The Forestry Industry in Papua New Guinea: Issues of Development and Environmental Protection

David Lea

Papua New Guinea's rain forest is the third-largest in the world following, the Amazon in South America and those in the Republic of Congo. So as a consequence, it represents a great storehouse of sequestering greenhouse gases, which are pivotal in controlling a rise in global temperature. The activities of the forestry industry have received opposition from environmental groups and the World Bank, but this opposition has not been welcomed by the local communities desirous of the level of development that accompanies logging operations. Recently non-governmental organization publications and media outlets have alleged that Papua New Guinea's loggers are rampantly, increasingly, and illegally destroying the indigenous forests, earning "hundreds of millions in revenue" while refusing to pay taxes. However, it is necessary to gain some perspective on the industry by focusing on the most recent developments regarding the allegations of excessive and increased logging, and the actual revenues paid to the government and other stakeholders. This article considers these issues and recent government policy, particularly underlining the progressive export tax increase from 33percent to 55percent of the free onboard value. This article evaluates the consequences of the Government's policies and suggests alternative ways to achieve sustainable forms of logging, which may also better satisfy the demands for increased development from local communities.

Keywords: *Papua New Guinea, forestry, World Bank, tax evasion, excessive logging*

Introduction

The last decades have witnessed the undeniable concern over the state of the natural environment and the fear of global warming. Papua New Guinea (PNG)'s rain forest is the third-largest in the world following, the Amazon in South

David Lea is a Professor, Political Science Department, University of Papua New Guinea, Papua New Guinea. He can be contacted at david.lea@upng.ac.pg

America and those in the Republic of Congo. So as a consequence, it represents a great storehouse of sequestered greenhouse gases that are pivotal in controlling a rise in global temperature. Committed environmentalists see PNG's rainforest as essential in the fight against climate change and, therefore, remain committed to maintaining this vast rainforest in its present condition. But unfortunately, this commitment struggles against the nation's desire for the benefits of the development. The forestry industry has been one of the principal motors of development in PNG and the benefits of development have a strong allure. Hence, PNG's rainforest, represents a locus for a clash of values and interests, of the environmentalist, developers, and large segments of an indigenous population desirous of the fruits of development.

The Barnett Inquiry and Legislative Reform

Earlier in this century, an Independent Forestry Review Team (IRFT) was created to review the sustainability of proposed lugging projects as part of the conditionality of World Bank loans (Filer, 2004). While the team only approved 10 out of 32 proposed projects as possibly sustainable, if remedial actions were taken, the team repeated numerous times that landowners are keen to support any development activity in their area which brings monetary benefits, including logging. But they lack internal cohesion, management skills, and access to good legal, financial, and technical advice (IRFT, 2004). Jorgenson (2006) observed a strong attraction that modernity exerts on the rural-based people of PNG. Modernity brings consumer goods, the cash economy, services provided by hospitals, educational institutions, and modern transportation systems, and so on with it. For PNG, these are the phenomena that define modernity; and the cash economy associated with mining, energy extraction, and logging is often seen as the key to access this modern world.

The recent history of forestry in PNG is understood, on the one hand, as a clash of wills between the government and the local communities desirous of revenue and the benefits of modern development from logging operations. On the other, the World Bank and the environment nongovernmental organization (NGO)s demanding reduced logging, environmental protection, and sustainable practice. This article will ultimately consider whether recent developments in the governmental forestry policy can effect a form of sustainable logging that satisfies the rural people's demand for the benefits of modern development and the World Bank and environmental NGOs.

This tug of wills began in the late 1980s when PNG's forestry industry became the subject of serious scrutiny. Although, PNG's forest industry was exporting about 2 million cubic meters of logs annually after 1987, there was a widespread perception that the industry was either mismanaged or managed only for the foreign-owned logging company benefits (Lea & Curtin, 2011). In 1987 Australian Judge "Tos" Barnett was appointed to head the Commission of Inquiry (1989) into Aspects of the Forestry Industry. He published his report in 20 volumes in various stages over 2 years. It was remarkable in many respects, a “tour de force,” carried out with some realized personal risk for Judge Barnett given he was attacked outside his Port Moresby home during the report preparation. The report concluded that the forest industry was “out of control,” dominated by foreign firms who maximized log export volumes without considering long-term sustainability, environmental damage, equitable sharing of benefits with landowners, developing onshore processing, and compliance with exchange control and tax laws (Barnett, 1989). The report, summarized that the industry was causing environmental damage and could influence the subsequent intervention of the World Bank apparently in favor of the environmentalists.

