

## Is logging in Papua New Guinea illegal and unsustainable?

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**The rape of PNG forests.** "Sexual coercion, corruption, and assault are the coin of PNG's illegal logging industry", Greg Roberts, *The Australian*, 24-25 June 2006. Australia's Forestry Minister Senator Abetz said logging in PNG was not conducted in accordance with the country's own regulations. "Some people would assert that the vast majority of it is illegal. From the evidence I have seen I would agree". He said he would soon release a paper on ways of banning illegally sourced timber. Greg Roberts, *The Australian*, 28 June 2006.

Guilty as charged would seem to be the only reasonable reaction to these reports in *The Australian*. Yet neither offered any evidence to show that most logging in Papua New Guinea is indeed 'illegal'. PNG is a safe target, unlike Tasmania and Western Australia, which log at higher rates without yet attracting quite such vitriolic hostility from real or would-be greens. Moreover these judgments are based on unsubstantiated allegations by Greenpeace and other NGOs that the rate of logging is "unsustainable" and contrary to the interests of both the people most nearly affected and the country as a whole.

Greenpeace fails to show what would provide more sustainable cash outcomes for all stakeholders, including the government and local landowners, other than small-scale and proven financially unsustainable eco-forestry projects. Greenpeace ignores that most (around 70 per cent) of PNG's landmass is unsuitable for anything except forestry and other tree crops like cocoa, coffee, copra, rubber, and palm oil, as shown by the statistic that these accounted for over 90 per cent of total non-mineral exports in 2005. It also ignores comparative data for a country like New Zealand that exported 7.2 million cu.m. of logs in 2001, five times more than PNG in that year, and whose total roundwood exports were the equivalent of 13 million cu.m., ten times PNG's in 2001. Its total annual harvest (including domestic consumption) was over 30 million cu.m. in 2004 when its total wood product exports were worth over US\$1 billion 2004, or ten times more than PNG's, despite its smaller total land area and even smaller forested area. If PNG were simply to match New Zealand's performance, its GDP would be about 28 per cent larger than the actual in 2005, while with its larger land mass and better climatic conditions for rapid tree growth, there is no reason why PNG's GDP could not be double today's level on the back of plantation-based timber exports of 30 million cu.m., with *pro rata* increases in government revenue offering scope for commensurate improvements in all its social indicators, a topic on which Greenpeace has nothing to offer.<sup>1</sup>

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<sup>1</sup> New Zealand's total log harvest volume was close to 30 million cu.m. in 2005; assuming a similar product mix (sawn, veneer, plywood, as well as round logs) and New Zealand's average price received in 2002 of K250 per cu.m., similar output in PNG would be worth K7.5 billion, raising total exports if all others remain at the 2005 level to K17 billion, and if the historic relation between value of exports and GDP in PNG holds at 1.7:1, then GDP would be K28.9 billion, *cet.par.*, or more than double the 2004 level of K13.7 billion. Such an analysis is simplistic but indicative of what is possible.

Greenpeace's determination that logging in PNG is illegal is based on some peculiar criteria. The comprehensive reviews of PNG's logging industry undertaken by the PNG Government and the World Bank between 2000 and 2005 found that all 14 of the biggest logging concessions were fully compliant with the Forestry Act in terms of permits, consistency with the National Plan, and harvesting supervision by the PNG Forest Authority. They also found that all but five of 32 proposed new logging projects had so far fulfilled "due legal process". Thus the "vast majority" of 46 existing and proposed logging projects was legal.<sup>2</sup>

Greenpeace's assault on "illegal" logging in PNG is part of its wider campaign against Rimbunan Hijau (RH), a Malaysian conglomerate with global interests in countries as far apart as Russia and New Zealand, conducted in documents like *The Untouchables: Rimbunan Hijau's world of forest crime & political patronage*. Greenpeace singled out RH's logging in PNG's Wawoi Guavi district for special criticism, finding fault in three respects, first, that due legal process had allegedly not been followed in regard to the extension of the licence in 2002, secondly, that the legal (sic) requirement for sustainability had not been applied, and thirdly, that the rights and interests of the local landowners had not been observed and protected.

But these legal issues are far from certain. The World Bank/GoPNG Review stated that the original Timber Permit granted to RH had been fully compliant with the PNG Forestry Act, but also suggested that the circumstances of the renewal in 2002 were questionable. It would be hard to sustain in court any claim that a permit granted with full due process should be deemed 'illegal' when the original Permit was granted with an annual cut based on a 26-year cycle, of which only 10 had passed.

Greenpeace's attack relies heavily on the account of the World Bank's review by the Washington NGO Forest Trends, which liberally stretches the term "illegal logging" to cover a wide range of non-forestry legal issues like landowner consent, work permits for expatriate staff, training, health and safety, and labour relations generally. None of these have anything to do with forestry, and the recent study of RH forestry in PNG by ITS Global found that it had a generally good record in these matters.<sup>3</sup>

The only valid basis for the Greenpeace/Forest Trends attack on *forestry* practises would be if it had indeed shown disregard for sustainable logging. But this fails on examination. The permitted annual harvest awarded to RH for its Wawoi Guavi project in 1992 was 350,000 cubic metres. The bulk of the harvest there has gone to the RH plywood and veneer mill, and allowing for the plant's log consumption of 300,000 cu.m. per year needed for its exports of around 150,000 cu.m. of processed wood products, the total harvest has been within the permit harvest of 350,000 cu.m.

