



SUBMISSION No. 18

Professor Jerry Vanclay
Professor of Sustainable Forestry, and Head
School of Environmental Science and Management
Southern Cross University, PO Box 157, Lismore NSW 2480
Ph: (02) 6620 3147 Fax: (02) 6621 2669
E-mail: jvanclay@scu.edu.au

The Secretary
Inquiry into the Australian Forestry Industry
House of Representatives
PO Box 6021
Parliament House
Canberra ACT 2600

House Standing Committee on Agriculture, Resources, Fisheries and Forestry

Inquiry into the Australian Forestry Industry

Dear Sir/Madam,

I am pleased to offer a submission to the inquiry into the current and future prospects of the Australian forestry industry.

Opportunities for and constraints upon production: Timber is the most greenhouse-friendly building product, and is a renewable resource that has been managed for decades in Australia, and for hundreds of years elsewhere. Although production forestry is arguably the most benign of all our land uses, it is one the most heavily regulated. Rather than offering innovative incentives, Australia tends to rely on restrictive legislation and regulation, which often focus on processes rather than outcomes. It is my view that better outcomes could be gained more efficiently with less legislation and more incentives.

In addition to bureaucratic obstacles, forestry is hampered by skills shortages at all levels of expertise, from equipment operators to professional forest managers, and to forest and timber researchers. Plantation forestry is also hampered by the long interval between planting and harvesting which is unattractive to many investors unless suitable incentives are offered.

Opportunities for diversification, value adding and product innovation: Globally, as populations and living standards increase, the world will need more timber and other forest products from an ever-diminishing area of forest. Forestry remains the best option to address these needs, because trees and timber are the most environmentally-friendly of the alternatives. The opportunity is to derive forest products from tree resources not currently utilized – urban trees, trees on farms, and products from forests managed primarily for conservation. Further increases in productivity can be achieved by improving the utilization

of current resources, by improving production systems to minimize waste, and by finding ways to utilize and add value to residues.

Environmental impacts of forestry: Although forestry is the most benign of land uses, it does have impacts. Land is finite, and land used for production forestry is generally not available for cropping (except in agroforestry). Forests may modify the microclimate: this is usually seen as a benefit (e.g., windbreaks and shelter for stock), but may be detrimental (e.g., water use). However, there is considerable scope to modify water use and other microclimate effects by managing the forest canopy and density. In addition, payments for environmental services (especially as annual stewardship payments) may be an effective way to ensure environmental outcomes on forest and other lands. I have written at length about effective stewardship incentives (e.g., Vanclay et al 2006), and continue to view this approach as the optimal way to maximize the benefits and minimize any detrimental impact.

Creating a better business environment for forest industries: Forestry is a long-term enterprise that is often capital intensive and, as with other investments, one of the best ways to improve the investment environment is to create certainty, transparency and resource security. It may be that annual stewardship payments for environmental services may be a more effective way to foster sustainable forestry than the tax breaks offered to MIS plantations in the past.

Social and economic benefits of forestry production: Long experience shows that forestry is an effective way to create employment and opportunity in rural areas where other opportunities are limited, and that forest industries often trend counter-cyclical to other rural enterprises. Production forestry may be an important way to maintain viable rural towns, and to maintain skilled and experienced fire-fighting crews with local field knowledge. Stability in rural towns (with services for travelers) and reliable fire suppression may be indirect benefits that far exceed the direct benefits of forest production.

Potential energy production from the forestry sector: Forestry offers important opportunities to create energy (electricity or liquid fuel) with zero net emissions, especially through biofuels made from forest and sawmill residues. Forests also offer scope for carbon sequestration, but this should be seen as an offset for land clearing only, and not as an offset for fossil fuels, because of substantial differences in residence time – left undisturbed, carbon in forests cycles over hundreds of year; in fossils it cycles over millennia, so it is impossible for forests to offer carbon sequestration with security comparable to that of fossils.

Land use competition between the forestry and agriculture sectors: There is greater land use competition (and longer-term implications) between urban development and agriculture than there is between forestry and agriculture, so the forestry-agriculture competition should be kept in perspective. Ideally, if market distortions can be avoided, agriculture-forestry issues should be resolved by the marketplace by economics of crop yields, rather than by legislation. However, if the Nation (or States) find it necessary to zone land for urbanization, agriculture and forestry, care must be taken to avoid small ‘slivers’ of land that are uneconomic to access or impractical for production systems.

Selected References

- Bristow, M., J.D. Nichols and J.K. Vanclay, 2006. Improving productivity in mixed-species plantations. *Forest Ecology and Management*, 233:193-194.
- Jay, A., D. Sharpe, D. Nichols and J. Vanclay, 2009. Sustainable Private Native Forestry - Timber production, biodiversity and soil and water indicators and their applicability to northeast New South Wales. RIRDC Publication 09/022.
- Nichols, J.D., M. Bristow and J.K. Vanclay, 2006. Mixed Species Plantations: Prospects and Challenges. *Forest Ecology and Management*, 233:383-390.
- Pearce, D.W., F. Putz and J.K. Vanclay, 2003. Sustainable Forestry in the Tropics: panacea or folly? *Forest Ecology and Management* 172(2-3):229-247.
- Putz, F.E., P.A. Zuidema, M.A. Pinard, R.G.A. Boot, J.A. Sayer, D. Sheil, P. Sist, Elias and J.K. Vanclay, 2008. Improved tropical forest management for carbon retention. *PLOS Biology* 6(7):1368-1369.
- Sayer, J.A., J.K. Vanclay and N. Byron, 1997. Technologies for sustainable forest management: Challenges for the 21st century. *Commonwealth Forestry Review* 76:162-170.
- Vanclay, J.K., 2006. Can the lessons from the Community Rainforest Reforestation Program in Eastern Australia be learned? *International Forestry Review* 8(2):256-264.
- Vanclay, J.K., 2007. Educating Australian foresters for the 21st century. *International Forestry Review* 9(4):884-891.
- Vanclay, J., 2007. A new approach to farm forests based on incentives rather than punitive regulation. *Australian Forest Grower* 29(4):28-32.
- Vanclay, J.K., 2007. How to foster good husbandry of private native forests. *Small-Scale Forestry* 6(2):205-218.
- Vanclay, J.K., 2008. Conserving habitat calls for hands-on approach. *Australian Forest Grower* 31(1):28-29.
- Vanclay, J.K., 2009. Managing water use from forest plantations. *Forest Ecology and Management* 257:385-389.
- Vanclay, J.K., 2010. Can silvicultural treatments improve the water economy? *Forêt Méditerranéenne* 31(4):366-368.
- Vanclay, J.K., 2011. Future Harvest: What might forest harvesting entail 25 years hence? *Scandinavian Journal of Forest Research* 26:183-186.
- Vanclay, J.K. and R. Prabhu, 1998. Healthy forests, sound economics, social justice. *Forum for Applied Research and Public Policy* 13:78-84.
- Vanclay, J.K., R. Prabhu and F. Sinclair, 2006. Realizing Community Futures: A practical guide to harnessing Natural Resources. Earthscan.
- Vanclay, J., D. Thompson, J. Sayer, J. McNeely, D. Kaimowitz, A. Gibbs, H. Crompton, D. Cameron, I. Bevege, 2006. A proposal for stewardship support to private native forests in NSW. The Southern Cross Group of forest researchers and practitioners. ISBN 0-9775976-0-1.