The Barnett Report extensively documented many cases of apparent transfer pricing whereby the declared price of exported logs is not their true value on world markets. So that even if a “fair” sharing of value had been defined and adopted, the government and landowners would not receive that when export values are fraudulently understated. The report also documents other frauds, including under-measurement of logs’ actual dimensions, under-grading, and miss-specification of species, all of which result in apparently understated revenues and profits. Regarding these findings, it is relevant that PNG Government entered into a partnership with Standard Global Services (SGS), the independent Swiss-based company, to monitor the quantity and quality of the exports, which began in 1995.

In addition, pressure from the World Bank, allegedly influenced by environmentalist NGOs, resulted in the passage of the 1991 Forestry Act, which imposed government regulation of the industry, entailing extensive bureaucratic requirements. Filer (2004) concluded that in the 1991 Forestry Act received approval from the World Bank as consistent with the Structural Adjustment Program in the bureaucratic superstructure needed to apply the Act furthered an agenda of preventing logging in PNG. As Filer, Dubash, and Kalit (2000, p. 98) colorfully suggested, the Act was intended “to stifle the log export industry in a mountain of red tape.”

Following the recommendations of the Barnett Report (Commission of Inquiry, 1989), the Government accepted a World Bank condition in its 1996 Structural Adjustment Program requiring the adoption of a new system of export taxation. The existing 10 percent *ad valorem* levy on log exports was made progressive, increasing incentives to engage in transfer prices, since the higher the declared free on board (fob) price, the higher the tax rate would be, at an average rate of 33 percent (Hunt, 2002). The immediate effect was a reduction in log exports, from 233 million Kina in the first half of 1997 to 80 million Kina in the first-half 1998, despite the depreciation of the Kina (Lea & Curtin, 2011).

Continuing Criticism of the Forestry Industry

Subsequently, despite these reforms, the allegations in the 1989 Barnett Report (1989), concerning corporate tax avoidance, transfer pricing, and illegal logging have continued.

There recurring claims that logging companies avoid paying income tax by offsetting revenue against claimed expenditures and losses. Somewhat more recently, the American Oakland Institute alleged that financial misreporting by foreign firms resulted in the nonpayment of hundreds of millions of dollars in taxes (Oakland Institute, 2018).

At the same time, there are allegations that logging activities have increased since the days of the Barnett Inquiry. In 2008, Garneau (2008) cited SGS reports declaring that certified timber exports were 2.5 million cubic meters (approximately17 cubic meters per logged hectare). In 2015, The European Timber Trade Association (2018, 28 Sept) claimed that in 2015 the timber industry of PNG produced about 4.1 million cubic meters of logs, of which 89 percent was exported as roundwood. In 2018, the Oakland's Institute's research claimed that despite the government's regulations, foreign companies, mostly subsidiaries of Malaysian company, Rimbunan Hijau, are exporting up to 40 percent more, while their reported losses have more than doubled (Pacific waves, 2018; Oakland Institute, May 2018).

In the same year, the London-based NGO, Global Witness, raised that illegal operational issues and failure to contribute to the nation's development. Global Witness representative Lela Stanley (2018, Oct 15) argued that statistics from 2014 showed that 70 percent of the timber in the country was illegally produced. The author asserts that "… foreign-backed companies have cut and sold off many millions more cubic meters of PNG timber, in a process that has signally failed to bring meaningful development to the country's rural and forest-dependent communities." The same publication later showed that analysis of satellite images of eight of PNG's largest logging operations provided evidence of documented violations of the Forestry Act. Moreover, the publication complains, none has faced any legal consequences and continues to sell PNG timber abroad.

Finally, international media has further amplified a theme that claims a reality of rampant logging, illegal activities, and tax evasion. This year the UK based Guardian published a report that agreed with this theme with this theme. Gwao, et al. Nicholas, and Lyons (2021) assert that forests in Pacific countries were being decimated, and were often not receiving the full value of their resources. Specifically, referring to PNG, they asserts "For decades the entire forestry industry in Papua New Guinea has declared just a few million dollars in profit each year on hundreds of millions in revenue." The same publication quoted that the commissioner general of PNG's internal Revenue Commission, Sam Koim, announced in May that his office was investigating 20 logging companies operating in PNG over tax compliance.

