

**LOGGING, LEGALITY, AND
LIVELIHOODS IN PAPUA
NEW GUINEA:**

**SYNTHESIS OF OFFICIAL
ASSESSMENTS OF THE LARGE-
SCALE LOGGING INDUSTRY**

VOLUME I



**FOREST
TRENDS**

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PAPUA NEW GUINEA:
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LARGE-SCALE LOGGING INDUSTRY**

VOLUME I

Logging, Legality and Livelihoods in PNG: Synthesis of Official Assessments of the Large-Scale Logging Industry, Volume I © 2006 Forest Trends.

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BACKGROUND:

Between 2000 and 2005, the Papua New Guinea (PNG) government commissioned five separate reviews of the administration and practice of the logging industry:

- Review of Forest Harvesting Projects Being Developed Towards a Timber Permit of Timber Authority (2000-01);
- Review of the Forest Revenue System (2001-02);
- Independent Review of Disputed Timber Permits and Permit Extensions (2003);
- Review of Current Logging Projects (2004-05); and
- Compliance Audits (2004-05)

The five Reviews were initiated in response to a widely held view that forest management in Papua New Guinea was not providing long-term benefits to the country or its citizens and to assess the implementation and effectiveness of the new governance regime introduced in the PNG Forestry Act of 1991.

The Reviews were conducted under Terms of Reference agreed upon between the Government of Papua New Guinea and the International Bank for Reconstruction and Development (the ‘World Bank’),¹ by teams of experts that included lawyers, foresters, economists and environmental and social scientists. The review teams were given unique access to official records, logging sites and company documents and were able to conduct wide-ranging interviews with industry participants, landowners and government officials.

The findings of the five government-initiated Reviews were presented in sixty-three individual reports that together provide a unique assessment of Papua New Guinea’s forest administration system and the sustainability of current and future large-scale logging operations. They provide a thorough examination of the whole timber harvesting process from initial project development through permit allocation to the actual logging operations and their long term impacts. The Reviews considered a range of different criteria for assessing the status of timber harvesting operations and analysed their impact from the perspective of all the key stakeholders.

Of the five Reviews, only some of the reports were made publicly available - through the PNG Prime Minister’s website. Copies of the other documents produced were circulated amongst government departments, industry and civil society organisations in PNG and subsequently distributed internationally.²

In this Report (Volume I), we summarize the key findings of the five Reviews to present a clear and

¹ The first Review was implemented as a condition of a Governance Promotion Adjustment loan between the State of Papua New Guinea and the World Bank. The third Review was to check compliance with a later loan agreement for a Forestry and Conservation project. The fourth and fifth Reviews were conditions contained in the World Bank loan agreement.

² The government may still be considering the recommendations of the Reviews, and therefore not making them widely available.

concise picture of the legal status, environmental sustainability and social impacts of current large-scale logging operations in PNG. We then provide some recommendations for a way forward.

Volume II summarizes the reports in each of the five Reviews. It provides a complete summary of the findings together with a commentary on the 2003 report from an Ombudsman Commission Investigation into a controversial allocation of forest harvesting rights. The material from the Reviews that were made publicly available,³ as well as Volume I and II are available on the Forest Trends website www.forest-trends.org. Documents that were not made publicly available by the Government, or portions of them, can often be found on other websites.

³ Forest Harvesting Projects Under Development - *published on the Prime Ministers internet website in April 2001*
Forest Revenue System - *published on the Prime Ministers internet website in April 2002*
Ombudsman Commission Report - *available from the PNG Parliament library where it was lodged in October 2002*
Review of Current Logging Projects - *published on the Prime Ministers internet website in April and October 2004*
except the Wavoi Guavi report

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
SUMMARY FINDINGS OF THE GOVERNMENT REVIEWS	2
Conclusions	7
Recommendations	7
STATISTICAL PROFILE OF CURRENT LOGGING OPERATIONS	10
CHAPTER 1. LEGALITY OF TIMBER HARVESTED IN PAPUA NEW GUINEA	12
1.1 Statutory requirements	13
1.2 Informed consent	17
1.3 Procedures and proper process (The 34 Steps)	18
1.4 Sustained timber yield.....	19
1.5 Harvesting regulations	19
1.6 Contractual requirements.....	20
1.7 Labor practices	24
1.8 Environmental Plans.....	26
1.9 Overview of legal compliance	29
1.10 Individual project compliance.	30
CHAPTER 2. ENVIRONMENTAL SUSTAINABILITY	35
2.1 Sustained timber yield.....	36
2.2 Control of environmental impacts.....	40
2.3 Conclusions	42
CHAPTER 3. SOCIAL IMPACTS	44
3.1 Financial benefits for local communities	44
3.2 Infrastructure obligations	48
3.3 Community expectations.....	50
3.4 Community Development Reports.....	52
3.5 Human Rights issues	54
CHAPTER 4. FINANCIAL ASPECTS.....	58
4.1 Forest Revenue System Review.....	58
4.2 Socioeconomic and financial aspects:.....	61
CHAPTER 5. POLICY IMPLICATIONS AND RECOMMENDATIONS	63
5.1 Recommendations from the Reviews	63
5.2 Forest Trends Recommendations for further action.....	64
Concluding Remarks	66
APPENDIX.....	67

LIST OF TABLES

Table A: Log export market share in 2004	1
Table B: Profile of logging operations analyzed in the Review of Current Projects	10
Table 1: Permit commencement and renewal dates	15
Table 2: Project compliance with the Forestry Act 1991	16
Table 3: Performance on processing obligations	23
Table 4: Labor practices	25
Table 5: Status of Environmental Plans	26
Table 6: General overview of legal compliance	29
Table 7: Summary of Legal Compliance in the Largest Current Logging Projects ..	31
Table 8: Summary of Legal Compliance in other Reviewed Projects.....	32
Table 9: Legal Compliance in New Logging Projects	33
Table 11: Performance on infrastructure obligations.....	49
Table 12: Social welfare findings.....	53
Table 13: Human Rights Articles relevant to timber harvesting in PNG	54
Table 14: Issues identified in the Report	57
Table 15: Log exports, 2004	59
Table 16: Log export market share in 2000	60
Table 17: Challenges to economic development.....	62
Table 18: General governance recommendations from Reviews	67
Table 19: Project specific governance recommendations	68
Table 20: Summary Review findings on three Permit extensions	69
Table 21: The Thirty Four steps	70

LIST OF BOXES

Box A: Lone Stars: Two Harvesting Projects Stood Out on Compliance Issues.....	4
Box B: Detailed Summary of the Review Findings.....	6

EXECUTIVE SUMMARY

Papua New Guinea's forest industry is predominately focused on the harvesting of natural forest areas for round log exports. There is little plantation production and only a limited number of processing facilities. The sector is dominated by Malaysian-owned interests and their primary markets for raw logs are in China, Japan and Korea. Very few wood products are manufactured in PNG itself.

Table A: Log export market share in 2004

Company	Origin	Volume	% Share	Value (Kina) ⁴	% Share
Rimbunan Hijau	Malaysia	649,000	32.5	120,000,000	33.5
Cakara Alam	Malaysia	234,000	11.5	35,000,000	10
Innovision	Malaysia	199,000	10	37,000,000	10.5
WTK Realty	Malaysia	176,000	9	32,000,000	9
Kerawara	Malaysia	175,000	8.5	40,000,000	11.5
SBLC	Unknown	140,000	7	22,000,000	6
Turama For. Ind.	Malaysia	133,000	6.5	23,000,000	6.5

Source: SGS Log Export Monitoring Reports

Between 2000 and 2005, in response to a widely held view that forest management in Papua New Guinea was not providing long-term benefits to the country or its citizens, and to assess the implementation and effectiveness of the new governance regime introduced in the PNG Forestry Act of 1991, the Papua New Guinea government commissioned five separate reviews of the administration and practice of the logging industry.

This report, Volume I in a three volume series, summarizes the key findings of the five Reviews to present a clear and precise picture of the legal status, environmental sustainability and social impacts of current large-scale logging operations in PNG. We follow this synthesis of the existing studies with our own recommendations for steps that would move PNG toward legal and sustainable logging, provide satisfactory livelihood opportunities for forest dependent communities, and promote sustainable economic development for the nation as a whole. We conclude by noting that these steps to establish legality, respect for human and property rights as well as people's participation in the development and monitoring of forest policy and practice, are necessary not only for the successful implementation of industrial logging, but for any and all forestry activities, be it logging, improved forest protection, collection of non-timber forest products or payments for ecosystem services.

⁴ One PNG Kina is equivalent to thirty US cents

SUMMARY FINDINGS OF THE GOVERNMENT REVIEWS

In Papua New Guinea, virtually all timber harvested from natural forest areas has official sanction in the form of a permit or license issued by the relevant authority. This point has been iterated, sometimes forcefully, by the PNG government on many occasions in response to allegations of illegal logging.⁵

The overriding conclusion from the Government of Papua New Guinea's own forestry review process, however, is that although all timber harvesting operations may be officially licensed, there are serious issues of legal non-compliance at almost every stage in the development and management of these projects. **For these reasons the majority of forestry operations cannot credibly be characterized as complying with national laws and regulations and are therefore 'unlawful.'**

In order to be regarded as 'lawful,' a timber harvesting operation needs far more than just an official permit or license. It is generally accepted that the operator must be able to demonstrate:

- Broad compliance with prevailing legal principles in their instruments which underpin the operating rights;
- A general observance of statutory and regulatory controls in the harvesting operation itself; and
- A more general conformity to the legal standards governing all business operations in PNG.

The Reviews clearly show that operators are not achieving compliance in these key areas, and that current commercial forest management is ecologically and economically unsustainable and illegal. Logging is also not serving the long-term interests of landowners or the State.

One Review alone of fourteen active logging projects (including the five largest⁶ and eight of the top twelve and covering a gross area of 3.17 million hectares with a population of more than 83,000 people) found that none can be defined as legal and only one project manages to meet more than fifty percent of key criteria for a lawful logging operation.

With two notable exceptions – namely the Open Bay and Watut concessions (see Box B) – the Reviews reveal that industrial logging:

- ***Does not deliver long-term benefits for landowners:*** The limited financial returns to resource-owners have substantially fallen in real terms over the last decade. Sums that are paid are not equitably distributed and rarely reach the poorest members of society. They are not applied to deliver long-term benefits and are soon exhausted through short-term consumer

⁵ See for example: 'All logging operations are legal – Forest Minister, ABC news website on 23rd February 2003; 'All timber projects operating legally,' The National newspaper on 5th November 2004 'All logging legal – NFA,' Post Courier newspaper on 25th November 2004; 'Minister defends projects,' The National newspaper on 26th November 2004.

⁶ Largest log exporting projects for the period 2000-2005

purchasing. Industry is allowed to ignore PNG laws and in fact gains preferential treatment in many cases, while the rural poor are left to suffer the social and environmental consequences of an industry that operates largely outside the regulatory system. The quality of landowner awareness and mobilization has been poor, and landowners are not making informed decisions.

- ***Generates local incomes that are too small to impact on living standards:*** Employment and other ‘spin-off’ benefits are usually taken by outside workers. In addition, salaries and employment conditions are generally very poor and have even been officially described in one project as modern day ‘slavery.’
- ***Provides Government with an income that is not used to deliver local services:*** While government collects about thirty million US dollars in log export duties each year, local communities are receiving very little in services or other government expenditures (or none at all). Promised infrastructure and other ‘development’ benefits are either not provided, are of poor quality or are not supported by complementary operational expenditures (either governmental or otherwise) to provide, for example, teachers for class rooms or medicines for aid posts.
- ***Is not underpinned by permits or licenses that comply with legal requirements, and is not effectively monitored and there is no control of field activities:*** The Reviews show that the primary governance role of the PNG Forest Authority and the duties of the Department of Environment and Conservation are seriously deficient, and there is a political vacuum with no demonstrated government interest in controlling the problems in the sector.
- ***Is not part of a sustainable management regime for forest resources:*** Forests are not being managed to maintain a sustained yield of timber from the forest, leaving local communities to find they are soon abandoned as the logging companies move on, leaving behind serious environmental damage, high social costs and a bewildered and disillusioned rural population with little sustainable infrastructure and few services.
- ***Unclear financial returns for logging companies:*** Logging companies themselves appear to be in a contradictory position. While current official log prices indicate that the industry has been unprofitable for a number of years (2005 losses were estimated at more than 75 million kina - \$25 million USD), logging continues and companies still seek access to new forest areas and make significant investments in other areas of the economy. This could be explained by short term accounting practices that defer the replacement of capital equipment and reallocate head-office costs. However, because of the ‘inexplicable price gap that warrants further investigation’⁷ evident and ‘substantial’⁸ financial incentives for under-reporting log values, no financial study has been able to exclude the continuing spectre of transfer pricing.