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<sup>2</sup> The Reviews were implemented by the Government as part of preconditions for World Bank loans to the forestry sector and were carried out by independent consultants including B. Everts, T. Vigus, Tony Power, and the lawyer Graham Powell, well known critics of successive PNG governments' forest policies. The Reviews are accessible through the website of the Prime Minister of Papua New Guinea and are summarised at length in *Logging, legality, and livelihoods in Papua New Guinea*, Washington DC, Forest Trends, 2006, in two volumes (referenced here as FT1 and FT2).

<sup>3</sup> *Whatever it takes: Greenpeace's anti-forestry campaign in Papua New Guinea*, Melbourne, ITS Global, July 2006.

This permitted harvest is well within the sustainable yield estimate by John McAlpine for PNG's Western province (see Fig.1). McAlpine is a noted pioneer of satellite mapping of PNG's resources but his estimate of sustainable yields could be considered inordinately conservative, at one cubic metre per hectare a year, as that equates to just half a ute's back load of firewood from an area as large as ten standard quarter-acre housing blocks in Australia.<sup>4</sup>

Tropical forest can do a lot better than that. Many species indigenous to PNG are capable of yielding much more. For example, tan wattle yields 10-20 cubic metres per hectare per year; *Anthocephalus chinensis*, 10-40; Norfolk pine, 20-30; *Eucalyptus deglupta*, 21-28.<sup>5</sup>

To claim that primary forest necessarily yields less than 10 per cent of plantation potential requires more substantiation than is provided by Greenpeace and Forest Trends. For example, NGOs frequently claim the sustainable rotation in tropical forests is as long as 70 years, however Jant, operator of the Gogol wood chip project in PNG's Madang province is still in business after 30 years, with rotations of 15 years for *Eucalyptus deglupta* and 8 years for *Acacia* on plantations established jointly with local landowners on the previously logged primary forest area.

PNG's Forestry Act states that forests are to be "conserved and renewed as an asset for succeeding generations" while the associated National Forest Policy interprets this as requiring that timber harvesting be managed on a sustained yield basis. But although "sustained yield" is one of those feel good phrases that are seldom if ever defined, least of all by Greenpeace, the PNG Forests Authority has based itself on the McAlpine determinations of sustainable cuts in each Province when awarding new permits like those for Wawoi Guavi in 1992. Ignoring this makes it easy for NGOs to deem that PNG's annual log exports of 2-3 million cu.m. p.a. are "unsustainable", whereas New Zealand's annual log harvest of 30 million cu.m. is never criticised, any more than similar levels in countries like Australia, Sweden, Malaysia, Canada, and the USA.

It is true that logging in the latter countries is mostly on a plantation basis, while plantations provide only a relatively small, albeit growing, proportion of PNG's log exports (more than 10 per cent in 2004). Sustainable yields will be different on plantations, where yields of up to 40 cu.m. per hectare a year are well documented,

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<sup>4</sup> McAlpine's data on PNG's forest resources and their sustainable yield may be found in (see Colin Filer, *The Political Economy of forest management in Papua New Guinea*, IIED, 1993), showing that the forest area in Western Province with commercial potential was 1.27 million ha. (See Fig.1 here). RH was awarded 448,300 ha. in 1992, or 35 per cent. His estimate of sustainable yield for the Province was 1.051 million cu.m. p.a., i.e. 370,600 or 20,600 more than RH's permit allowed. Rimbunan Hijau's veneer and plywood mills in Western Province raised exports of veneer from 1,700 cubic metres in 1999 to 71,615 cubic metres in 2002 and plywood exports from 7,000 cubic metres in 1999 to 70,083 cubic metres in 2002 (requiring total log inputs of around 300,000 cu.m.).

<sup>5</sup> David E Webb, Peter J. Wood, Julia Smith, *A Guide to species selection for tropical and sub-tropical plantations*, London, ODA, 1980.

from what is feasible in natural forest where species, ages and hence dimensions of the tree stock are highly variable.

The UN's Food and Agriculture Organization's 2005 annual forestry report provides a useful rule of thumb for the potential sustainable yields of primary and plantation forests, in the ratio of 1:4. Thus plantation yields of 20 to 40 cu.m. per ha. a year are comparable with primary forest yields of 5 to 10 cu.m., well above McAlpine's conservative one cu.m. per ha. p.a. for PNG's Western Province.

Yet even McAlpine's cautious estimate of the overall potential logging capacity of PNG's forests and therefore of the maximum sustainable harvesting potential, albeit disregarded by Greenpeace and Forest Trends, has yet to be exceeded in practice (see Figs. 1 and 2). The World Bank estimated in the 1980s that PNG's forests could sustain logging at an annual rate of 6 million cu.m., a rate subsequently confirmed by McAlpine, and more than double the average achieved rate since 1985.

