forest industry businesses, workers whose jobs depend on native forests are more vulnerable to change than those employed in the plantation sector, having lower educational attainment, higher attachment to the industry, and higher attachment to their local community. The most vulnerable groups are therefore harvest and haulage contractors and processing workers whose jobs depend on native forests.

In the case of harvest and haulage contractors, high dependence on and attachment to the forest industry, combined with often experiencing significant negative impacts from the recent downturn (affecting both their personal finances and wellbeing) and relatively low levels of formal educational attainment, all increase vulnerability. This suggests a need for providing assistance that reduces the financial stress faced by these contractors, as well as addressing the psychological stress of change in an industry on which they are highly culturally dependent. Targeted skills training and assistance to find a new job are also essential for workers who have often not been employed outside the industry, and may not have had any experience in formally applying for a job.

In the processing sector, vulnerabilities of workers are slightly different: they have very low levels of educational attainment, but more confidence in their ability to find new work and fewer indications of very severe psychological distress (albeit with many workers indicating high levels of stress). A focus on skills training and assistance with the process of applying for employment may be most important to assist these workers.

Exposure of Tasmanian communities to change in the forest industry

The exposure of different Tasmanian communities to change was identified by examining (i) how dependent different communities are on the forest industry, defined as the proportion of the employed labour force working in the industry, and (ii) the impact of the downturn on employment in different local government areas (LGAs) across Tasmania. Many LGAs are highly dependent on the forest industry, and have experienced a substantial decline in forest industry employment during the downturn. The communities most exposed to change were identified as Dorset, Central Highlands, Glamorgan–Spring Bay, Derwent Valley, Southern Midlands, Circular Head, Waratah–Wynyard, Burnie, Kentish, Huon Valley and Meander Valley. Several LGAs

were also identified as being particularly likely to experience out-migration of forest industry workers if they lost employment, with Dorset, Hobart, Central Coast, Glenorchy and Huon Valley most likely to experience loss of population. Circular Head and Glamorgan–Spring Bay are least likely to experience out-migration of forest industry workers who lose jobs, something which may lead to long-term unemployment if new employment opportunities are not found within these communities.

It is essential that an in-depth study be undertaken of the impacts experienced by these communities as a result of the downturn, and of the likely impacts of future changes to the forest industry. The resources available for this study did not permit this analysis, and it is essential that the work reported here identifying exposure of communities to change be built upon by analysing how different communities are impacted by, and adapt to, change.

Impacts of an uncertain future

All groups who took part in this study emphasised that the challenges currently affecting forest industry businesses and workers are a result not only of the downturn. While the market driven factors causing the downturn were the principal cause of job loss during 2008 to 2010, over the year to March 2011 job loss and decreased business activity have also resulted from the high level of uncertainty about the future associated with ongoing discussion of the *Principles Statement*. Uncertainty about the future has resulted in businesses and workers delaying important decisions such as making investments in their business or large purchases, and causing skilled workers to choose to leave the industry. These issues have contributed to the rapid decline in employment and business activity. With an agreement announced on 24 July 2011, the next challenge will be ensuring that this uncertainty is reduced through the implementation of the announced forest industry changes, with appropriate support needed to ensure that businesses feel confident to invest, and workers feel confident to remain in the industry.

The results of the study also clearly indicate that most businesses and workers feel able to adapt to change, if given the time and resources to do so. A clear and adequate timeframe for implementation of change is needed to enable businesses and workers to plan and implement adaptation strategies. Ideally, a transition period of several years is needed to optimise adaptation. Knowing the timeframe for transition and the changes that will occur during it can provide those in the industry with the information they need to make decisions about their optimal adaptation strategies.

It is also essential that the assistance packages provided to help workers, businesses and communities adapt to future change in the industry address the negative impacts that both the downturn and the current uncertainty about the future of the industry have had on the adaptive capacity of businesses and workers. The downturn and ongoing uncertainty have substantially reduced adaptive capacity of many businesses and workers, and unless this is addressed, they will have difficulty adapting successfully to the future changes to be implemented in the industry.

Assisting businesses and workers to adapt to change

The results of this study show that some businesses and workers are more vulnerable than others to change in the forest industry—in other words, they are more likely to experience negative impacts as a result of change, and are less likely to adapt successfully to change. It is important to design support mechanisms and policies to target the specific vulnerabilities of these different groups.

Structural adjustment assistance should focus on providing support that makes best use of the skills and resources people already have, and build their capacity to adapt successfully to change. We recommend that any structural adjustment assistance include an integrated package of support measures, focused around capacity building for the long term as well as ameliorating shorter-term impacts of loss of employment, falling business activity, and difficulty downsizing or restructuring businesses. Many workers and businesses are already using their own resources to adapt to change. Providing assistance to facilitate this type of adaptation can substantially reduce the negative impacts associated with change in the forest industry, and by doing so can reduce the overall costs of assistance packages.