⁷ Forest Revenue Review Report, 2003 (page 127)

⁸ Review of Socioeconomic and Financial Impacts at Appendix Eight of the Observations and Recommendations report from the Review of current Logging Projects (page 13)

Box A: Lone Stars: Two harvesting projects stood out on compliance issues

The timber harvesting operations at Open Bay and Watut were singled out for better than average compliance among all the forest management projects that were investigated during the Review process.

These two projects were particularly highlighted for:

- the quality of the forest management operations and observance of the Logging Code of Practice;
- the efforts made to deliver long-term benefits in the local communities including providing and maintaining key infrastructure; and
- the training and other benefits provided for local workers

Unfortunately, neither project satisfies current legal requirements, but this seems to be the result of governance failures in the administration of the forestry sector rather than a reflection on the bona fides of the operating companies.

Other factors that differentiate these projects from other concessions:

Timing	Both projects are more than forty years old and were established long before other current industry participants became involved in the sector.
Singularity	Unlike other companies, both operators have remained committed to a single project and have not sought to acquire other concessions.
Ownership	Both projects have partial State ownership and one is the only non-Malaysian operation in the sector
Workforce	Unlike other operations, there are minimal foreign workers and a demonstrated commitment to training and localization.
Plantations	Both operators have shown a long term commitment by establishing plantation areas to ensure continuity of supply.

As a result of these factors, both projects have become integrated into the local communities and the companies are not seen as outsiders or transient entities.

The different Reviews set out a series of general governance and project specific recommendations, from proposals to implement a Commission of Inquiry with powers to summons documents and cross-examine witnesses, through to remedial actions to correct procedural errors in the development process for individual projects. The full set of recommendations is summarized in Tables 18-20.

The majority of the recommendations for the individual project recommendations as well as for improvements in general governance have been for the large part ignored, demonstrating government acquiescence, or preference, for the status quo and/or a lack of political will or leadership to implement reform. As quoted in one of the Reviews, *“The review of current policies, laws regulations and guidelines indicated that the PNG Government and its regulatory institutions have all the necessary policies, laws, regulations and guidelines required to ensure that sustainable timber production can be achieved. The challenge is to commit to the policy and to use the available tools effectively.”*⁹ This is attributed to a lack of political will to exercise control over the logging industry.¹⁰

A fundamental problem is also likely corruption, as is most clearly stated in the *Review of Disputed Allocations* which described logging companies as acting like robber barons and being encouraged by persons whose proper role was to exercise control. Corruption is an underlying theme throughout the Review reports, which recommended further investigations be conducted to reveal the truth behind actions that were seen as highly suspicious.¹¹

⁹ Observations and Recommendations Report from the Review of Current Logging Projects (page x)

¹⁰ Observations and Recommendations Report from the *Review of Current Logging Projects* (page 84)

¹¹ The Review of Disputed Permits recommended a Commission of Inquiry was necessary to “unravel the web of deceit” – Confidential Report (page 1) which has quoted in other documents.

Box B. Detailed Summary of the Review Findings

The Review findings can be summarized according the following main themes:

LEGALITY: There is a general failure in legal compliance against key criteria in the majority of harvesting operations sufficient to warrant the general conclusion that most are operating unlawfully.¹² The most widespread and demanding problems are the failure to secure the informed consent of resource owners to timber harvesting and the inability of the State to ensure sustained yield management in natural forest areas. The Reviews provide massive evidence that resource owners are not making informed decisions about the use of their resources, and the consent that has been given for current and future forestry operations is clearly legally flawed. In many projects these failures are exacerbated by unlawful permit extensions, clear failures to apply or enforce applicable harvesting standards and failures to meet infrastructure and processing obligations. There is also clear evidence of a deeply concerning trend of labor abuse in many projects.

ENVIRONMENTAL SUSTAINABILITY: Forests are not being managed sustainably. The five Reviews present substantial evidence that Papua New Guinea's large-scale timber harvesting operations do not comply with the requirement to provide a sustained yield of timber and there is no measure of environmental sustainability. Basic descriptions of the forest resource are generally "unreliable" and in some cases, "wildly misleading." Annual allowable harvesting levels in individual projects have been set too high and forest areas are effectively being 'logged out.' The average concession life between 1993 and 2000 was just 11 years, a fraction of the 40-year cutting cycle required by law, implying that cutting rates are far in excess of a sustainable harvest. Only four projects, out of twenty-nine being considered for a new Timber Permit, were identified as "sensible viable" log export projects *if* remedial actions were taken. The ability of the forest to regenerate is being seriously compromised by the lack of appropriate planning and care. This is exacerbated by the poor management of the harvesting operations and further compounded by the failure of the authorities to effectively monitor and enforce the required standards.

SOCIAL IMPACTS: While logging does bring short-term cash incomes to local resource owners, these are quickly dissipated and, in general, have not delivered lasting benefits. Promised infrastructure developments also tend to be short-term and are not supported by government investment in maintenance or support services. Local landowners suffer from the environmental impacts of unregulated logging operations, and there are serious instances of labor and human rights abuses as well as other negative social impacts. The expectations of local communities are not being met by the logging process.

FINANCIAL ASPECTS: In May 2005, average log prices were US\$60, which, according to the Review analysis, would generate log export revenue losses of K76 (US\$23) per cubic meter or US\$46 million per annum. Logging therefore does not appear to be economically viable in PNG at declared export prices. While this may be explained by short term accounting practices that defer the replacement of capital equipment and reallocate head-office costs, no financial study has been able to exclude the continuing specter of transfer pricing given the 'inexplicable price gap that warrants further investigation'¹³ evident and the 'substantial'¹⁴ financial incentives for under-reporting log values. Government continues to be the primary beneficiary of the forest industry, receiving US\$30 million in cash revenues annually. These are not returned to local communities through services or other support.

¹² Official inspections at export only verify the quantity and description of the timber to ensure export taxes are paid; there is no connection between the unlawful nature of operations in the forest and the legal documentation that PNG wood products carry. Official export documentation is therefore likely to be laundering of the 'unlawful' timber into legitimately-produced exports.

¹³ Forest Revenue Review Report, 2003 (page 127)

¹⁴ Review of Socioeconomic and Financial Impacts at Appendix Eight of the Observations and Recommendations report from the Review of current Logging Projects (page 13)

CONCLUSIONS

As long as there is a lack of political will to challenge the status quo in PNG's forest sector and address the breakdown in governance mechanisms, broad policy recommendations from the Reviews and the specific action points are unlikely to change the dominant paradigm unless other measures are taken to address more fundamental problems.

Until the political leadership is prepared to step outside its current paradigm, any policy prescriptions to improve either returns to rural populations or long-term sustainability will be superfluous. This has been clearly demonstrated over the last five years as administrators have failed to implement remedial actions recommended through the Review processes, while politicians have pushed for new timber permits to be released without the required legal compliance or sustainability.

If positive change is to occur it is first necessary to create a conducive environment where the nexus between the political and administrative leadership and the logging industry no longer exists. This can only be achieved through measures that are not dependent on political sanction and that cannot be externally influenced by those who are at the root of the problem.

In this setting of politically sanctioned illegal and unsustainable timber harvesting it is worth mentioning that two logging projects - Open Bay and Watut - have been identified that stand out for providing long-term benefits to local people, treating their workforce with respect and generally observing applicable laws and regulations. Both have achieved a sustained yield of timber by using plantations to supplement natural forest harvesting, and one processes all of its production timber.¹⁵

RECOMMENDATIONS:

Not all the necessary steps to ensure a better outcome can be achieved directly through governmental action as long as the necessary political will cannot be demonstrated to exist. A number of different mechanisms need to be utilized, engaging a broad range of stakeholders both in PNG and internationally.

1. ***Continued Monitoring and Engagement by International Organizations:*** The situation in PNG should continue to be monitored and the state of forests and forest practice in PNG publicized in order to support local and foreign institutions with a remit for seeking sustainable development outcomes for the people of PNG – now and for future generations. It is critical that these efforts continue, despite the prevailing situation where unsustainable economic development is underpinned by windfall, unusually high commodity prices and a perverse political economy, which purports to be democratic while enfranchising vested national and international interests.

¹⁵ Both of these projects involve partial State ownership and both were established long before the other current industry participants entered the market. Unfortunately both projects are classified as illegal as their Timber Permits were renewed by the Forest Authority without compliance with the Forestry Act though this may say far more about the competence of the Forest Authority than the bona fides of the logging companies involved.

Major donors and international organizations should be encouraged to maintain a high level dialogue with the Government of PNG to support priority programs of basic governance. Problems with the forest sector, such as insufficient community participation, transparency, and accountability in formal decision-making can sometimes be seen as a “microcosm” of broader governance problems within a country. If positioned well, forest concerns can act as a catalyst for broader governance reforms within a country.

While for years the World Bank and the Government of PNG were engaged in a constructive dialogue to bring about governance reform in the forest sector, in 2005, they agreed to cancel the Forestry and Conservation Project (FCP) after disbursements had been suspended for one of the longest periods in the Bank’s operational history. This was mainly because the issues inherent in the Review reports could not be resolved. Given the significance of the forests in the rural sector (both formally and informally), however, sustainable development will not be achieved without the clear recognition of this priority by the Government of Papua New Guinea and all donors, including Asian Development Bank, the European Commission, The World Bank, AusAID, etc.

2. ***Support Increased Awareness of Landowners Rights and the Establishment of a Legal Fund to Challenge Illegal Actions:*** The donor community (in particular AusAID and the larger international environmental NGOs) should be encouraged to support mechanisms which help local landowners understand their rights and provide them with legal assistance – such as a legal fund to support the enforcement of laws and regulations through local institutions in accordance with the Laws of the Sovereign State of PNG. This legal fund could be accessed by civil society to financially support legal challenges through the court system.
3. ***The Government of Papua New Guinea and all development partners need to:***
 - a. *Support mechanisms of independent review:* This could include support for the Ombudsman Commission to enforce implementation of its recommendations in its Kamula Doso report and implement the Commission of Inquiry recommended in the Review of Disputed Permits and Permit Extensions as an example that malfeasance cannot be accorded by both the passage of time and a seeming change in individuals when the main instigators remain.
 - b. *Investigate links between logging operations and the political elite:* This could include international assistance to Statutory Authorities to investigate the linkages and capital flows between timber industry participants and other sectors of the PNG economy and the political elite.
 - c. *Support good logging operations in PNG:* There are a few logging operations in the country which are deemed beneficial to both local landowners and the country, but they are lost in a sea of bad operators. The government needs to support these companies, or risks having environmentally sensitive markets in Europe boycott PNG’s exports (or Chinese exports composed of PNG wood products) across the board. Support could include facilitating market access to the markets in Europe, support for further value-added processing by good operators in PNG itself, and further research to identify key factors that have contributed to the positive Review findings for the Open Bay and Watut projects and how these successes can be replicated.

- d. *Investigate allegations of illegal accounting practices:* support ongoing comprehensive investigation into the unresolved issue of transfer pricing, including those which may have both international and PNG-based support;
- e. *Encourage nations and industries importing PNG wood products to ensure only legal wood products enter their supply chains.* Official inspections at export only verify the quantity and description of the timber to ensure export taxes are paid; there is no connection between the unlawful nature of operations in the forest and the legal documentation that PNG wood products carry. Official export documentation is therefore likely to be laundering the ‘unlawful’ timber into legitimately-produced exports. Export monitoring needs to continue, but should also include links to verify that the forest products come from lawful concessions.

Timber export flows and volumes from PNG for all forest products need to be monitored to identify both primary markets and end uses with a view of providing the background for certification. Importers such as China and the UK have the opportunity to take a global leadership role that includes establishing green public procurement policies. In China, this could start with a pilot program to ensure verified legal sourcing for construction related to the 2008 Beijing Olympics.

- f. *Share experiences with other nations with similar problems and the same industry participants:* This could include the establishment of a regional Forum with the Solomon Islands to share information on unlawful activities and industry participants.