Moreover, "The Guardian: in its Pacific Plunder series states that China is getting wealthy from timber illegally logged in the Pacific. Allegedly China imports timber, often illegally harvested in Pacific Islands, and exports a wealth of finished wood products (Davidson, 2021). The London-based NGO, Global Witness, claims China has been the largest export market for timber from PNG, imports one-third of its tropical timber from PNG while turning a blind eye to the illegal sources of the timber (Cannon, 2018). At the same time, *The Guardian*, relying on sources from Global Witness, underlines the failure of China to hold illegal loggers accountable (Davidson, 2021).

A More Balanced Account

To summarize, these publications suggest the forestry industry is rampantly, increasingly, and illegally destroying the indigenous forests, earning "hundreds of millions in revenue" while refusing to pay taxes often when practicing illegal transfer pricing. However, it is necessary to gain some perspective on the industry by focusing on the most recent developments regarding the allegations of excessive and increased logging and the actual revenues paid to the government and other stakeholders.

The issue of illegal operations frequently raised by Global Witness refers to alleged violations of the 1991 Forestry Act (Stanley, 2018). But as described in detail by Filer (2004), the act imposes onerous bureaucratic requirements, which would require another article to address the nature and seriousness of each of these alleged infringements. Indeed, alleged violations might well refer to laxity in following the letter of the law. To date neither the logging companies nor the government administrators are motivated in matters of strict compliance. As Filer (2004) further explains, the PNG Government's failure to monitor and enforce its own rules and regulations in the name of good governance may well relate to the fact that these rules and regulations are primarily the work of the bank's consultants. Therefore the Government's sense of ownership is "none too strong."

Concerning the issue of excessive and increased logging, information from SGS, the Swiss-based company, which independently monitors the export of forest products from PNG, indicates that rather than increasing, log exports from PNG were lower last year, falling from 3.8 mm^3 in 2019 to 2.9 mm^3 in 2020 (SGS Log Export Monitoring Service, 2021). While recent publications, especially media publications, allege China's increasing importation of PNG timber, in reality, PNG's exports to China are declining and have fallen 37 percent in the first quarter of 2021 (ITTO Market Information Services, 2021). Moreover, a source within SGS notes that PNG's exports, in general, are down another 12 percent from 2020. This noticeable reduction in export volumes coincided with the increase in export tax on logs from 33 percent to 55 percent as of Jan 1, 2020.

Apart from whether the export of roundwood is increasing or decreasing, another issue of concern is excessive logging and exportation. Lea and Curtin (2011) point out that in the 1990s, New Zealand's logging produced nearly 10 times as much as PNG, but from a forested area that is only 7% of the country's total land area. As far as one can determine, New Zealand continues to export far more than PNG. The New Zealand Forest Owners Association (2020) reports that in 2019, in addition, to sawn lumber, 22 million cubic meters of unsawn logs were exported from New Zealand. Moreover, the Food and Agriculture Organization of the United Nations (2016) states that combined, the largest exporters of roundwood accounted for 60 million or 49% of all exports. The Food and Agriculture

Organization of the United Nations (2016) indicates that the Russian Federation is the primary exporter. Other major exporters are New Zealand, the United States of America, Canada, and Czechia. Significantly PNG is unmentioned in this list. The Natural Resources Institute Finland (2019) also stated that in 2019, 15.86 million cubic meters of industrial roundwood were exported from Russia, compared with 3.8 mm^3 in 2019 from PNG in the same year.

The disparities between the volume of logging in the South Pacific, particularly PNG, and the far greater volume of logging occurring in the northern hemisphere and New Zealand have not gone unnoticed. Filer (2004) documented that the World Bank is strongly influenced by environmental NGOs and is determined to prevent the harvesting of forests in developing countries such as PNG, "tout court", while turning a blind eye to much more intensive logging in their members' respective home countries like Sweden and New Zealand. A more cynical view might suggest that the World Bank is, in reality, striving to protect leading western industries from competition from developing states such as PNG.

