

What's happening in private forestry?

This newsletter is to update you on recent developments relating to private forestry in our area and on the activities of the Northern Inland Forestry Investment Group (NIFIG). NIFIG is a joint Commonwealth/State funded group, operated by the New England-North West Regional Development Board, whose role is to nurture forest industry activity in the region.

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1. JVAP private native forestry sustainability project

In January 2005, National Heritage Trust funding was made available to undertake research into the sustainability of private native forestry operations. The project was arranged by the Joint Venture Agroforestry Program in Canberra, a consortium consisting of three R&D Corporations – Rural Industries Research and Development Corporation (RIRDC), Land & Water Australia, and Forest and Wood Products Research and Development Corporation (FWPRDC), together with the Murray-Darling Basin Commission (MDBC).



A suite of projects were commissioned in February 2005 to examine aspects of PNF sustainability and mapping/inventory issues, with the sustainability focus being on biodiversity and habitat impacts from forestry operations. Already, the work has revealed some interesting results which need to be taken on board by policy makers, especially considering recent forestry decisions such as the Western Woodlands.

Additional field work will be carried out in September 2005 – May 2006 on the North Coast, East Gippsland and possibly cypress areas in our region if further funding is approved. Findings from the field work, computer modeling and literature reviews on sustainability to date are as follows:

Implications for Sustainability

- Forestry thinning operations on public forest sites in Northern NSW, Tasmania and Victoria indicated that while there were short-term effects (lasting a few years) on species composition and forest structure, in the medium term (after about ten years), the impacts were negligible so long as soil disturbance is kept to a minimum (which is usually the case for PNF thinning operations);
- Grazing (cattle) post-thinning has a short-term detrimental effect on regeneration. Excluding cattle for 3-9 years post thinning will minimise loss of growth response;



- Soil disturbance during thinning is potentially more significant than soil disturbance during logging. It can result in regeneration of undesirable under-storey species. Where possible, low impact thinning machinery should be used (often not a problem in PNF where brush-cutters, chainsaws or chemical axes are used);
- The literature revealed that there is no consistent evidence to demonstrate that forestry operations have a negative impact on biodiversity or habitat. This was also found during studies carried out for the Regional Forest Agreements in northern and western NSW;
- Current measures of the sustainability of forestry operations (e.g. species counts or habitat measures) all have their shortcomings and do not conclusively 'prove' sustainability or otherwise - a universal indicator of biodiversity sustainability is unlikely to be identified;
- The concept of a generally applicable species threshold (i.e. a population level below which a species can't recover) is not useful;
- The precautionary principle (i.e. if there is scientific uncertainty that an activity will produce serious or irreversible environmental damage then don't proceed) appears to have been mis-used in forest policy decisions, since the principle also needs to be applied to serious or irreversible economic impacts and the relative costs and benefits compared;
- Ecological sustainability is not an endpoint but an overall direction in forest management;
- Critical threshold levels for vegetation or habitat cover cannot be applied with any confidence across different landscapes or biotic groups - this issue is important for CMAs devising catchment targets;
- Structural retention without active management of dense regeneration can lead to limited habitat value for biodiversity;
- It is typically not necessary to manage every hectare of a private forest for biodiversity values.



Typical North Coast native forest site, the subject of sustainability measurements to assess the effects of forestry activity and grazing on forest structure, regeneration and habitat value.

Implications for the PNF Code of Practice

- There are no forest biodiversity conservation 'recipes' that can be applied uniformly to all regions, landscapes and stands;
- Forest management should follow a risk-spreading approach (i.e. don't do the same thing everywhere);
- An economic analysis of predicted forest timber volumes for north east NSW spotted gum forests indicates that under the proposed PNF Code of Practice, the current financial incentives to high grade forests persist and do not encourage landholders to adopt better forest management practices for future commercial timber production. This occurs because basal area restrictions and the requirement to retain more large trees severely compromise future timber growth.
- The persistence of high grading with the Code in place leads to lower forest structure environmental features (standing basal area, number of large trees) than a program of proper silvicultural treatment.

In summary, findings to date indicate that appropriately applied management practices in private native forests can boost timber production with no evidence of reduced biodiversity or habitat value. Indeed, biodiversity and habitat values can be maintained or improved and are likely to be higher than competing land uses (e.g. cropping and grazing). Forest growth models combined with economic analysis suggest that the proposed Code of Practice for PNF in NSW will not reduce the undesirable 'high-grading' of private forests, leading to lower ecological and economic values than could otherwise be achieved. Poorly constructed regulation may lead to environmental results opposite to those intended. Incentives for good commercial private native forest management should be explored as an alternative. This is of critical importance to an industry which is increasingly relying on timber supplies from private land.

2. Regional economic benefits of timber production

The regional development and economic benefits from forestry operations can significantly outweigh those of competing land uses. This is particularly the case where the processing of the timber occurs locally.

The following figures illustrate the situation for softwood plantations and livestock activities in the 1990's in Oberon. This result still holds today and it noteworthy that the majority of the positive impacts occur at the timber processing stage. This also applies to forestry based upon native forest timbers.