4. *Underpinning all of this is the need to support /maintain some independent mechanism which reports clearly on the situation with respect to forests in PNG.*

These, as well as other steps to establish legality, respect for human and property rights as well as people’s participation in the development and monitoring of forest policy and practice, are necessary not only for the successful implementation of industrial logging, but for any and all forestry activities, be it logging, improved forest protection, collection of non-timber forest products or payments for ecosystem services. Taken together, they would help transform PNG’s forestry sector to one that not only ensures sustainable forestry and conservation, but to one that provides satisfactory livelihood opportunities for forest dependent communities and promotes sustainable economic development for the nation as a whole.

STATISTICAL PROFILE OF CURRENT LOGGING OPERATIONS

Table B presents a statistical profile of the fourteen timber harvesting operations studied in the Review of Current Logging Projects. These fourteen projects include the five largest log exporting projects for the period 2000-2005 and eight of the largest twelve operations (see further Section 1.10 below).¹⁶ *On the evidence from the Reviews, none of the fourteen projects can be defined as legal and only one project manages to meet more than fifty percent of key criteria for a lawful logging operation.*

The fourteen projects studied cover a gross area of 3.17 million hectares which in 2000 contained a human population of more than 83,000 people. In 2004 this forest area generated 1.3 million cubic meters of log exports with a declared value of over 228 million Kina (69 million US dollars). In addition these forests provided logs for domestic sales and processing into sawn timber, veneer and plywood. The log exports from these fourteen projects represent slightly over 65% of the total from PNG in 2004.

Table B: Profile of logging operations analyzed in the Review of Current Projects

Project	Operator	Origin	Size (ha)	Exports (2004) m ³	% of total	Rank	Human population	Value US\$ 000s	Outputs	Original Permit	Extension	Legality
Makapa	Innovision	Malaysia	301,500	199,318	9.9	1	3,032	12,309	Raw log exports	1992 - 2002	Yes, 2013	4 / 9
Vanimo	WTK	Malaysia	292,000	176,454	8.8	2	12,539	10,559	Raw log exports Sawn timber	1991 - 2011	No	5 / 10
Vailala 2&3	Rimbunan Hijau	Malaysia	202,300	157,228	7.8	3	8,112	9,085	Raw log exports Domestic log sales	1992-2002	Yes, 2012	1 / 9
Ania Kapiura	SBLC	Not known ¹⁷	188,000	140,082	7	4	6,636	7,224	Raw log exports	1989-2014	No	5 / 10
Wawoi Guavi	Rimbunan Hijau	Malaysia	488,300	136,586	6.8	5	4,153	8,371	Sawn timber Veneer sheets	1992 - 2002	Yes, 2012	
Turama	Rimbunan Hijau	Malaysia	1,250,000	133,332	6.6	6	6,670	7,541	Raw log exports Domestic log sales	1995-2030	No	3 / 10
Open Bay	Open Bay Timbers	Japan/ PNG	15,600	115,153	5.7	7	862	4,954	Raw log exports	Not known ¹⁸	Yes, 2004	

¹⁶ The 'top twelve' projects not considered as part of the review were Arawe (ranked number six); Kiunga-Aiambak (ranked nine) Alimbit Andru (ten) and East Kikori (eleven).

¹⁷ Ownership changed in 2002/3 but details of the new owners have not been registered.

¹⁸ The Timber Rights were acquired in 1967 and the Permit Holder registered in 1971

									Plantation logs			
Vailala Block 1	Rimbunan Hijau	Malaysia	113,400	78,037	3.9	8	10,631	4,470	Raw log exports Domestic log sales	1991-2003	Yes, 2009	1 / 9
Iva Inika	Kerawara	Malaysia	13,400	49,166	2.4	9	280	2,541	Raw log exports	1988 - 1998	Yes, 2003	2 / 8
Kapuluk	Samling	Malaysia	165,600	42,971	2.1	10	5,989	2,475	Raw log exports	1989 - 2009	No	4 / 9
Manus West	Rimbunan Hijau	Malaysia	32,500	32853	1.6	11	3,432	2,497	Raw log exports	1988 - 2003	In process	2 / 9
Seraji	Deegold	Malaysia	47,000	31,932	1.6	12	1,046	1,847	Raw log exports Sawn timber	1995 - 2004	Not known	2 / 9
Buhem Mongi	Willis Kent	Malaysia	88,500	24,078	1.2	13	11,555	1,294	Raw log exports	1997 - 2032	No	3 / 9
Watut	PNG Forest Products	Malaysia / PNG	37,400	0	0	14	8,523	0	Sawn timber Plywood	1992 - 2002 ¹⁹	Yes, 2007	6 / 9
Totals			3,169,400	1,317,190	65.4		83,460	75,163				

Source: All data derived from the Individual Project Reports from the Review of Current Logging Projects; SGS Log Export Monthly Monitoring Report December 2004; and the National Statistics Office

Notes:

- Operator: Company acknowledged as in charge of harvesting operations and log exports
Size: Gross forest area²⁰
Population: Figures derived from the 2000 Census data published by the National Statistics Office
Exports: Raw log exports
% of total: Proportion of total log exports in 2004
Rank: Relative importance on the basis of log export volume in 2004
Value: Kina value of the log exports in 2004
Outputs: Income sources for the operating company
Legality: Assessment derived from Tables 7 & 8 of Volume I

¹⁹ The sawmill and plywood factory were established many years earlier and relied on plantation material alone.

²⁰ The Forestry Act mandates that forest resources can only be developed in accordance with the National Forest Plan.

CHAPTER 1. LEGALITY OF TIMBER HARVESTED IN PAPUA NEW GUINEA

In Papua New Guinea, virtually all timber being harvested from natural forest areas have official sanction in the form of a permit or license issued by the relevant authority. This point has been iterated, sometimes forcefully, by the PNG government on many occasions in response to allegations of illegal logging.²¹

Evidence from the five government-initiated Reviews, however, indicates that although all timber harvesting operations may be officially licensed, there are serious issues of legal non-compliance at almost every stage in the development and management of these projects. **For these reasons the majority of forestry operations cannot credibly be characterized as complying with national laws and regulations and are therefore ‘unlawful.’**²²

The most widespread and manifest problems are the failure to secure informed consent and the inability of the State to ensure sustained yield management in natural forest areas.

In order to be regarded as ‘lawful,’ a timber harvesting operation needs far more than just an official permit or license. It is generally accepted that the operator must be able to demonstrate:

- Broad compliance with prevailing legal principles in their instruments which underpin the operating rights;
- A general observance of statutory and regulatory controls in the harvesting operation itself; and
- A more general conformity to the legal standards governing all business operations in PNG.

The five Reviews that form the basis for this report present an unusually comprehensive and perhaps unique database of information on legal compliance in the development and allocation of timber harvesting rights and in the management of on-going logging operations. They provide sufficient information to allow a broad assessment of the legality of harvesting operations in general and specific conclusions to be drawn in relation to many individual projects, including most of the largest projects currently operating.

The key criteria that are relevant for any assessment of legal compliance are statutory requirements, informed consent of resource owners, proper procedures and processes, sustainable timber yield, compliance with harvesting regulations, contractual requirements and labor practices. These are

²¹ See for example: <http://abcnews.go.com>, ‘All logging operations are legal – Forest Minister,’ 23 February 2003; *The National*, ‘All timber projects operating legally,’ 5 November 2004; *Post Courier*, ‘All logging legal – NFA,’ 25 November 2004; *The National*, ‘Minister defends projects,’ 26 November 2004.

²² Official inspections at export only verify the quantity and description of the timber to ensure export taxes are paid; there is no connection between the unlawful nature of forest operations and the legal export documentation that PNG wood products carry. Official export documentation is therefore likely to be laundering of the ‘unlawful’ timber into legitimately-produced exports.

described below together with an assessment of compliance in some of PNG's largest logging operations.

1.1 STATUTORY REQUIREMENTS: *Commercial forest management in Papua New Guinea is governed by the Forestry Act 1991 as amended in 1993, 1996, 2000 and 2005.²³ This Act was introduced in response to the findings of a seminal Commission of Inquiry²⁴ in the late 1980s that exposed widespread mismanagement and corruption in the forestry sector. The Act introduced a completely new statutory framework for the management and control of forest harvesting operations and established the PNG Forest Authority as the principle regulatory agency. Key requirements in the Act are:*

1. Conservation and renewal of forest resources as an asset for succeeding generations²⁵
2. Administration of the management, development and protection of forest resources by the PNG Forest Authority²⁶
3. Development of forest resources only in accordance with the National Forest Plan²⁷
4. Timber harvesting allowed only under a permit or authority issued under the Act
5. Other forest industry activities to be regulated by licenses²⁸
6. Registration of all forest industry participants²⁹

The Act also provides a detailed framework for the development and allocation of timber harvesting rights and gives powers to enforce the Act against defaulting companies and individuals.

1.1.1 Findings: General compliance

In general, the five Reviews found that forest resources were being managed according to four main elements of the statutory framework. In particular the Reviews confirmed that:

- The PNG Forest Authority controls the allocation and management of forest resources and has a presence in every Province with large-scale logging operations. Its various divisions and management structures are all in place and functional.
- A National Forest Plan was published in 1996 and has been broadly followed - although there has been no substantive review or update of its contents since it was first issued.³⁰

²³ The 2005 amendment was, at December 2005, under a Constitutional challenge and had not been implemented.

²⁴ Commission of Inquiry into aspects of the Forest Industry, 1989

²⁵ This is contained in the Long Title of the Act and in Section 6

²⁶ Sections 5-8

²⁷ Section 54 and 47/48

²⁸ Section 91

²⁹ Section 105

³⁰ Many consider the Plan 'expired,' as all the prescriptions for forest management and other activities were for a five-year period to 2001 and have not been extended. This is not an issue raised in any of the Review Reports except for various notations that the Plan requires 'updating.'

- Almost all timber harvesting operations appear to take place under an officially sanctioned permit or authority issued under the Act and other industry activities are licensed.³¹
- The National Forest Service maintains a register of Forest Industry Participants and this seems to include all the relevant organizations and bodies.

1.1.2 Findings: Assessment of Individual Projects

There are two main problems in the area of statutory compliance identified through the review process:

1. Harvesting projects that pre-date the 1991 Forestry Act do not comply with the new requirements contained in that Statute (in particular, operations are not being managed according to sustainable yield principles); and
2. Many of these previous projects are being extended in time as the permits come to the end of their term despite this practice being unlawful.

The *Review of Current Logging Projects (2004-05)* found that only three³² of the fourteen harvesting operations studied had been initiated after the 1991 Act came into effect, and that one of these projects³³ had still been granted a permit under the old Act. Only in one³⁴ of the eleven projects initiated prior to the 1991 Act had measures been taken to bring the operation into compliance with the new Act (and these had not been successful as harvesting was still not being conducted on a sustained yield basis).³⁵ This is despite the fact that the 1991 Forestry Act gave the Forest Authority full and specific powers to review older projects and bring them into compliance with the new framework and in particular to adjust harvesting rates to comply with the principle of a sustained yield.³⁶

Many of the projects that predate the commissioning of the 1991 Act were commenced in the late 1980s or very early 1990s – some after the 1991 Act had been passed but in the last days before it became effective (see Table 1). All projects were granted ten, twelve or sometimes fifteen year permits. Therefore, many have been coming to the end of their term between 2000 and 2005.