While the level of logging is not excessive by global benchmarks, there remain allegations that the forestry industry has failed to return value to the government and the people of PNG through tax evasion by means of illegal practices such as transfer pricing. As evidence for this claim, many critics point to the insufficiency of income tax received from the industry. However, sources within SGS argue that the primary point missed by all commentators, including the PNG Internal Revenue Commission (IRC), is the level of export tax paid on round logs, which is currently 55 percent of the fob value. In comparison, New Zealand, whose timber exports are presently 4–5 times PNG's, imposes no export taxes on timber. As mentioned, in 1996, a World Bank condition in its Structural Adjustment Program for PNG required adapting a new system of export taxation. The existing 10 percent *ad valorem* levy on log exports was made progressive. The higher tax rate imposed reached an average of 33 percent (Hunt, 2002). This tax was criticized as ironically increasing incentives to engage in transfer prices, since the higher the declared fob value, the greater the tax. Although the 33 percent increase in the export tax was criticized, *a fortiori*, it is now the case that the incentives to practice transfer pricing have transmogrified in so far as the progressive export tax has increased to 55 percent on average during 2020 (Commissioner of Customs, 2020).

This money is collected by the PNG Customs Service (plus K8 per m^3 as an Export Development Levy) at the time of shipment and paid directly to the PNG Treasury but not collected by IRC. Nevertheless, this is a "tax" as far as a foreign investor is concerned. No export tax is levied on a PNG exporter for any other commodity. The 55 percent paid fob value is the motivation that drives companies to disguise profits. Sources within SGS explained that the government was not missing out on revenue from the forestry industry. It was just being collected by another arm of the government.

To summarize, a situation is created in which the Government's left hand (Customs) is collecting all the tax leaving nothing for the right hand (IRC), irrespectively hefty "tax" is accumulated. If the IRC were to collect an additional 30 percent for resident rate or 48 percent for non-resident rate of the actual profits earned, along with the 55 percent tax levied by customs, the logging companies would cease to operate, and it is unlikely that any tax revenue would be forthcoming for the government. Given the correctness of these observations, commentators emphasize the lack of tax revenue received by the IRC but ignore the punitive taxes paid to Customs, thus, misleadingly claiming that the IRC doesn't generate any revenue.

But one suspects that increased tax on the export of logs, announced in the government's 2020 budget, is driven by the Budget theme, "Take back PNG" (Deloitte, 2020). Although it is alleged that the export tax increase is justified by the intention to capture resource, rent, and encourage downstream processing, the budget's theme, "Take back PNG," on interpretation, has been motived by in strategies to increase revenue streams from foreign operators. The earlier increase to 33 percent tax rate on exports was originally a condition imposed by the World bank. Hence, the current increase may also be traceable to external pressures from environmentalists and international organizations that see the forest industry as a threat to the environment.

But sources within the SGS assume that the government's high export tax has pushed logging companies into a position of "transfer price or die." The increase in export tax in 2020, and decrease in logging in the last two years, are consistent with the view that some companies have ceased operations in 2021 because they could not sustain the increased payments to the government. Moreover the same sources within SGS observed that if the price of entry into the market is "to operate illegally in terms of transfer pricing," then one only gets a certain "class" of investors in the forest industry! And it is not a good "class"! In making the point, the source refers to the English Prime Minister who noted a couple of centuries ago that "the art of taxation is to pluck the maximum number of feathers from the golden goose while provoking the minimum of honking"!

Additionally, commentators that decry the lack of government revenue received through the IRC also fail to mention the royalties and the significant production levies paid in advance to the landowners and government for export sales. A complete account of the revenue paid out to the major stakeholders, the government, and landowners would include all taxes, levies, premiums, and duties paid to the government (National & Provincial), government agencies, and landowners. These payouts have been estimated by the same source within the SGS as around K25 per m^3. Ultimately, those who only emphasize the monies received by the IRC paint a very misleading narrative in which the PNG people and the government appear to receive next to nothing from logging companies that are enjoying "hundreds of millions in revenue." The PNG forest authority reported that between 2008 and 2018 the government earned K2.67 billion (US 760 million) through the log export tax and development levy. Royalties, premiums, and levy payments to landowners were estimated at K620 million (US 176 million). The forest management levy and restricted forest license were estimated at K50 million (US14 million). Provincial, district, and local level government levies were estimated at K20 million (US 5.7 million) (Kama, 2019).

