

Dr Ken Eldridge

The Secretary
Senate Standing Committee on Environment, Communications and the Arts
P O Box 6100 Parliament House
Canberra ACT 2600

Dear Sir

Inquiry into forestry and mining operations on the Tiwi Islands

I wish to express my concern to the Committee about the impacts of existing forestry operations on the Tiwi Islands, in particular the clearing of native forest to establish extensive plantations of *Acacia mangium* for pulpwood production.

As to my professional background: I have degrees in botany (BSc and MSc) and forestry (PhD); I have more than 50 years experience of research and development in forest genetics and tree breeding with success in obtaining improved plantations of pines and eucalypts; I am a Fellow of the Institute of Foresters of Australia (IFA) and a post-retirement Honorary Research Fellow at CSIRO Division of Plant Industry. This submission only expresses my personal opinions, and not those of the IFA or of CSIRO.

In regard to the Terms of Reference my submission is about item a. environmental impacts of existing forestry operations, and item e. alternatives to clearing Tiwi native forests.

a. In August 2008 I visited Melville Island with other IFA members on an IFA tropical forestry study tour. We were guests of Great Southern Forests N T Pty Ltd (GSL) – they were generous hosts, including providing flights from Darwin. This was my fourth one-day visit to Melville Island since 1970. I wrote a short article on my visit, published in the Newsletter of the Northern Territory Environment Centre, September 2008 page 10. A copy of this article has been received by the Committee, as ‘Additional Information’. Sections of my submission in quotes are from that article.

‘About 26 000 ha of savannah woodland on Melville Island and small areas on Bathurst Island have been cleared in recent years and planted with an Australian tropical acacia (*Acacia mangium*) for the production of pulpwood for export.’ *A. mangium* is a successful plantation species in Indonesia, Thailand and other countries and it produces high quality pulp and paper.

My impression of the Tiwi plantations, having seen industrial plantations of many species in several countries, was that ‘GSL have achieved good survival and weed control, and the trees were healthy with little damage from insects or fungi. However, stem and branch form was not good, many trees having forks, crooked stems or coarse branches. Such poor form is common when genetically unimproved ‘wild’ seed is used in *Acacia mangium* plantations elsewhere.’ Such form deficiencies reduce the return at harvest due

to reduced yield and the extra cost of delimiting and debarking, prior to chipping for export at age 8 to 10 years. Apart from the possible risk of lower returns due to tree form, there are obvious risks from cyclone and wild fire. Cyclone Ingrid in 2005 caused so much damage to plantations older than three years that they were replaced.

To prepare for planting, 'after large sound eucalypt logs were harvested for export, the remaining forest was cleared with a chain between two large bulldozers, heaped, burned and ploughed. The native forest ecosystem is irreversibly destroyed by such clearing. The first 26 000 ha of plantations are mainly where the old growth forest was tallest, the land well drained and not steeper than about 5 degrees. Mature height of the native forest is a good indicator of the future growth rate of a plantation. On sites of lower productivity there would be less prospect for profitable return on the plantation investment.'

'Is it right to clear native forest for industrial plantations? Not in Queensland any more or in those southern States where this practice was prohibited by legislation more than 30 years ago.'

I am concerned about the low or zero intrinsic value put on the native forest and its diversity of plants and animals and its cultural significance to indigenous people in the past and to all people now. My contention is that neither the present Tiwi traditional landowners, nor the company GSL, nor the Northern Territory government, nor the Australian government have the right to make a value judgment that the savannah woodland forest of the Tiwi Islands is of no value and therefore can be destroyed for the prospect of relatively short term commercial gain from pulpwood plantations.

A discussion of the ethics of value judgements in clearing native forests for plantations was forcefully expressed by philosophers R and V Routley in their book *The Fight for the Forests*, RISS ANU, 1974 (pages 294-296, 338). In the 1970s legislation was enacted in a number of Australian states to limit or prohibit clearing of native forests for plantations. The Northern Territory government, and the Commonwealth government in its oversight of the NT, are more than 30 years behind the rest of the nation in this regard.

In addition to the need for restraining the clearing of native forest on the Tiwi Islands, there is also a need to consider a Comprehensive, Adequate and Representative System (CARS) of Tiwi national parks and equivalent reserves as in other parts of Australia, as part of an overall forest policy for the NT.

e. Concerning the prospects for alternative economic development opportunities:

1. There may be opportunities for sustainable selective logging without destroying the ecosystem. Australian foresters have more than 100 years of experience in managing native eucalypt forests for limited wood production while maintaining many other values. Local small-scale sawmilling could produce construction timber for local use. Records of previous efforts at sawmilling on Melville Island are contained in Annual Reports of the Forestry and Timber Bureau 1960 to 1975 and CSIRO Forest Research 1975 to 1978. In

that period there was considerable Commonwealth Government investment in NT forestry research and development.

2. Community development of eco tourism has good prospects. In August 2008 I also had a visit to Bathurst Island. Included in the tour was a visit to a splendid tall eucalypt forest, nicely labeled with names of the plants - prime plantation land !

3. Involvement in future carbon trading might include paying Tiwi people for NOT clearing their forests.

I sincerely hope that my observations and opinions will be of assistance to the Senate Committee in its Inquiry into forestry operations on the Tiwi Islands.

K G Eldridge

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