Three effects are shown in Figures 1 and 2 which are:

1. Direct effect – the value of timber production and employment created in the timber industry;
2. Production induced flow-ons – value and employment created in other industries due to timber industry purchases;
3. Consumption induced flow-ons – value and employment created in other industries due to timber industry employees spending their wages.

Figure 1. Economic impacts per 1000 ha of plantation, Oberon 1988-89

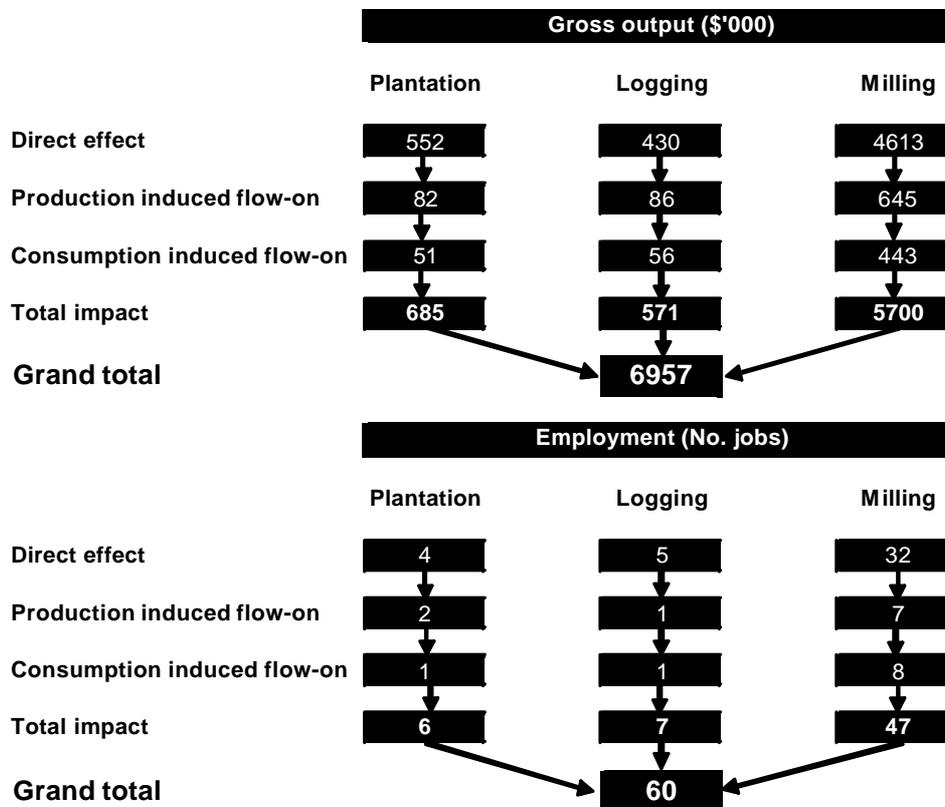
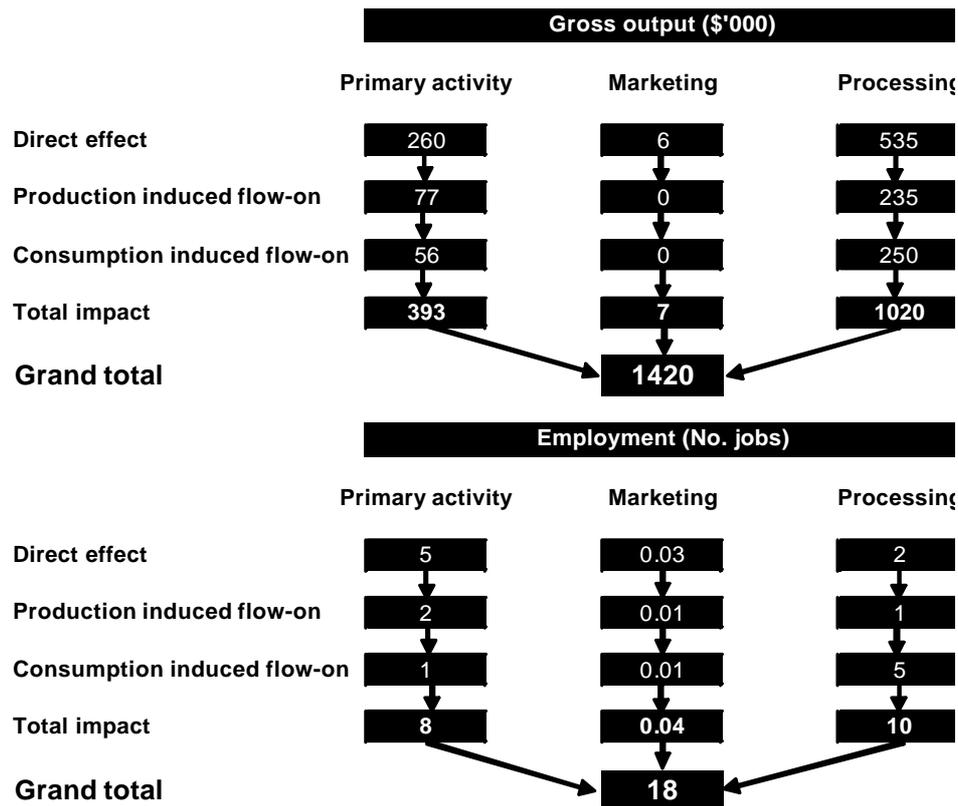


Figure 2. Economic impacts per 1000 ha of mixed livestock, Oberon 1988-89



3. Walcha Plantation Investment – Uses for Lower Quality Plantation Timber

Growing trees produces a lot of lower quality wood, no matter how well they are managed for higher value products. This is true for both plantations and managed native forests. If markets can be found for those lower quality products, the economics of the venture is greatly improved.