³¹ The Review of Forest Harvesting Projects being developed towards a Timber Permit or Timber Authority recorded four ‘notable exceptions’ where harvesting was being conducted without a proper permit or license, (see page iii of the Executive Summary in the *Observations and Recommendations Report* from that Review)

³² Buhem Mongi Busaga, Seraji and Turama Extension

³³ Seraji

³⁴ Makapa

³⁵ Individual Project Report No.4 from the Review of Current Logging Projects

³⁶ Section 137

Table 1: Permit commencement and renewal dates

Project	Operator	Permit date	Renewal	Project	Operator	Permit date	Renewal
Open Bay	Open Bay	Dec 1984	2002	Wawoi	RH	Apr 1992	2002
Manus WC	RH	May 1988	2003	Makapa	Innovision	June	2002
Iva Inika	Kerawara	Dec 1988	1998	Vailala	RH	June	2002
Kapuluk	Samling	June	2009	Watut	PNGFP	June	2002
Ania	SBLC	Oct 1989	2013	Turama	RH	June	2030
Vailala	RH	Feb 1991	2003	Seraji	Deegold	Nov	2005
Vanimo	WTK	Oct 1991	2011	Buhem	Willis	Sept	2032

Notes: *Open Bay:* *Open Bay Timber*
RH: *Rimbunan Hijau*
SBLC: *Stettin Bay Lumber Company*
WTK: *WTK Realty*

Source:: *All data derived from the Individual Project Reports from the Review of Current Logging Projects (2004-05)*

In these projects, most logging companies have been unable to fulfill the maximum permitted harvesting quotas under the terms of the Permits and have not therefore exhausted all the timber resource within the initial permit periods. In these circumstances, the Forest Authority has been granting permit extensions of up to ten years to allow logging to continue until the timber resource is exhausted. **Such extensions to old permits are not allowed under the provisions of the Forestry Act and as such, the extensions have been unlawful.**

This issue was stated in both the *Review of Disputed Permits* and some of the Individual Project Reports from the *Review of Current Logging Projects*. However, none of the recommended actions have been taken to remedy the apparent illegality by cancelling the extensions that have been granted. Further applications are still being approved. An attempt was made in 2005³⁷ through the Forestry Amendment Act 2005 to allow such extensions in the future.

While all the studied current logging projects are in compliance with four of the main elements of the statutory framework, the Forestry Act requirement that forest resources be conserved and renewed (through the application of sustained yield principles³⁸) only occurs in a small minority of cases (two out of fourteen) and that the majority of projects (nine out of fourteen) have unlawfully extended permits (see Table 2).

³⁷ The Act was passed by Parliament in October 2005 but was constitutionally challenged in the Supreme Court and as of December 2005 had not been implemented

³⁸ These principles and their application are discussed in 1.4

Table 2: Project compliance with the Forestry Act 1991

Project	Operator	Sustained yield	PNGFA oversight	National Plan	Permit or Authority	Industry Participant	Lawful extension
Ania Kapiura	SBLC	No	Yes	Yes	Yes	Yes	N/a
Buhem Mongi	Willis Kent	Yes	Yes	Yes	Yes	Yes	N/a
Iva Inika	Kerawara	No	Yes	Yes	Yes	Yes	No
Kapuluk	Samling	No	Yes	Yes	Yes	Yes	N/a
Makapa	Innovision	No	Yes	Yes	Yes	Yes	No
Manus West	RH	No	Yes	Yes	Yes	Yes	No
Open Bay	Open Bay	No	Yes	Yes	Yes	Yes	No
Seraji	Deegold	No	Yes	Yes	Yes	Yes	N/a
Turama	RH	Yes	Yes	Yes	Yes	Yes	N/a
Vailala Blk1	RH	No	Yes	Yes	Yes	Yes	No
Vailala 2&3	RH	No	Yes	Yes	Yes	Yes	No
Vanimo	WTK	No	Yes	Yes	Yes	Yes	No
Watut	PNGFP	No	Yes	Yes	Yes	Yes	No
Wawoi Guavi	RH	No	Yes	Yes	Yes	Yes	No
Summary		2/14	14/14	14/14	14/14	14/14	0/9

Notes: Sustained yield: Was the project designed to provide a sustained yield of timber?
 PNGFA oversight: Does the Forest Authority regularly monitor forest harvesting activities?
 National Plan: Was the project listed in the National Forest Plan 1996?
 Permit or Authority: Has an official Timber Permit or Authority been issued?
 Industry participant: Are the companies involved registered Forest Industry Participants?
 Lawful extension: Where an extension of logging rights has been granted, was it done lawfully?

Source:: All data derived from the Reports of the Independent Review of Disputed Timber Permits and Permit Extensions and Individual Project Reports from the Review of Current Logging Projects

1.2 INFORMED CONSENT: *In Papua New Guinea, local populations retain legal control of land under a system designated as ‘customary land tenure.’ Under this system, the rights of local people largely conform to what many societies may term ‘communal ownership’ although in PNG these rights are often expressed in general ‘motherhood statements’ that are more closely akin to stewardship rights and obligations. What is important is that the rights to manage forest resources and to harvest and sell timber are bound to the land and are clearly vested in the people and not the State.*

The Forestry Act 1991 requires that the rights of customary owners of the forest resource ‘shall be fully recognized and respected in all transactions.’³⁹

Under the Act, the first stage in the development of a timber harvesting project is for the State to acquire the forest management rights from the landowners. This is done through a contract known as a Forest Management Agreement that must be in writing and set out all the monetary and other benefits the landowners will receive in return for giving logging and marketing rights to the State.⁴⁰

It is a basic tenant of the Law of Contract that when a person gives their agreement in a legally binding contract they must be giving ‘free and informed’ consent. This means that they understand the nature of the contract and their rights and obligations under its terms.

In a society like Papua New Guinea, where land and timber rights are communally held by local populations, and where literacy and general levels of education can present major barriers to effective communication and where there is an incredible variety of local languages, the need to ensure free and informed consent presents special challenges but also obligations on those seeking to obtain customary rights.

1.2.1 Findings

The overwhelming evidence from the Reviews is that local people are not giving informed consent to harvesting operations on their land. They do not understand the nature of the contracts that are signed in their name or their rights and obligations under those agreements.

The ‘2001 Review of Forest Harvesting Projects under Development’ found that overall that “*The quality of the land owner awareness work is being compromised, or sometimes even overlooked, and it cannot be said that landowners are making an informed decision or that their expectations are likely to be met.*”⁴¹

The same report also criticized the quality of the work to organize landowners into recognized clan groups for the purposes of identifying the resource owners, giving consent to agreements and receiving financial benefits: “*The work being done by all parties in incorporating land groups is uniformly poor. The Registrar of Titles does not have the capacity to properly vet registrations.*”

This Review was critical of the checks and balances that are supposed to be provided by Provincial Forest Management Committees which have a specific role in verifying the quality of the landowner

³⁹ Section 46

⁴⁰ Section 58

⁴¹ Observations and Recommendations Report, Executive Summary (page ii)

mobilization and their consent: *“The Provincial Forest Management Committees are often inadequately verifying Incorporated Land Groups and the willingness of landowners to enter into the Forest Management Agreement.”*

As a result of its findings the Review noted that in relation to landowner’s signatures on forest management agreements *‘it is difficult to challenge the view held by some that the signatures are sometimes not worth the paper they are written on.’*⁴²

These findings were endorsed by the Review of Current Logging Projects in 2004:

“Landowners in general have little concept of a long term land use agreement, especially one that ties their land to long-term sustainable timber production.

In many cases the landowners at large knew only what they had been told by their clan agents, the landowner company, or the logging company. There were many instances of incorrect or biased information being provided. Typically there is no independent source of advice. At many of the meetings held with landowners, the interest was as much in becoming better informed as it was in expressing concerns.

Landowners at large often complained that they had no access to copies of relevant documents, such as the Forest Management Agreement. Requests to the clan agents or the landowner company to provide copies are generally ignored.

*Generally landowners were not fully aware of the social, environmental and economic impacts that logging brings, and consequently are not able to factor this information adequately into their decision to pursue a logging project.”*⁴³

The Reviews provide massive evidence that resource owners are not making informed decisions about the use of their resources and the consent that has been given for current and future forestry operations is clearly legally flawed.

1.3 PROCEDURES AND PROPER PROCESS (THE 34 STEPS): *The Forestry Act and attendant Regulations set out a detailed framework for the development of new forest harvesting projects from the initial landowner consultation through to the issuing of the final Timber Permit. The stages in this process are commonly referred to as the ‘thirty-four’ steps (see Annex 1).*

1.3.1 Findings

The Review of Forest Harvesting Projects under Development found that required procedures and proper processes were generally being followed in the development of new harvesting projects. In only four cases were general policies, laws and proper procedures not observed, and it was found

⁴² Observations and Recommendations Report, Appendix 6 at page 10

⁴³ Observations and Recommendations Report at pages 36 and 37

that, once noted, these had all been dealt with satisfactorily.⁴⁴

The Review did however express misgivings in some areas about the quality of the work done in following the thirty-four steps: *“Although due process has generally been observed, the quality with which some of the essential steps have been dealt with has been less than acceptable.”*⁴⁵

The main areas of concern that were highlighted were:

- Quality of the landowner awareness compromised and sometimes overlooked all together
- Universally poor landowner incorporation work
- Unreliable forest resource descriptions that are sometimes ‘wildly misleading’
- Failure of Provincial Committees to fulfill some of their functions

However, the Review found that in all the studied cases the deficiencies were capable of rectification and none of the projects were in this aspect fatally flawed.

1.4 SUSTAINED TIMBER YIELD: *The requirement in the Forestry Act for forest resources to be ‘conserved and renewed as an asset for succeeding generations’ has been interpreted in the National Forest Policy as requiring that timber harvesting be managed on a sustained yield basis.*⁴⁶

1.4.1. Findings

The Reviews found that in Papua New Guinea neither in the development of new projects nor in the management of current logging operations are the principles of sustained yield management being successfully applied or enforced in the harvesting of natural forest areas. This is primarily due, in new projects, to the inaccurate and exaggerated resource data that is used to compute harvesting levels and in older projects to the short duration of the permits themselves.

These are serious and material failures in the context of the legal status of timber harvesting operations.

The failure to achieve this standard in both the planning of new projects and in existing timber harvesting operations is considered in detail in Section 2.1 as part of the wider issue of Environmental Sustainability.

1.5 HARVESTING REGULATIONS: Compliance with harvesting regulations and other requirements relating to the planning and management of field operations is a key parameter in the assessment of the legality of forestry projects.

⁴⁴ Review of Forest Harvesting Projects being developed towards a Timber Permit or Timber Authority Observations and Recommendations Report at page iii of the Executive Summary

⁴⁵ Observations and Recommendations Report, Executive Summary at page ii

⁴⁶ National Forest Policy 1991

Papua New Guinea's policies, laws and regulations relating to the administration of forest management provide a detailed framework for the planning and conduct of harvesting operations and post-harvest assessments. This includes: requirements for detailed five-year and annual working plans; compliance with a Logging Code of Practice and key standards governing harvesting operations, roading and post-harvest treatments; and approved Environmental Plans.⁴⁷

1.5.1 Findings

Environmental impacts of timber harvesting operations are not being adequately controlled and the regulatory framework is not being applied or enforced.

The *Review of Current Logging Operations* included a comprehensive assessment of the performance of industry in implementing the framework for control of harvesting operations and the National Forest Service in monitoring and enforcement. In analyzing the failures which contribute to the general finding of a lack of implementation and enforcement of harvesting controls, the Review found all the three key parties - the logging industry, the PNG Forest Authority and the Department of Environment and Conservation - are deficient in upholding their obligations. Section 2.2 further outlines some of these issues.

1.6 CONTRACTUAL REQUIREMENTS: Forest management in general and timber harvesting operations in particular are underpinned by a series of contractual relationships between the key stakeholders: resource owners, the State, the licensed holder of the timber harvesting rights and the logging company.⁴⁸

The exact set of contracts to be found in any one forest management project can vary depending on the legislation that applied at the time the project was initiated, the form of the resource-owner mobilization, the type of license-holding entity and the size of the harvesting operation.

However, whatever the exact form of the contractual relationship, there is always at the core a series of obligations that the logging company owes to the resource owners, whether directly or indirectly, that are to be performed in return for the right to harvest and remove timber. These obligations invariably include three key elements:

1. Direct financial payments
2. Construction of infrastructure
3. Installation of timber processing facilities

⁴⁷ A full list of the measures that comprise the framework can be seen at pages 1 and 71 of the Observations and Recommendations Final Report from the Review of Current Logging Projects

⁴⁸ In some cases the licensed holder of the timber harvesting rights is the logging company

1.6.1 Findings: Direct financial payments

Direct financial payments to the resource owners come in the form of a mandated ‘royalty’ based on the amount of timber harvested and a range of other levies and premiums that vary between projects. The *Review of Current Logging Operations* found that while many resource owners complain about the level, distribution and use of direct financial benefits, there was almost no evidence that logging companies were failing in their obligation to make these payments - although often the amounts and the identity of the recipients could not be verified because of poor record keeping.

A detailed summary of the financial obligations on a project by project basis in the fourteen harvesting operations assessed as part of the *Review of Current Logging Projects* and the amounts that have been paid to resource owners is provided in Section 3. 1.

