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March 25, 2011

## Inquiry into the Australian forestry industry

Opportunities for and constraints upon production;

## **Native Forests**

The most important point I have to make is that native forests should be sustainably utilised – something we know how to do quite well. We should not be misled into thinking that placing all native forests in "protective areas" is beneficial either for the economy or forest ecosystems.

(Please see an excellent essay on this subject by the conservation biologist Dr Simon Groves): http://www.onlineopinion.com.au/view.asp?article=11374

The public generally has the mistaken notion that an end of harvesting trees in native forests, both those under public and private ownership, is desirable. Quite the contrary, as Professor Michael Archer of the University of New South Wales has noted, "Conservation through Sustainable Use" is a much more sensible policy.

If indeed most of the 43m ha of native forests in Australia become off limits for tree harvesting, then a sustainable production of at least one cubic metre of wood (of high-quality timber not low-quality plantation wood) per hectare per year will have been lost. This will aggravate the already large (\$2+billion per year) deficit in wood products and not in fact manifest itself as good stewardship of those forests.

In fact, we know, through more than one hundred years worth of research, how to manage native forests not only for timber production but for the wide range of their ecosystem services (Jacobs 1955, McKinnell et al. 1991, Florence 1996, Lindenmayer and Franklin 2003).

I am not in any way arguing against regulation but rather in favour of carefully managed forests where silviculture – that is, preparing forests for the successful growth of new regeneration – is considered in the context of providing faunal habitat, avoiding catastrophic bush fires, protecting catchments and so on. Currently, for example, in NSW public forests are increasingly in reserves or, where timber cutting is allowed, exploited for very small amounts of timber (<10m<sup>3</sup> per ha) without any treatments whatsoever to encourage the development of healthy, vigorous stands in the future.

Thus the constraints to production come in native forests from

- 1. Putting the most productive areas into national parks and
- 2. Not managing the remaining areas for future production.

Opportunities for diversification, value adding and product innovation;

How can these opportunities be developed if the forestry research sector continues to shrink? –

\* CSIRO Forestry "downsized"

\*~15 research staff in FNSW sacked (apparently the priority here is only to make money from pine plantations and to avoid any investment in improving condition of native forest or to develop eucalypt plantations)

\* University-level forestry departments becoming smaller or nonexistent

- Environmental impacts of forestry, including:
  - impacts of plantations upon land and water availability for agriculture; and,

The topic of water and plantations has been well elucidated in various Joint Venture Agroforestry Program (RIRDC) publications and articles such as Lloyd (2010). Currently the plantation estate is at 2m ha, but some people predict that the eucalypt area will shrink from 1m ha to approximately 600,000 ha unless a new viable model for plantations is developed.

 the development of win-win outcomes in balancing environmental costs with economic opportunities;

Again the great opportunity that exists is to manage the large area of native forests for timber and other values, according to systems that have been developed over many decades. Plantations, particularly in terms of carbon budgets, are not as ecologically desirable as native forests. If the plantations are harvested on short (8-20year) rotations and the material used for short-lived products such as newsprint, and the establishment techniques involve large amounts of diesel and petrochemical-based compounds (as they do) then plantations are carbon-negative. That contrasts with the case of native forests where perhaps 50% of the carbon removed is not lost to the atmosphere at all, but preserved in long-lasting sawn forms. And where those trees were new ones emerge (with small or no expenditure of carbon from us) and fix even more carbon. "Win-win" is the right term.

- Creating a better business environment for forest industries, including:
  - investment models for saw log production;
  - new business and investment models for plantation production; and,
  - superannuation investment in plantations;

These are all areas where legislators should excel, in one of the most advanced democracies in the world. In some places in the

world – New Zealand, the southeastern United States of America – landholders are aware of a stable industry buying timber that they themselves can produce. Also there are existing extension services that can provide efficient technical packages to farmers. Further, the tax laws are structured so that it makes sense for landholders to plant trees: they know they will have something to sell and a market buying at a reasonable price, that the tax laws favour them growing trees, and that they will be allowed legally to harvest trees they plant.

The lack of certainty in terms of policy and lack of clarity about presence of on-going markets as well as lack of certain tax benefits all discourage investment.

Of course MIS was a disaster which unfortunately took the reputation of our forestry profession – already in the gutter – down even lower. Legislatures need to be much more thoughtful about devising instruments intended to achieve certain outcomes, such as the development of a plantation estate. The MIS strategy provided opportunities for people interested only in a quick profit to make large amounts of money, whilst committing to only minimal efforts in forestry.

Good law making is difficult but not impossible – successful models in other countries, including New Zealand, USA, and European countries should be carefully studied and modified for Australian conditions. New programs need to be constantly monitored and modified as necessary.

Public forest services have traditionally done an excellent job of managing both native forests and plantations. Their advantage is that they can operate on long time scales. Forests NSW has research trials going back to the early 20<sup>th</sup> century and highly skilled foresters who can apply the results of more than 500 experiments across the state.

Large areas of native forest were managed for timber production as well as other values by State Forests NSW for nearly a century. They were managed well, so well that they looked like national parks and in fact became parks to a large extent. It is often forgotten that these public agencies – run by generations of foresters who fought off take-overs by graziers and farmers – did such a good job.

I advocate management of both native forests and plantations by state forest services.

Social and economic benefits of forestry production;

Detailed data on this topic are available from sources like Bureau of Rural Sciences (2010). But the actual number of people working in forestry and associated occupations can be somewhat misleading in terms of values to society.

Australia has only about 1.6% of its population working full time in direct primary production. The country runs the risk of becoming entirely urban and suburban and losing all contact with the realities of producing the things everyone consumes.

Thus every rural job should be considered important to preserve and the society as a whole should look for ways to increase the number of such jobs.

- Potential energy production from the forestry sector, including:
  - biofuels;
  - biomass;
  - biochar;
  - cogeneration; and,
  - carbon sequestration;

These are all important topics where there should be major amounts of public investment in research and development.

In our region of northeast NSW and southeast Qld there are some 116,000ha of subtropical eucalypt plantations (Nichols et al 2010). As forest researchers working through the CRC Forestry we have spent the last five years devising viable thinning regimes for these plantations. A major challenge for us is to convince forest owners to thin - currently there is no market for wood chips within close proximity to most of these plantations. We also have no know uses for small logs. Thus the plantations stay unthinned, meaning that they are unlikely ever to produce good sawlogs.

Developing uses for small logs which need to be thinned would be extremely useful for this estate. Biodiesel is particularly promising and we hope funding for creative work in the area is forthcoming.

- Land use competition between the forestry and agriculture sectors:
  - implications of competing land uses for the cost and availability of timber, food and fibre;

Australia has many highly qualified soil scientists and there has been intensive mapping of soils in areas suitable for agriculture and horticulture. We also have land classification systems that classify land as being anything from highly productive with no restrictions for agriculture to suitable only for protection of soils and watersheds.

With plantations – again better done under public agencies – a coherent system of selection of appropriate lands for planting can be implemented, so that major areas of agricultural areas are not lost.

Again native forestry can take place in existing areas where there are forests, without competing with agriculture.

- harmonising competing interests; and,
- opportunities for farm forestry.
- 1. Convince farmers they will be able to harvest trees they plant
- 2. Provide technical assistance (extension services have been badly decimated in the last 20 years)
- 3. Structure tax laws so that growing trees makes sense for landowners

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Thank you very much for the opportunity to make this submission.

Regards

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