Our Walcha plantation development strategy has revealed large volumes of lower quality wood will be available in the region both from plantation and processing residues if the intended plantation expansion to 50,000 ha occurs. For example, between 2005 and 2021, around 200,000 m³ would be available annually, rising to 580,000 m³ from 2034 onwards. These include substantial volumes of both softwood and hardwood residues.

We commissioned a forestry consultant to explore the options for using these residues to attract additional processing operations to the region and boost local economic activity. A number of potential options were identified in his recently completed study, the most promising including:

- Hew Saw processing – involves the technology to process smaller logs. An investor already operating in the Walcha region uses this technology in their Tasmanian processing plant;
- Wood preservation plant – either via new investment or expansion of existing facilities;
- Particleboard production – a small scale plant selling into the Sydney or export markets;
- Export logs – as a short to medium term option.

The study identified potential investors for the various products.

If you are interested in seeing the full report, please contact David Thompson.

4. Code of Practice Private Native Forestry (PNF)

There is still nothing to report on the progress of the Code and the recent changes within the NSW Government may have substantial implications for the progress of the Code. At present, the sustainable forestry exemption carried over from the SEPP46 regulations still operates.

As outlined above in Section 1, researchers at Southern Cross University have examined the impacts of various drafts of the Code on private native forestry operations on the North Coast of NSW and the findings are interesting.

They indicate that:

- The proposed basal area limits and large tree retention requirements may lead to sub-optimal silvicultural practices which will not generate adequate 'release' and future growth for commercial purposes;
- That commercial yields may be significantly reduced to the extent that good forest management practices are only worthwhile on the very best private forest sites;
- That incentives for the undesirable 'high-grading' of forests (i.e. selectively removing all the best logs, performing no silvicultural management and leaving minimal future growing stock) will not be addressed by the Code. This will lead to a more uniform forest structure which is detrimental to both habitat quality and future timber yields.

This situation would impact negatively on the sustainability of the native forestry industry in both an environmental and economic context, particularly given the increased reliance on private timber sources which now represent up to 50 per cent of the total log supply in some areas.

5. Industry profile

I am currently updating the information we have on the timber processing industry in the region by means of a survey and by personally visiting as many sawmills as possible. We last collected this information in 1998 and it is interesting to observe the changes since then. We use this information to ensure we have a clear picture of the size and nature of the industry, to help us understand the issues being faced by timber processors and to ensure our work program is focused on the most important industry issues, opportunities and problems.

Hardwood mills

For the hardwood mills surveyed to date, uncertainty over the PNF Code appears to be a major issue, with many delaying expansion or investment decisions until the situation is clearer. In general however, many of the smaller mills (2-3,000m³ log input) have increased their throughput since 1998, while for the larger mills log throughput has fallen. In general, timber supplies from private property have assumed much greater importance in our region, a trend which is also evident on the coast where private timber now makes up about 50% of total log supplies to processors.

Cypress mills & the Brigalow Decision

The recent Brigalow Bioregion decision has made it difficult to obtain information from cypress mills at present, because the future of their operations is uncertain. Our understanding is that of the 57,000 m³ of logs allocated to industry under the decision, 17,000 m³ of that timber is to come

from private lands, so in this respect the PNF Code of practice could be critical.

Some other estimates I have made on the impact of the decision include:

- Value of gross output reduced by \$22 million
- 213 less jobs
- Household income falls by \$5.1 million.

Warrumbungles National Park economic impact data for 1996/97, scaled by the CPI to match the 2002 forestry data indicates that replacing timber losses through tourism requires:

- 211,000 additional Park visitors to replace gross output
- 133,000 additional visitors to replace lost jobs
- 132,000 additional visitors to replace household income.

Current total National Park visitation to the area is 89,420 visitors, so significant increases are required to offset the timber losses.

6. Training in cypress pine management and sawmilling available

Following the insert in our last newsletter regarding options for managing and value-adding cypress pine, sawmiller and landholder Peter Appleby has expressed an interest in helping local landholders earn income from cypress timber. Peter is offering training on a fee-for-service basis and interested parties can contact Peter on (02) 6723 3295 (please note, this is for the information of newsletter recipients and is not an endorsement by the Northern Inland Forestry Investment Group).

Yours sincerely



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See more information about forestry in our region and past newsletters on the New England- North West Regional Development Board's website: www.nio.com.au

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