To do this, support measures need to go beyond simple financial payments to specific groups. Financial assistance is not nearly as effective when provided without other support such as training support and financial, business and psychological counselling to enable optimal utilisation of the financial assistance. For example, the redundancy payments enabled by the recent Tasmanian Forest Contractors Exit Assistance Program, which focused on providing grants for business exit, were considered beneficial by study participants. However, participants criticised many other aspects of the program, including the lack of clarity of application guidelines, the amount of money available, the fairness of the process, and the limited scope of eligibility for assistance.

The recommendations below focus on identifying the types of assistance most likely to reduce social and economic impacts of the downturn, and future change, on businesses, workers, and communities dependent on the forest industry. This assistance may include payments made to businesses that lose contracted rights to resources harvested from native forest, something that has formed a part of several previous structural adjustment packages in the forest industry, as well as in other industries where the government grants a right to access natural resources, such as the fishing industry. We focus on understanding whether and how such payments, as well as other strategies that aim to reduce negative impacts, can reduce the overall cost of change in the forest industry for those affected.

(i) Assistance strategies for businesses

Forest industry businesses vary in their vulnerability to change and, perhaps more importantly, in the range of strategies by which they can adapt to change. Many processors and harvest and haulage contractors are highly dependent on native forest resources and have little capacity to change their business infrastructure to either work elsewhere in the forest industry (i.e. the plantation sector), or to shift their business activities outside the industry. However, many identified that they may be able to diversify their business, but that they need certainty about the type and volume of resources that will be available to them into the future in order to do so.

Providing certainty of access to forest resources, and a clear transition period to any planned change in access, is therefore the most effective assistance that can be provided to many businesses, as it provides a basis on which they can plan their business activities and invest in the future. While uncertainty is ongoing, short-term financial assistance may be needed to maintain business activities, particularly where businesses face difficulty accessing finance due to the lack of certainty about the future of the industry.

Providing assistance to develop new business opportunities is the next most useful strategy. Supporting businesses to diversify into new activities can be more effective than exit assistance, as by maintaining business viability it reduces flow-on impacts to workers, families and communities.

This assistance can include:

- (i) enabling access to finance through loan guarantees or interest rate subsidies
- (ii) providing access to financial and business planning advice that encourages development of new business activities (e.g. through expansion of the Rural Financial Counselling Service)
- (iii) market development assistance (e.g. through AusIndustry)
- (iv) direct grants to facilitate development of new business activities, such as worker training, capital equipment, marketing, etc. The latter may be in the form of payments intended to address a business's loss of contracted access to forest resources.

Provision of exit or downsizing assistance may be necessary for businesses that do not have the capacity to adapt their business to new work either within or outside the forest industry. Providing funding to assist exit (e.g. in the form of a payment based on the loss of contracted volumes of wood supply) ensures business debts can be paid and redundancy packages provided. It must, however, be accompanied by strategies aimed at reducing the flow-on impacts of businesses exiting the industry. This includes support for unemployed workers, upstream and downstream businesses that lose revenue as a result of forest industry businesses exiting the industry, and the communities affected by loss of business activity and associated impacts on employment. Assistance that focuses on helping business managers and workers plan for their future after exiting the industry is particularly important.

When considering who should be eligible for assistance, the overall goals of change in the forest industry need to be considered. For example, the agreement signed on 24 July 2011 commits to reducing access to native forest resources, and encouraging a shift to a plantation-based industry. Minimising the social and economic impacts of this transition requires not only assisting those currently dependent on native forests, but also considering how to facilitate the transition to greater dependence on plantations. In the plantation sector, the downturn has had a major impact on employment and on the financial capacity of existing businesses. This sector is therefore not able to readily make the types of investment needed to expand the plantation industry in Tasmania: many skilled workers have left the industry, and financial capacity is limited. Assistance that enables expansion and diversification of plantation-based businesses is needed to overcome these barriers, and to facilitate transition to a plantation-based forest industry.

(ii) Assistance strategies for forest industry workers and families

Forest industry workers and their families may be negatively impacted by the consequences of loss of employment, underemployment, and uncertainty about the future. While many workers who have lost jobs have found new employment relatively quickly, that employment is often relatively insecure and pays less than their previous work in the forest industry. Assistance that improves the capacity of workers to gain new employment with equivalent or better conditions to their previous job can improve outcomes for many workers, as can assistance that reduces the negative impacts of shifting from one job to another.

Many of the assistance strategies discussed below focus on helping those workers made redundant as a result of forest industry change. Some—particularly retraining and short-term financial support—are also important for those who remain employed but experience significant change to the nature of their employment, either in the short or long term, as a result of change in the forest industry (such as contractors who experience a substantial reduction in work hours and hence in income).