1.6.2 Findings: Construction of infrastructure

As well as providing resource owners with direct financial payments, logging companies are often required to construct various types of infrastructure within the forest management area and sometimes beyond its boundaries. Most commonly, this includes: roads of a set standard to link villages to a main highway (with permanent bridges and culverts); buildings such as classrooms, aid posts and houses for service providers; and sometimes churches and other facilities such as airstrips or sporting venues.

While all logging companies appear to make some effort to fulfill their infrastructure obligations, compliance was generally found to be unsatisfactory. Some obligations are never met, the standard of roads is usually very poor and other facilities are often badly constructed using poor quality materials.

Section 3.2 provides a detailed assessment of the infrastructure obligations in the fourteen harvesting operations studied as part of the *Review of Current Logging Projects* and their degree of compliance.



This road constructed by Rimbunan Hijau is supposed to be trafficable by two-wheel drive vehicles in all weather conditions.

1.6.3 Findings: Downstream processing facilities

The third common element in the contractual obligations of a logging company is the development and management of downstream processing facilities such as sawmills, veneer plants and wood chip mills within the project area. These are commonly seen as advantageous for local communities as they can provide additional employment opportunities, training and skills development and spin-off business opportunities. They also contribute to general economic activity and increase both direct and indirect government returns.

In fourteen harvesting operations studied as part of the *Review of Current Logging Projects*, the degree of compliance with processing obligations was found to be generally very poor with promised facilities often not being installed (see Table 3). The only notable exceptions to the general finding were the projects at Watut, Vanimo and Wawoi Guavi where the promised plywood and sawmills had been constructed and were operational.

Table 3: Performance on processing obligations

Project	Operator	Processing Obligations	Compliance	Notes
Iva Inika	Kerawara	None	N/a	N/a
Manus West Coast	RH	Veneer mill Sawmill	No No	No veneer mill Sawmill inoperative
Buhem Mongi Busagi	Willis Kent	Prepare a detailed proposal on domestic processing	No	No proposal prepared
Makapa	Innovision	General commitment to phase out log exports by 2000	No	All logs still being exported in 2005
Kapuluk	Samling	Sawmill with 40,000 cubic meter capacity Submit a wood chip mill proposal	No Partial	No sawmill Chip mill built but never operational
Seraji	Deegold	Sawmill with no log exports after 2000	Partial	Primarily still a log export operation. Some small scale sawmilling.
Vailala 1	RH	Sawmill	Partial	Processing facility proposal submitted to government (no date available)
Vailala 2&3	RH	Sawmill with 40,000 cubic meter capacity	No	No sawmill
Turama	RH	Large domestic processing plant planned but not a contractual requirement	Partial	Plywood mill plan submitted
Watut	PNGFP	Plywood mill and sawmill	Yes	Both mills established and all logs harvested are processed
Ania Kapiura	SBLC	Sawmill	Partial	Sawmill currently closed
Open Bay	Open Bay	Wood chip mill	No	No chip mill, sawmill now proposed
Vanimo	WTK	Sawmill	Yes	Sawmill processing 43,000 cubic meters on average
Wawoi Guavi	RH	Sawmill	Yes	Sawmill operational
Summary			No 6/13 Yes 3/13 Partial 5/13	

Source:: All data derived from the Individual Project Reports from the Review of Current Logging Projects

1.7 LABOR PRACTICES: *As part of the responsibility to conduct its business lawfully, companies have important obligations relating to the treatment of employees. Labor laws are part of the regulatory framework that governs all industries in PNG including the forestry sector.*

1.7.1 Findings

The *Review of Current Logging Projects* included a detailed examination of labor and employment practices conducted by a senior Officer from the Department of Labor and Industrial Relations in six of the fourteen studied timber-harvesting operations.

The investigations focused on three main areas; the employment of expatriate workers, training for national employees and appropriate health and safety measures. The Review also details the concerns raised by logging company staff to the Review Teams and includes comments on issues such as staff housing and other employment conditions. The main findings from the six projects are presented in Table 4.

The Reviews found a stark contrast between two sets of projects in the findings on the level of compliance and general attitude to employment issues. For the Watut project, the Department of Labor expressed almost total satisfaction with every element of the company's performance. In Open Bay, it was critical only of the absence of appropriate health and safety measures.

In contrast, in the other four projects the Department was highly critical in every one of the studied elements of the employment practices and was scathing of labor relations in general. **In Wawoi Guavi, the conditions endured by the local workforce were officially said to amount to 'slavery.'**⁴⁹

In each of the four projects, laws relating to the employment of overseas workers were being abused, there was no formal training or skills development and no regard for employees' health and safety.



“Absolutely no regard for safety and safe working practices”⁵⁰

⁴⁹ Individual Project Report No.14 from the Review of Current Logging Projects

⁵⁰ Photograph taken from page 6 of Appendix Two to the Individual Project Report No.9 Turama from the Review of Current Logging Projects

Table 4: Labor practices

Project	Operator	Employees <i>National/Foreign</i>	Foreign Labor	Training	Health and Safety	Other Issues
Turama	RH	306 / 38 (8:1)	Abuse of training plan and work permit guidelines	Lack of systematic training with no emphasis on skills transfer	Absolutely no regard for safety and safe working practices	<ul style="list-style-type: none"> • Wages, deductions and leave entitlements • Overcrowding problems with immanent health hazards • Company uses the Police Force to assault employees who raise concerns... violation of human rights
Watut	PNGFP	700+ / 13 (53:1)	Management and specially skilled areas	An important aspect of the company's program	Strong safety policy for all level of employees	None.
Ania Kapiura	SBLC	482 / 8 (60:1)	Abuse of training plan and work permit guidelines	Training is not being given any attention	Absolutely no regard for safety	General discrimination against national employees and favouring of expatriate staff
Open Bay	Open Bay	188 / 9 (21:1)	No violation of work permits	General satisfaction	Safe work practice is non-existent	<ul style="list-style-type: none"> • Toilets and hygiene facilities • Entitlements including compensation and dismissal
Vanimo	WTK	918 / 79 (12:1)	Positions are exaggerated to obtain approval	Very minimal	No regard for safety and safe work practices	<ul style="list-style-type: none"> • No leave entitlements • Unauthorised and excessive salary deductions • No wage increases
Wawoi Guavi	RH	500+ / 112 (5:1)	Total disrespect for Employment of Non Citizens Act	Non existent	Appalling and cannot be measured against any standard	<ul style="list-style-type: none"> • Living conditions is appalling with overcrowding and is totally unsafe • No leave entitlements • Unauthorised and excessive salary deductions • No wage increases
Summary		Ratio 2650 / 259 (10:1)	2/6 positive	2/6 positive	2/6 positive	1/6 positive

Note: This table has been completed using actual quotes from the five Reviews

Source:: All data derived from the Department of Labor and Industrial Relations Inspection Reports in the Individual Project Reports from the Review of Current Logging Projects

1.8 ENVIRONMENTAL PLANS: A valid Environmental Plan for all timber harvesting operations is a legal requirement under the Environmental Planning Act and a legal prerequisite to the issuing of a Timber Permit under the Forestry Act.

1.8.1 Findings

The *Review of Current Logging Projects* found the requirement for an Environmental Plan had been met in all the fourteen on-going harvesting operations that were studied (although in one case the Plan had never been approved). However, the Review also found that in many cases the Plans had either expired and/or been archived by the Department of Environment and Conservation.

In six of fourteen projects reviewed, the Environmental Plan had already expired at the date of the Review. One project had no approved Plan; one Plan expired in 2005 (see Table 5). For ten projects, the Environmental Plan had already been archived by the Department of Environment and Conservation. One Environmental Plan had been lost.

Table 5: Status of Environmental Plans

Project	Timber Permit Expiry	Environmental Plan Expiry	Years timber permit would be without EP	Environmental Plan Location
Ania Kapiura	2014	2014	0	Archived
Buhem Mongi	2032	2032	0	On file
Iva Inika	2003	1998	5	Not recorded
Kapuluk	2009	2009	0	Archived
Makapa	2013	2002	11	Archived
Manus West	2003	2003	0	Archived
Open Bay	2004	2014	10	Archived
Seraji	2004	Never approved	10	Lost
Turama	2007	2030	23	On file
Vailala Blk1	2009	2005	4	Archived
Vailala 2&3	2012	2002	10	Archived
Vanimu	2011	2011	0	Archived
Watut	2007	2002	5	Archived
Wawoi Guavi	2012	2002	10	Archived
Summary		Compliance: 5/14	Average gap: 6.3	2/14 on file

Source:: All data derived from the Individual Project Reports from the Review of Current Logging Projects

These findings are reflected in the overall conclusion from the Review of Current Projects that the Department of Environment and Conservation *'is ineffective in the forestry sector'*⁵¹ and there *'is a consistent lack of DEC field monitoring and control.'*⁵²

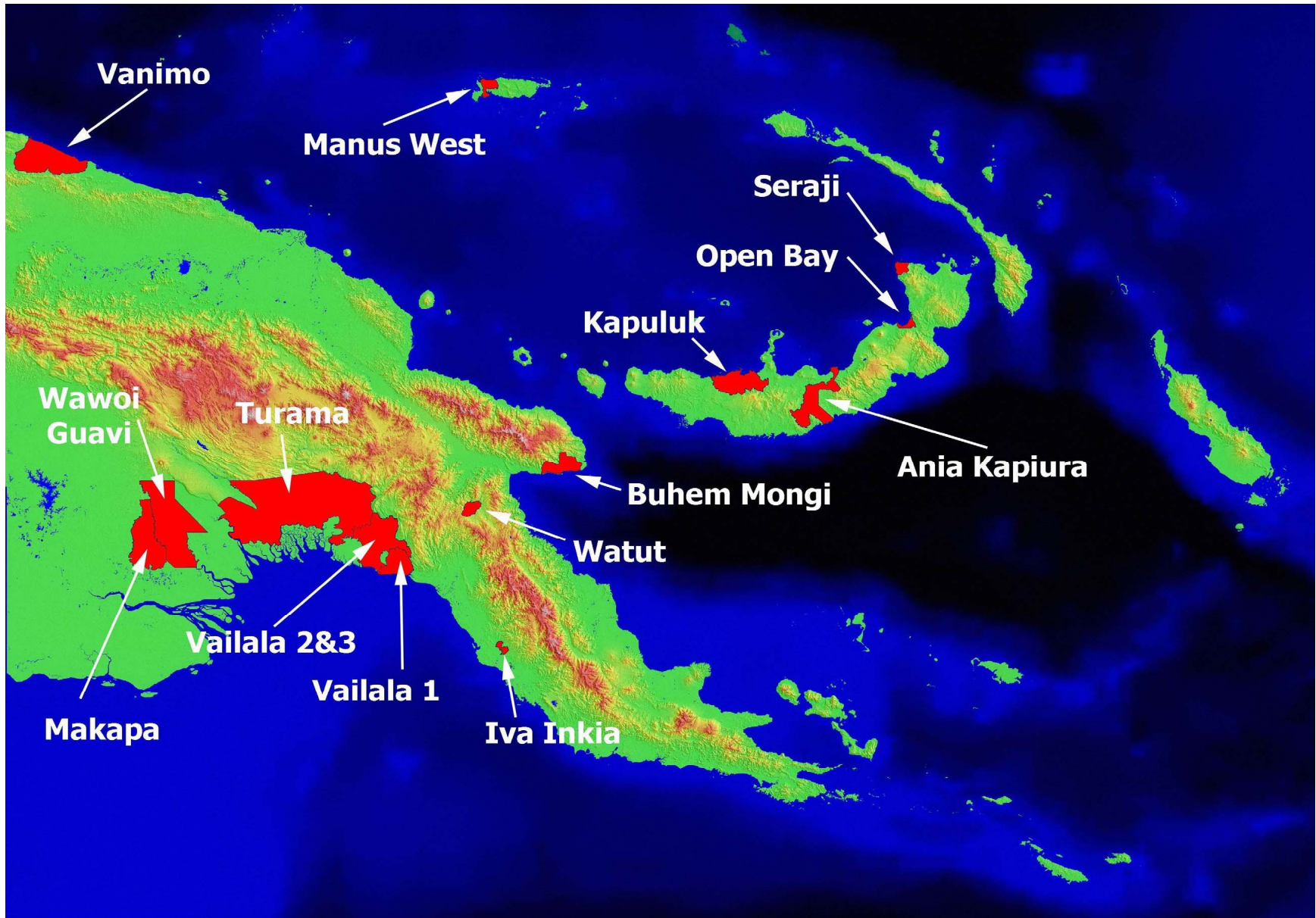
The situation with respect to planned new timber harvesting projects does not seem to be any better. Compliance Audits conducted in 2004 and 2005 for four new logging operations⁵³ found that in each case the project was not covered by a valid Environmental Plan (see Table 9).