The other main basis for deeming all logging in PNG to be illegal is the claimed lack of informed landowner consent, but this is itself ill informed. First, distant judges like Greenpeace need to realise that *there is no documented landownership in any part of PNG's forest areas*. The country's customary land tenure system is based on individual rights to one's own home and cultivated gardens. In the primary forest that is the subject of logging permits, there is little such cultivation.

Instead, PNG's forests are a commons in which all living in and around it have rights of access for hunting and gathering, but there are no rights of any one individual or family to exclude others. Ignoring these facts, it becomes all too easy for NGOs to find disaffected putative "landowners" in the vicinity of a timber permit area eager to claim that they knew nothing of the project before its inception, gave no consent to it, and have gained no benefit in the form of a share of royalties paid by the logging contractor.

Yet it is clear from the World Bank/GoPNG Review that logging contractors must have a government-approved agreement with incorporated landowner groups (ILGs) before they can acquire Timber Rights, and that there are large numbers of landowners who have over the years received significant cash payments. If these landowners had not consented to the project, they weakened their case by accepting payments, but in reality, they consented. However PNG's rural population is famed for its opportunism, migrating swiftly over large distances to wherever they see a chance of portraying themselves as the original landowners in some new timber or mining project area. Thus the 1990-2000 Censuses revealed large movements to the vicinity of Porgera gold mine and the Kutubu oil fields, all in the hope of laying claim to royalty flows. In such circumstances it is easy for Greenpeace to find disaffected "landowners" in every logging area.<sup>6</sup>

The claims by Forest Trends and Greenpeace that logging in PNG is illegal and unsustainable leads to promises to recommend steps "that would move PNG toward

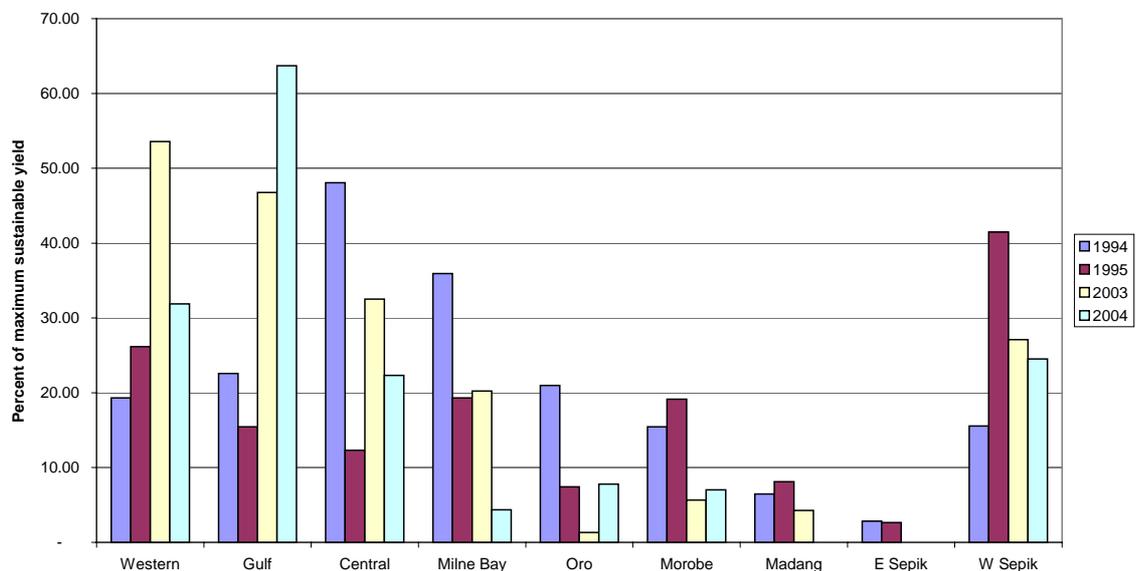
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<sup>6</sup> Colin Filer (op.cit.1993) comments on the "indigenous resource owners" who are "ever eager to exchange these resources for some form of 'development' - provided the price is right"(p.5).

legal and sustainable logging". In practice they fail to do other than propose administrative changes that would not necessarily reduce logging below its alleged and undefined "unsustainable" level.

NGOs would make a more positive contribution if they encouraged the reform of PNG's land tenure system, as this is what stands in the way of more extensive renewable forestry throughout the country.<sup>7</sup> It would also help if the NGO community would understand that about two-thirds of PNG's land mass is suitable only for forestry, and that if that was allowed to be exploited at the same sort of scale attained in New Zealand and Malaysia, it would transform the country's economic prospects as well as reducing its present reliance on its non-renewable mineral resources.

**Fig1 Log exports as % of maximum sustainable yield  
Mainland Papua New Guinea**



<sup>7</sup> For a full discussion see Tim Curtin and David Lea, Land titling and socio-economic issues in the Pacific, *Pacific Economic Bulletin*, 21.1, 2006, 153-180.

**Fig.2 Log exports as % of maximum sustainable yield  
PNG islands**