Seven forms of assistance are recommended, many of which can be packaged together. Taken together, these are intended to address the factors contributing most to vulnerability of forest industry workers (lack of experience in working outside the industry resulting in low confidence and little experience applying for employment; low educational attainment; and for some, lack of financial resources):

- Employment referral services that help workers find new employment, reducing the length of time they are unemployed: These services need to specifically match skills of forest industry workers to new jobs, and provide support to the large number of workers who have limited experience in applying for jobs.
- Assistance in applying for new employment: This may include financial assistance to cover
 costs of travelling to interviews, phone bills, training, or relocating to a new town to take
 up a new job. It can also include assistance preparing a CV and preparing for job
 interviews, critical for many workers who have not had experience applying for jobs
 outside the forest industry.
- Access to training: This includes training that formalises skills attained in the forest industry that may be applicable in new jobs (e.g. through obtaining machinery operator tickets), and training in new skills targeted at industries in which employment is available. Training opportunities may need to be provided both to those who leave the industry and those who remain employed, but whose jobs change substantially (e.g. as a result of a forest industry business diversifying its activities outside the forest industry).
- Psychological and financial counselling: Workers experiencing high levels of stress, depression or other mental health issues have limited capacity to plan successfully and constructively for their future. Providing psychological support, as well as financial planning advice, can be highly beneficial. This can occur through formal mechanisms such as counselling services; however, many workers are highly reluctant to access such formal services. Given this reluctance, it may be necessary to make accessing this assistance a requirement for eligibility for other forms of assistance, or to provide it as a packaged service together with employment referral or other services. Existing initiatives such as the Rural Alive and Well (RAW) program provide a useful blueprint for this type of service. Workers also receive psychological support from social networks within and outside the forest industry: supporting these existing networks can provide opportunities for workers and family members to interact and discuss their issues, rather than being isolated. For example, funding for community or forest industry organisations that enables them to organise events that bring workers and their families together and that provide opportunities for peer support can be highly beneficial.
- Redundancy assistance: Ensuring workers have access to redundancy payments helps both businesses and workers by enabling businesses to exit or downsize while workers have resources to cover living costs while seeking new work or can afford to retire early.
- Cost-of-living support: Short-term assistance to cover living costs may be necessary for some workers and, in particular, managers of small businesses in the contracting and processing sectors. This type of assistance is particularly useful during the period in which longer term assistance is not yet available, but workers are struggling. Many workers are currently in this position.
- One-stop shops and other 'information' assistance: Providing advice on all forms of assistance available is essential to ensure workers and businesses are able to identify and access that assistance. Workers and businesses also need support in applying for

assistance. This requires good communication through existing networks (such as forest industry organisations), and ideally the provision of 'one-stop shops' where all information is available, packaged together with assistance services such as employment referral and financial counselling.

As with businesses, consideration needs to be given to which workers will be eligible for different forms of assistance. Where the assistance aims to help workers transition to new types of employment (e.g. through retraining) eligibility should ideally be broad, ensuring those in both native forest and plantation-based jobs can obtain the skills needed to transition successfully to a changed forest industry. Other forms of assistance may have more restricted eligibility, particularly redundancy payments.

Consideration should be given to extending eligibility for some forms of support beyond workers in the forest industry to include their families (e.g. through support for spouses of forest industry workers to receive training assistance if they need to seek work as a result of their partner losing or changing jobs).

(iii) Assistance strategies for communities dependent on the forest industry

Communities dependent on the forest industry need specific assistance to help ameliorate the downstream economic and social impacts of change in the forest industry. Assistance provided to businesses and workers may not always 'trickle down' to communities, particularly if a community experiences out-migration of population as a result of change in the forest industry. While not examined in detail for this report, three broad types of support are often identified as useful:

- Funding for community activities to build positive social capital: This is particularly useful in the short term, to help maintain social networks that are an important form of support for those affected by change, and which may otherwise erode.
- Funding to strengthen existing community support services, including both government services and community and industry groups providing essential support during times of difficulty: This needs to be provided early in any change process.
- Funding regional development assistance that enables communities to invest in developing new economic activities: Funding to support existing local initiatives and networks can be particularly cost-effective.

(iv) Timing and coordination of support

Timing of support is critical. Assistance is needed as soon as possible to address the falling capacity of many businesses and workers to adapt to change. Providing assistance rapidly will reduce the costs of adapting to change by minimising further negative impacts. If assistance is delayed substantially, many more workers and businesses may have 'tipped over' their threshold of change, with substantially reduced financial and psychological capacity to cope with further change.

Support packages must be accompanied by adequate investment in coordination and communication activities, to ensure that those eligible for assistance are (i) aware of the availability of assistance, and (ii) have the ability to access this assistance, including where necessary being provided with help to fill in forms and with direct encouragement to take up assistance. Adequate investment in coordination and on-ground support is a crucial and often

missing element of structural adjustment support, and can substantially improve the speed and efficiency of delivery of assistance, thus reducing the negative impacts experienced by businesses, workers and their families.

Further work

This report does not attempt to predict the likely impacts of future change to Tasmania's forest industry, but can be used as a basis for assessing the impacts of the agreement announced on 24 July 2011. Nor does it examine the full impacts of the downturn: flow-on impacts on local communities were not examined due to a lack of sufficient resources. This type of assessment is urgently needed, with many communities experiencing significant loss of local employment during the downturn. This study should be used as a basis from which this type of assessment is undertaken, ideally in partnership with the people and communities impacted by change in the industry.