⁵¹ Review of Current Logging Projects Observations and Recommendations Final Report Executive Summary (page ix)

⁵² Page 55

⁵³ East Awini, Amanab 1-4, Asengseng and Rottok Bay

Map 1: Location of concessions examined in the Review of Current Logging Projects



1.9 OVERVIEW OF LEGAL COMPLIANCE: *The analysis that has been presented above is based on the findings of the five government sponsored Reviews of different aspects of commercial forest management conducted between 2000 and 2005. This analysis is sufficient to provide a general overview of legal compliance in timber harvesting operations in Papua New Guinea using the seven criteria identified as key components for lawful timber harvesting. Table 6 summarizes the findings from the analysis presented above.*

The evidence suggests there is a general failure in legal compliance against key criteria in the majority of harvesting operations sufficient to warrant the general conclusion that most are operating unlawfully.

Both the failure to secure informed consent and the inability of the State to ensure sustained yield management in natural forest areas are the most widespread and unambiguous problems. In many projects these failures are exacerbated by unlawful permit extensions, clear failures to apply or enforce applicable harvesting standards and failures to meet infrastructure and processing obligations. There is also clear evidence of a deeply concerning trend of labor abuse in many projects.

Table 6: General overview of legal compliance

Key criteria	Evaluation	Conclusion
Statutory requirements	Satisfactory compliance with most key elements but no application of sustained yield management principles in 12 of 14 projects and 9 of 14 permits unlawfully extended	Majority of projects fail on sustained yield and extensions
Informed consent	No informed consent to logging operations	All projects fail ⁵⁴
Procedures and proper process	General compliance although the quality criticized in some areas.	A general pass
Sustained timber yield from natural forest	No successful application of this principle in any projects	All projects fail ⁵⁵
Harvesting regulations	All parties failing to ensure the application and enforcement of harvesting regulations in most projects	Majority of projects fail on this criteria
Contractual requirements	Direct financial payments are made but a general failure to fulfill infrastructure and processing obligations. Many projects fail on one or two of the three keys elements	Performance is mixed and needs to be assessed on a project basis
Labor practices	Very poor in 4 of 6 projects. Anecdotal evidence from 8 other operations suggest non-compliance is widespread	Majority of projects fail on this criteria
Environmental plan	Plans did exist but had either expired and/or been archived with no effective monitoring of compliance	Many projects fail

⁵⁴ Probably including Open Bay and Watut

⁵⁵ Open Bay and Watut have achieved a sustained yield overall by supplementing natural forest harvesting with the establishment of plantations.

1.10 INDIVIDUAL PROJECT COMPLIANCE: *As well as providing a general overview of legal compliance across the logging industry, the five Reviews also contain sufficient detail to conduct a more specific analysis of legality in some individual current logging operations and some new and proposed projects.*

1.10.1 Current projects

The twelve largest logging projects in PNG in terms of the level of log exports in the period since 2000 generated over three-quarters of all PNG's total log exports by volume in the period 2000-2005 (see Table 7).⁵⁶

Eight of these twelve projects were studied as part of the *Review of Current Logging Projects* and one in the *Review of Disputed Permits and Permit Extensions*. Two of these projects have also been the subject of a Compliance Audit.⁵⁷ Three projects in the 'top twelve' were not included in any of the Reviews: Arawe (ranked number 6), Alimbit Andru (10) and East Kikori (11).⁵⁸ Five projects that were part of the Review of Current Logging Projects are not among the twelve largest log-exporting operations (see Table 8).

Each of the assessed projects failed to meet at least four of the eight key criteria for establishing the legality of a timber harvesting operation. Such a level of non-compliance against key criteria must lead to the conclusion that all these individual projects are currently operating 'illegally.' This conclusion applies to the five largest logging projects in PNG, to all nine in the top twelve studied as part of the Review process and to all fourteen operations investigated as part of the Review of Current Logging Projects. All the projects fail on the key criteria of informed consent and a sustained timber yield from the natural forest, and there is only one criterion – the paying of financial benefits – for which all the projects demonstrate a measure of compliance.

From this assessment, Rimbunan Hijau's logging operations in Vailala, Turama and Wawoi Guavi fail on the highest number of key criteria. These projects are the largest, second largest and fourth largest in PNG, respectively.

⁵⁶ PNG Eco-Forestry Forum Fact Sheet No.1 of 2005 'Log Export Projects 2000-2005'

⁵⁷ Vailala and Wawoi Guavi

⁵⁸ Excluded from the *Review of Current Logging Projects* on the basis that either the timber permit would expire with twelve months and no extension had been applied for or it was anticipated the timber resource would be logged out within two years - Review of Current Logging Projects Observations and Recommendations Final Report Appendix Two

Table 7: Summary of Legal Compliance in the Largest Current Logging Projects

Project	Rank (export)	Operator	Statute	Consent	Process	Yield	Harvest Code	Payments	Infrastructure	Processing	Environment	Labor
Turama	1	Rimbunan Hijau	Yes	No	No	No	No	Yes	No	No	Yes	No
Vailala	2	Rimbunan Hijau	No	No	No	No	No	Yes	No	No	No	N/a
Vanimo	3	WTK	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No
Wawoi Guavi	4	Rimbunan Hijau	No	No	Yes	No	No	Yes	No	Yes	No	No
Makapa	5	Innoprise	No	No	Yes	No	Yes	Yes	Yes	No	No	N/a
Arawe	6	Cakara Alam	Not reviewed									
Ania Kapiura	7	Nissho Iwai	Partial	No	Yes	No	No	Yes	Yes	No	Yes	No
Open Bay	8	Open Bay	No	No	No	No ⁵⁹	Yes	Yes	Yes	No	Yes	Yes
Kiunga-Aiambak	9	Samling	No	No	No	No	N/k	Yes	N/a	N/a	N/k	N/a
Alimbit Andru	10	Rimbunan Hijau	Not reviewed									
East Kikori	11	Rimbunan Hijau	Not reviewed									
Kapuluk	12	Samling	Partial	No	Yes	No	No	Yes	No	No	Yes	N/a

Notes

Statute: Does the project broadly conform to the requirements of the Forestry Act 1991 as amended?

Consent: Is it likely the landowners gave their informed consent to logging?

Process: Was due process generally followed when the Timber Permit was granted?

Yield: Is the project being managed to produce a sustained yield of timber from the natural forest?

Harvest Code: Does logging generally comply with the requirements of the Logging Code of Practice?

Payments: Are required royalties and other resource payments being paid?

Infrastructure: Are required infrastructure developments being provided?

Processing: Have mandated processing facilities been brought on-line?

Environment: Is the project covered by a current Environmental Plan?

Labor: Are statutory minimum standards being met in employment practices?

Source: All data derived from the Reports of the Independent Review of Disputed Timber Permits and Permit Extensions and the Individual Project Reports from the Review of Current Logging Projects

⁵⁹ The Open Bay project does maintain a sustained yield of timber, as 12,000 hectares of the natural forest area have been converted to plantation.

Table 8: Summary of Legal Compliance in other Reviewed Projects

Project	Operator	Statute	Consent	Process	Yield	Harvest Code	Payments	Infrastructure	Processing	Environment	Labor
Buhem Mongi	Willis Kent	Yes	No	No	No	No	Yes	No	No	Yes	N/a
Iva Inika	Kerawara	No	No	Yes	No	No	Yes	No	N/a	No	N/a
Manus West Coast	Rimbunan Hijau	No	No	Yes	No	No	Yes	No	No	No	N/a
Seraji	Deegold	No	No	No	No	No	Yes	Yes	No	No	N/a
Watut	PNG Forest Products	No	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes

Source: All data derived from the Reports of the Independent Review of Disputed Timber Permits and Permit Extensions and the Individual Project Reports from the Review of Current Logging Projects

1.10.2 New projects

There are four projects for which Timber Permits have recently been granted or which will be allocated in the near future and for which a Compliance Audit has been conducted to assess performance against key legal criteria.

According to the Audits, four projects fail to meet a number of key legal criteria. None of the projects are based on the informed consent of resource owners, none will ensure a sustainable yield of timber and all have flawed Environmental Plans (see Table 9).

Table 9: Legal Compliance in New Logging Projects

Project	Developer	Status (Nov 2005)	Statute	Plan	Consent	Process	Yield	Environment Plan
Amanab 1-4	WTK	Timber Permit	Yes	No	No	No	No	No
Asengseng	Rimbunan Hijau	Project Agreement	Yes	No	No	Yes	No	No
East Awin	GL Niugini	Timber Permit	Yes	Yes	No	Yes	No	No
Rottock Bay	Cakara Alam	Project Agreement	Yes	No	No	Yes	No	No
Summary			4/4	1/4	0/4	1/4	0/4	0/4

Notes:

Statute: Does the project conform to the requirements of the Forestry Act 1991 as amended?

Plan: Is the project listed in the National Forest Plan?⁶⁰

Consent: Is it likely the landowners gave their informed consent to logging?

Process: Was due process generally followed in developing the Timber Permit?

Yield: Will the project produce a sustained yield of timber from the natural forest?

Environment: Is the project covered by a valid Environment Plan?

Source: Data derived from the Compliance Audit Reports and the earlier findings in the Individual Project Reports of the 'Review of Forestry Harvesting Projects being processed towards a Timber Permit or a Timber Authority

⁶⁰ The Forestry Act mandates that forest resources can only be developed in accordance with the National Forest Plan

These data indicate there is a serious breakdown in the application of proper legal criteria in the development and allocation of new timber harvesting projects such that they are legally flawed before operations even begin. They should be classified as unlawful.

The analysis shows that, for the new projects, the compliance assessments provided by the *2001 Review of Forestry Harvesting Projects being processed towards a Timber Permit or a Timber Authority* have largely been ignored and the recommendations made, even though politically endorsed⁶¹ have not been acted upon. As a consequence these projects are coming into production with considerable legal flaws.⁶²

Specifically, there also appears to be a general failure to implement the recommendations from the Ombudsman Commission in its report on the allocation of Kamula Doso. The Report recommended that new timber permits should not be given to logging companies *'who have failed to meet their statutory, contractual or fiduciary obligations'*⁶³ in their current operations.

Both WTK and Rimbunan Hijau were assessed unfavorably in the Review of Current Logging Projects. Rimbunan Hijau was also heavily criticized in the Review of Disputed Permits and Permit Extensions yet these companies are being allocated new permits.

1.10.3 Conclusion

These findings show that the majority of commercial timber harvesting in Papua New Guinea is not being conducted lawfully. Both the timber harvesting permits and the operations themselves can be characterized as illegal. This analysis applies across the entire forestry sector and to all the individual projects studied in the various government initiated Reviews. It indicates a breakdown of governance control and either an inability or unwillingness in those charged with exercising control and administering the forest industry to fulfill their mandated functions.

This conclusion endorses the view expressed in the Review of Disputed Timber Permits and Permit Extensions that the 'Robber barons'⁶⁴ of the forest industry are *"...now as active as they ever were. They are not only free to roam, but are in fact encouraged to do so by persons whose proper role is to exercise control over them."*⁶⁵

⁶¹ By the National Executive Council in November 2001

⁶² Despite these rather patent legal failings, the Review noted the ANZ Bank provided a Bank Guarantee in respect of East Awin that effectively secured the logging rights for the selected developer, GL Niugini.

⁶³ Recommendation 6 of the Final Report of the Ombudsman Commission Investigation into a Decision of the National Forest Board to award Kamula Doso to Wawoi Guavi Timber Company (page 112)

⁶⁴ This is a reference back to the 1987 Commission of Inquiry that characterised the forest industry as robber barons roaming the countryside and seizing at will whatever forest they wanted

⁶⁵ Report on Confidential Matters from the Review of Disputed Timber Permits and Permit Extensions (page 1)

CHAPTER 2. ENVIRONMENTAL SUSTAINABILITY

Environmental sustainability is a concept that has been given many different definitions but at its core is the notion that the ecological integrity of a geographical area should be maintained. In the context of timber harvesting from natural forest areas, if environmental sustainability is to be achieved, it requires that the intervention does not adversely impact the range and quantity of the biodiversity or the nature and extent of the areas' ecological functions.