One needs to consider the allegation that the forestry industry has "failed to bring meaningful development to the country's rural and forest-dependent communities." This claim fails to acknowledge that local logging operations also bring a degree of development in infrastructure and services that governments, national, and provincial, often fail to provide. Transportation systems, medical services, aid posts, employment, and even airstrips are necessary logging operations concomitants (Anon, 2020). It may be true that the revenue received from the industry has not generated significant development. The government (national and provincial) and the landowners are accountable for singling out logging companies because of development shortages. These groups are also the recipients of revenue from logging industry. One must also question their failure to use these funds in a meaningful way that benefits rural development. For example, Filer (2004) refers to findings of the IRFT that investigated 49 logging projects or project proposals within the industry earlier this century, and observed that, in general, the landowners failed to organize and manage cash flows from logging projects for long term benefits.

Conclusion

The author has deliberately relied exclusively on sources from SGS, the independent Swiss-based company employed by the government to monitor the quantity and quality of the exports in this article. Industry sources, though available, have not been used to avoid interpretations of apologetics for a controversial industry. Ultimately, environmentalists may well applaud the actions of the government for having reduced logging activities. But one needs to analyze whether this recent government policy, especially concerning increased export tax, can deliver a sustainable form of logging that can satisfy the rural people's demand and the government for the benefits of modern development and the environmental concerns of the World Bank and the environmental NGOs. One can certainly share the concerns of the environmentalists that advocate reducing the levels of logging as a means to control global warming, and the punitive export tax has, to a degree, had that effect. At the same time, the representative of the people, the government, may well believe that increased export tax has enhanced revenue, further improving national and rural development. Although the rural-based, in the absence of *in situ* operations, will regret the loss to local infrastructure in terms of roads, aid posts, and even rural airstrips, not to mention local employment generated by local logging operations. Moreover, the policy may well be short-sighted, can have infelicitous consequences in which the industry is urged to rely on illegal activities and operators to satisfy the global demand.

This article concludes that sustainability will be tough to achieve when the government creates the conditions in which the industry becomes dominated by unethical and illegal operators, who have to adopt illegal measures to survive. As has been pointed out, New Zealand exports 4 to 5 times as much forest products. But New Zealand's sustainable practices such as reforestation after harvesting, the avoidance of clear-cutting, and the development of plantation forestry projects also need to be followed and noted. These are practices that need to be widely and generally implemented in PNG for the forestry industry is to become more environmentally acceptable. The history of the industry in PNG indicates that the government regulations of the industry are not satisfactory. The heavy export tax will not improve the industry's performance. Companies surviving through illegal practices and cost cutting cannot be easily persuaded to adopt the additional measures that protect the environment and ensure sustainability.

At the same time, one needs to recognize the insatiable global demand for wood and paper products. The World Bank and environmentalists might agree that an effective way to reduce the activities of the industry is to impose a punitive tax on exports, and the government may well regard the increased tax to enhance their revenue stream. Ultimately, the accelerating global warming, needs to be better addressed through alternative policies that emphasize sustainability. First, environmentalists should accelerate efforts to combat the global demand for wood and paper products, rather than seeking to punish the suppliers. As in the so-called "war on drugs," the targeting of the suppliers has failed to stop supply as long as the high demand remains constant, and the same reality necessarily applies to logging. Second, the government and environmentalist should intensify their efforts to encourage sustainable practices that will require the granting of long-term as opposed to simple short-term log extraction licenses, which would better allow of reforestation and forestry plantation projects.

Finally, although the author argues that the government and other stakeholders are receiving significant and sufficient revenue through the export tax, some are in thrall to the theology of income tax, and the presumed moral necessity for all income recipients to pay the correct tax on their income. Although some wealthy Middle East states remain unpersuaded about this dogma. However, to secure compliance with the Taxation Act, efforts need to be laid to cancel all taxation of log exports. An increase in staffing of the Internal Revenue Commission to undertake annual tax audits of all firms engaged in the forest industry should be recommended to ensure they pay income tax on their taxable income (Lea & Curtin, 2011, p. 145). The adoption of these recommendations should weaken the motivation to indulge in transfer pricing as the fob value loses relevance and the absence of a punitive export tax would hopefully vitiate the necessity to disguise profits.

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