In Papua New Guinea, full environmental sustainability is not a policy goal or a legal requirement, although laws and regulations do exist that seek to mitigate the environmental impact of timber harvesting operations.

Papua New Guinea's Constitution, which was adopted in 1975 when the country was given independence, contains motherhood statements on the need to protect the natural environment. Specifically it mandates that:

"Papua New Guinea's natural resources and environment be conserved and used for the collective benefit of us all, and be replenished for the benefit of future generations. We accordingly call for wise use to be made of our natural resources and the environment...in trust for future generations; and the conservation and replenishment...of the environment; and all necessary steps to be taken to give adequate protection to our valued birds, animals, fish, insects, plants and trees."⁶⁶

This theme was first translated into the laws and regulations governing the forestry sector in PNG in the early 1990s when, with major donor support from overseas and following a seminal Commission of Inquiry into the activities of the logging industry, the system for forestry administration was completely overhauled.

The long title of the new Forestry Act (1991) included the goal *"manage, develop and protect the Nation's forest resources and environment in such a way as to conserve and renew them as an asset for the succeeding generations."* These words were repeated in the body of the Act as the first objective of the newly formed PNG Forest Authority, which was mandated to administer forest management on behalf of the State.

The new Act and descendant policies and regulations⁶⁷ were all devised with two key objectives in mind. These were to: 1) achieve a continuous supply of timber from the forest estate, and 2) to achieve some measure of forest conservation.

In order to achieve these objectives, laws and regulations placed a responsibility on the State to ensure harvesting is planned and implemented according to the principles required to maintain a sustained yield of timber while environmental impacts are minimized to protect the future commercial crop and maximize the ability of the forest to regenerate.

⁶⁶ Constitution of the Independent State of Papua New Guinea, Fourth National Goal and Directive Principle

⁶⁷ The range of laws, policies and regulations are set out in some detail in the Final Report from the Review of Current Logging Projects (*see at Item 5.17 in Report One*)

In assessing the environmental sustainability of large-scale timber harvesting operations in PNG, it is useful to look at the findings from the various Reviews that relate to these two criteria.

2.1 SUSTAINED TIMBER YIELD: In the language of Papua New Guinea’s National Forest Policy, published in 1991, an overarching objective in the management of forest resources is: “To ensure the sustainability of our forests, that is to say, through proper management practices our forests may be used but are not “used up” and are retained as a renewable resource.”⁶⁸

In order to achieve this goal it was mandated that forest resources “be managed and utilised in accordance with programmes embodying the principles of sustained yield management” which shall be “the guiding principle.”⁶⁹ The Policy requires that a “benchmark formula” should be used for calculating the allowable level of harvesting and this was to be set by “dividing the total merchantable resource within the production forest by an assumed cutting cycle of forty years.” This formula was to be reviewed in light of further research. Subsequent regulations⁷⁰ have detailed the nature of the calculations that are to be made in establishing the gross and net harvestable areas, the gross and net commercial timber volumes and the annual allowable harvesting level.

2.1.1 Findings

Although set as a guiding principle in 1991, the evidence from the five Reviews show that sustained yield management is not being achieved in either the planning or management of timber harvesting operations in Papua New Guinea, and currently no logging projects are successfully applying the principle.

Two key problems are that resource data are not accurate in new and planned projects, which leads to annual allowable harvesting rates that are too high, while older projects that were not established in accordance with sustained yield principles have not been brought into compliance with the Policy and Legislation.

2.1.2 New and planned projects

The Reviews all point to a conclusion that the principle of sustained yield management is not being successfully applied in the planning and allocation of new harvesting projects.

The 2001 ‘*Review of Forestry Harvesting Projects being processed towards a Timber Permit or a Timber Authority*’ examined thirty proposed large-scale log harvesting operations that are required to be managed on a sustained yield basis. The Review found that in many cases the calculations of merchantable timber were neither based on reliable survey data nor calculated correctly. The extent of the timber resource, therefore, had often been exaggerated. In fact, many of the proposed projects contained too little

⁶⁸ National Forest Policy, Ministry of Forests, 1991.

⁶⁹ Page 6

⁷⁰ Forestry Regulations 1998 as amended

timber to be commercially viable if harvested on a forty year cycle. The Summary and Recommendations Report from the Review stated:

“There has been insufficient forest inventory resulting in unreliable forest resource descriptions; and insufficient care is taken with the resource descriptions set out in the Forest Management Agreements. In some instances these are wildly misleading.”⁷¹

The Review found that only two of the thirty proposed projects had conducted an adequate (one percent) resource inventory. Only four projects had correctly stated the gross loggable area. No project had set aside the mandated ten percent of the gross area for conservation purposes.

The Review concluded that only four of the thirty proposed harvesting operations clearly had the potential to proceed as viable projects based on sustained yield principles.⁷² For each of these projects, the Review identified a series of remedial steps that were necessary to ensure proper compliance with laws, regulations and procedure.

The Review also identified a further six proposed harvesting operations where there could be the potential for a viable project, but only if (a) policy decisions were made to allow logging in identified ‘fragile forest’⁷³ areas, (b) the forty year logging cycle was reduced to thirty-five years and (c) the mandated ten percent conservation ‘set-aside’ was not implemented. The Review did not offer an opinion on whether or to what extent these policy decisions would impact on the ability of the forest to produce a sustained yield.

The Review recommended the remaining twenty projects should not proceed as the amount of forest resource was insufficient for a viable large-scale log export harvesting operations based on sustained yield principles.

The 2004 Compliance Audits included the study of four projects covered in the earlier 2001 Review which had further progressed and were now at the final stage of the allocation process with a Timber Permit already issued or imminent.

As already referred to in Section 1.10, the Audits found the necessary remedial actions identified in the earlier Reviews had not been implemented, and specifically, the need to reassess the sustainable level of harvesting and base the calculations on reliable inventory data had not been undertaken. As a consequence, the conclusion in all four cases was that the resource data and the specified annual level of harvesting in the project documentation were unreliable and did not satisfy the sustained timber yield requirements of the Forestry Act and Policy.

⁷¹ Review of Forest Harvesting Projects being developed towards a Timber Permit or Timber Authority Observations and Recommendations Report at page ii of the Executive Summary.

⁷² This number was later reduced to three when a Compliance Audit in 2004 found that the actual net commercial timber volume in the proposed East Awin project was in truth much lower than the 2001 Review had revealed and the project was not viable on a sustained yield basis.

⁷³ Fragile forests are forest types such as those that suffer inundation or on limestone karst that have been identified as unable to support logging on a forty year cycle as the conditions will not ensure rehabilitation within this period and logging should either be excluded all together or conducted on a longer cycle.

Each of the Compliance Audits contains an estimate of the likely correct annual level of harvesting required to comply with the principle of a sustained yield. In each case these estimates were substantially lower than the permitted harvest in the project documentation,⁷⁴ and in each case they were below the accepted threshold for a commercially viable large-scale log export project⁷⁵.

The Compliance Audits each state that:

“Proper forest inventory underpins sound forest management. The Forest Authority Board should reasonably expect that forest resource descriptions presented to them by the National Forest Service are soundly based. Field inventory is a basic forestry skill, and it reflects very poorly on the professionalism of the National Forest Service that it is unable to undertake this basic forestry task, and that it is comfortable in presenting unreliable data to the Board.”⁷⁶

2.1.3 Existing Projects

The principle of extracting a sustained yield of timber from the forest is also not being applied in existing forestry operations. The 2003 Review of Disputed Timber Permits and Permit Extensions looked at the question of sustainability in three existing logging operations where the Timber Permit had recently been extended in time to allow logging to continue. The Review found that in each project the principle of sustained yield management had not been applied.

- **Wawoi Guavi:** The Wawoi Guavi Timber Permit was first issued in April 1992 and allowed the available timber resource to be logged over a ten year period.⁷⁷ The Review examined the ten year Permit extension granted in 2002 and concluded that:

“It is clear that the resource will be exhausted well within the period of the extension. No regard has been had at all to the application of a 35 year (or any other) cutting cycle to ensure the sustainability of the resource.”⁷⁸

The Review also concluded that *“the estimated remaining resources have been grossly and negligently overestimated”* and that at the allowable rate of harvesting the entire timber resource could be completely exhausted within as little as two years.

- **Vailala Blocks 2 & 3:** The original Timber Permit for the Vailala Blocks 2&3 logging project was issued in June 1992 and allowed the timber resource to be harvested over a ten-year period.

⁷⁴ Amanab Blocks 1-4, 17,500 cubic meters per year not 94,000. Asengseng, 53,000 cubic meters per year not 96,000. East Awin 37,500 cubic meters per year not 141,000. Rottock Bay 44,000 cubic meters per year not 78,000.

⁷⁵ 70,000 cubic meters per year

⁷⁶ This comment can be found at the foot of the last page of Attachment Two to each of the four Compliance Audits.

⁷⁷ It is not noted in the Review Report, but it is picked up in the later Compliance Audit of the Project conducted in April 2004, that when the Permit was originally issued it was in breach of the Forest Policy requirement for the application of a forty year logging cycle and in allowing the forest to be harvested over ten years there was clearly no attempt to apply the principle of sustained yield management.

⁷⁸ Review Report (pages 3-4)

In granting an extension of the Timber Permit for a further term of ten years, the Review found that the issue of sustainability:

“Was not adequately addressed” and “in fact the allowable cut would seem to exceed a sustainable figure by about 300%.” As a result “logging operations under the extended permit cannot be said to be in accordance with sustainable management practices.”⁷⁹

- **Passismanua:** Passismanua was the third Timber Permit extension examined as part of the Review of Disputed Allocations. This Permit had also been issued in 1992 and again allowed the available timber resource to be logged over a ten year period in breach of the forty-year cycle and the principle of sustained yield management.

The Review found that the remaining available resource was estimated by the National Forest Service to be just 50,000 cubic meters. Under the terms of the Permit the annual allowable cut was 150,000 cubic meters, which the Review found was “100 times higher” than the estimated sustainable cut of just 1,428 cubic meters.

The Review concluded that *“The logging operation under the extended permit cannot be said to be in accordance with sustainable management practices.”⁸⁰*

The Review of Current Logging Operations looked at fourteen existing large-scale timber harvesting operations. It correctly noted that only two of the projects studied had been initiated after the new Forestry Act came into force in June 1992 and therefore most were not originally designed to produce a sustained yield of timber (despite the motherhood statements in the PNG Constitution and the fact that some did post date the September 1991 National Forest Policy).⁸¹

The Review also noted that the Forestry Act provided a mechanism for the older projects to be brought into compliance with the new legislation but that any attempts had failed and the opportunity has now been lost. As a result, none of these projects were being managed on a sustained yield basis and it was predicted all would be ‘logged out’ within five years.

“Whilst the new Forestry Act 1991 provided powers to bring these projects into line with the requirements of the National Forest Policy 1991 (essentially reducing the permitted annual allowable cut to a sustainable level), the limited attempt made soon after the commencement of the Act was not successful. The opportunity to comprehensively restructure any of the logging projects authorised under the old Act has now passed. Although the term of some of these projects is being extended to allow harvesting to be completed, it is expected that nearly all of these projects will have exhausted their forest resource and ceased operations by 2010.”⁸²

The two projects that were initiated after the Forestry Act became operational are Turama Extension and Buhem Mongi Busaga. Both projects were studied as part of the Review of Current Logging operations.

⁷⁹ Review Report (pages 3-4)

⁸⁰ Review Report (page 3)

⁸¹ These projects were Wawoi Guavi, Makapa, Vailala Blocks 2&3 and Vanimo

⁸² Observations and Recommendations Final Report at page 83

- ***Buhem Mongi Busiga:*** In the case of Buhem Mongi Busiga, a Timber Permit was granted in 1997 for a term of thirty-five years. The Permit estimates the net commercial timber resource to be 2,096,000 cubic meters and allows a maximum annual harvest of 61,000 cubic meters. At this rate of harvesting and based on these figures the area would be completely logged in just under thirty-five years (five years less than the forty mandated in the National Forest Policy).

However, the Review considered that the net commercial volume per hectare figures that were used in the Forest Authority calculations were “*unrealistically high.*”⁸³ The Review did not offer any further clarification on what a reasonable figure might be, although evidence from other similar projects in that area suggests the figures used might be twice what could be reasonably expected. This would have a substantial impact on the ability of the forest to sustain logging for thirty five years and to maintain a sustained yield thereafter.

- ***Turama Extension:*** The Turama Extension project is rather unusual in that the Timber Permit was issued in June 1992, days before the new Forestry Act came into force and before the State had acquired the rights to manage the forest from the landowners. Those rights were acquired three years later. This Permit is the largest in Papua New Guinea in terms of its geographic size and covers an area of 1.25 million hectares. The Timber Permit allowed the forest to be cut over a period of ten years without any application of the sustained yield principle and this has not subsequently been changed.

Further anecdotal evidence of the failure to ensure sustainable yield management in existing forestry operations can be found in the report of the 2002 Forestry Revenue Review. There it is recorded that in relation to West New Britain: “*The Provincial Office of the Forest Service advised that as of October 2001 there were 7 large logging camps operating in the province, with 9 large logging camps having shut down over the past 2 to 3 years. Eight of these shut down due to resource depletion, with only one shutting down due to low profits.*”⁸⁴

2.2 CONTROL OF ENVIRONMENTAL IMPACTS: In order to achieve a sustained yield of timber from the forest, it is not sufficient to only regulate the rate of harvesting; the manner in which harvesting operations are planned and carried out must also be controlled. This is recognized in the policies, laws and regulations relating to the administration of forest management in Papua New Guinea, which provide a detailed framework for the planning and conduct of harvesting operations and post-harvest assessments.

This framework includes detailed five-year and annual working plans that specify the proposed interventions, a Logging Code of Practice with key standards governing harvesting operations, roading and post-harvest treatments and a statutory requirement for approved Environmental Plans.⁸⁵

⁸³ The figures used was 35 and 44 cubic meters per hectare

⁸⁴ Review of the Forest Revenue System in Papua New Guinea - Final Report, March 2002 (page 83)

⁸⁵ A full list of the measures that comprise the framework can be seen in the Observations and Recommendations Final Report (pages 1 and 71)

The Review of Current Logging Operations provided a comprehensive assessment of the performance of industry in implementing the framework for control of harvesting operations and the National Forest Service in monitoring and enforcement. The Review included field assessments of all large-scale logging projects that were currently operational and where it was expected that the timber resource would not expire and operations would not cease within the next two years. This involved a total of fourteen projects.

The overall finding of the Review was that the environmental impacts of timber harvesting operations were not being adequately controlled and the regulatory framework was not being enforced:

“The Review Team observed that many breaches of the logging standards go unreported and are not actioned. Field based PNGFA monitoring officers have lost faith that their attempts to impose sanctions on non-complying logging companies will be backed up by senior management, who in turn take their cue from the current political leaders. Although the logging companies could improve the supervision of their own field operations, achieving compliance with the requirements of the Planning Monitoring and Control Procedures (including the 24 Key Standards) relies mainly on more assertive and effective field monitoring and control by the Government’s regulatory agencies.”⁸⁶

This general finding of a lack of implementation and enforcement of harvesting controls was reinforced in the Review Report in the findings in relation to each of the three key stakeholders – industry, PNG Forest Authority and the Department of Environment and Conservation.

The Review presented three main findings in relation to the planning and control of logging operations by industry. These were:

- 1) *“The logging companies generally employ expatriates, mostly Filipinos, to plan and control their logging operations. Most of the expatriates have no qualifications in forestry, or received any training in the Planning Monitoring and Control Procedures.”*
- 2) *“Generally plans are well prepared. Many logging companies have access to computer aided mapping systems. However, implementation of the plans in the field is suspect.”*
- 3) *“The Review Team observed a number of instances where the logging had been sub-contracted, and the sub-contractor did not have a copy of the approved plans, in particular the approved Annual Logging Plan. It is unclear how the sub-contractor is expected to follow a plan he does not possess.”⁸⁷*

The Review also presented its findings on environmental monitoring and control by industry:

“Many logging companies have failed to comply with the Approval Conditions of their Environmental Plan, especially in failing to actively implement an Environmental Monitoring and Mitigation Programme, and a Waste Management Plan.

⁸⁶ Observations and Recommendations Final Report, Executive Summary (page viii)

⁸⁷ Observations and Recommendations Final Report (page 39)

Where an Environmental Management Officer is appointed, he typically has other duties, and his environmental responsibilities are not given priority.”⁸⁸

On the performance of the PNG Forest Authority, the Review findings were that:

“Field monitoring and control is essential if the forests are to be managed in a sustainable and environmentally sensitive manner. It is clear that proper field monitoring and control is being compromised... It is the view of the Review Team that field monitoring and control is the core business of the PNGFA, and that it is not acceptable that over-expenditure in other areas is being allowed to adversely affect its performance in this area”⁸⁹

For the Department of Environment and Conservation the Review concluded

“There is a consistent lack of DEC field monitoring and control in the forestry sector... This is of concern because it means that there is no effort being made to ensure that the logging companies comply with the DEC approved plans; to guide the companies where there is lack of compliance; or to impose sanctions where there is a material and ongoing failure to meet the terms and conditions of the Environmental Permits.”⁹⁰

And later *“There is no effective monitoring of compliance with Environmental Plans, Environmental Plan conditions, Environmental Management and Monitoring Programmes, or Waste Management Plans for the logging industry. As a consequence there is no enforcement effort, or any application of penalties... For a number of active logging projects, the Environmental Plans had been archived, and even the expiry of Environmental Plans in some cases has not been noticed or actioned.”⁹¹*

The Review also noted many other problems that were not only affecting the ability of forests to recover from the disturbance caused by harvesting operations, but were also inhibiting the regrowth of commercial species. These included gardening activities by landowners, re-logging of abandoned coupes, and *“very little effort by the forest industry to undertake reforestation.”⁹²*

The Individual Project Reports in the Review are generally critical of the standards of industry in its implementation of planning and harvesting control procedures and of the effectiveness of the Forest Authority in ensuring compliance (as can be seen from the summary comments above). The Review did, however, single out four logging operations for showing a markedly better standard of performance than the rest. These were Ania Kapiura, Makapa, Open Bay and Watut.

2.3 CONCLUSIONS

The five Reviews present substantial evidence pointing to non-compliance by large-scale timber harvesting operations in the required measures to ensure a sustained yield of timber. Although the

⁸⁸ Observations and Recommendations Final Report (page 41)

⁸⁹ Observations and Recommendations Final Report (page 49)

⁹⁰ Observations and Recommendations Final Report (page 56)

⁹¹ Observations and Recommendations Final Report (page 58)

⁹² Observations and Recommendations Final Report (page 61)

requisite laws, policies, regulations and procedures appear to be clearly established and understood by the operators, the Reviews show that they are not being followed.

As a result of this situation, annual allowable harvesting levels in individual projects have been set too high, and forest areas are effectively being ‘logged out.’ The ability of the forest to regenerate is being seriously compromised by the lack of appropriate planning and care.

In planned and new timber harvesting projects the resource data is inaccurate because it is based on limited sample data of questionable veracity. This leads to the overestimation of the available commercial timber and harvesting rates that are too high, while the mandated forty year cycle has been reduced to thirty-five years without any available explanation.

In existing logging projects the opportunity provided by legislation to bring the operations into line with sustained yield principles has not been taken and the poor quality of the harvesting operations is compounded by the failure of the authorities to effectively monitor and enforce the required standards.

Papua New Guinea’s large-scale timber harvesting operations do not comply with the requirement to provide a sustained yield of timber and can therefore be no measure of environmental sustainability. While the problems that have given rise to this situation have been clearly identified there is no evidence of measures being taken to change the current paradigm.



“The Review complimented the quality of harvesting management in the Open Bay project”

CHAPTER 3. SOCIAL IMPACTS

A comprehensive assessment of the social impacts of large scale resource development projects on rural communities and the positive and negative ramifications felt by local people needs data from in-depth field studies over a period of years. The five government Reviews were not able to conduct such analyses and therefore cannot provide sufficient data to compile such a picture. However, the Reviews can provide a fairly detailed and very useful snapshot of the impacts of forest harvesting projects on local communities.

These impacts were listed in the Observations and Recommendations Report of the *Review of Current Logging Projects*:

“Direct financial benefits include... landowner royalty receipts, project development benefit payments, various specified levies, log export premium payments, and employment wages for PNG workers... Non-monetary costs ... relate to health care, education, market access, training and skills acquisition, food and livelihood security, impacts on drinking water quality, fish stocks and the availability [of] other subsistence resources, the social impact of land tenure disputes, interaction with foreign nationals, and income volatility and uncertainty.”⁹³

In considering the information available in the Review reports, it is useful to first consider two aspects of timber harvesting that are often cited as the primary reasons why local communities welcome logging in their forest areas: direct financial benefits and promises of infrastructure development.

3.1 FINANCIAL BENEFITS FOR LOCAL COMMUNITIES: In rural areas of PNG, there are usually extremely limited opportunities for formal paid employment. While most rural people in PNG have cash incomes from small-scale agriculture, the informal economy, or remittances from employed family members living in town, these amounts are usually small and irregular. Direct financial payments to local resource owners are therefore a major inducement to accept commercial exploitation of forest resources.⁹⁴

The extent and size of direct financial benefits paid to resource owners in the forestry sector varies from project to project and can change over time as agreements are renegotiated to satisfy stakeholder expectations or changing circumstances. A timber royalty calculated according to the volume of timber harvested is common to all projects. The rate is nationally mandated and currently stands at K10 per cubic meter (about 3 US dollars).

Based on current export levels, resource owners are currently entitled to receive about K20 million kina (US\$6 million) in royalties each year. This represents about K4 (US\$1.20) per person if averaged

⁹³ Observations and Recommendations report (page 65)

⁹⁴ Review of Current Logging Projects Observations and Recommendations Report (pages 36 and 69) and Appendix 8 (page 22)

across the whole population of PNG.⁹⁵ This can be contrasted with the K100 million (US\$30 million) government receives each year through the log export tax.

Most projects also require an additional premium to be paid to resource owners calculated on either the size of the harvest or the level of log exports. Rates vary from project to project and can be volume or price based. Various other smaller amounts may be paid to resource owners in levies or under lease agreements for the use of land or waterways or to compensate for noise or dust.

3.1.1 FINDINGS

Table 10 shows the principle payments logging companies are obliged to make in the fourteen harvesting operations assessed as part of the Review of Current Logging Projects as well as information on the amounts actually paid. These projects accounted for sixty-five percent of all log exports in 2004 and therefore should present a fairly representative picture of the logging industry as a whole.⁹⁶

⁹⁵ Based on the data from the 2000 Census

⁹⁶ See the Statistical Profile in Section 5 below

TABLE 10: FINANCIAL OBLIGATIONS AND PAYMENTS

Permit	Obligations	Review Findings
Iva Inika	<ul style="list-style-type: none"> ▪ K10 (US\$3) royalty on logs scaled ▪ K10 export premium to landowner company ▪ K4 (US\$1.20) in levies on logs scaled 	No details provided on actual payments made although landowner dissatisfaction with payment distribution is noted
Manus West Coast	<ul style="list-style-type: none"> ▪ K10 royalty ▪ Unspecified log export premium 	PNGFA unable to provide any statistics on royalty payments. Review estimated K3.5 (US\$1) million paid since 1988 based on the export volumes ⁹⁷
Buhem Mongi Busagi	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ K4 processing levy ▪ Project Development Levy (K2-13) 	Royalty – K1.75 (US\$0.525) million paid 1997-2003 No processing levy paid PDL – K1.3 (US\$0.4) million paid 1997-2003
Makapa	<ul style="list-style-type: none"> ▪ K10 royalty on logs scaled ▪ Log export premium (7% of fob) ▪ Various infrastructure funds 	1999-2003 K6 (US\$1.8) million royalty paid 1999-2001 K900,000 premium collected Company claims K17.6 (US\$5.25) million paid to landowners in total 1999-2003
Kapuluk	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ Log export premium (3% of fob) ▪ Various levies 	1993-2003 K4.25 (US\$1.3) million royalty paid Company claims K5.6 (US\$1.7) million in total paid to landowners between 1997 and 2003
Seraji	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ K8 export premium ▪ K2 levy for community services 	The permit holding landowner company claims K52,000 (US\$15,000) paid to landowners and K174,000 (US\$52,500) in liquid assets
Vailala 1	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ Log export premium (3-7% of fob) ▪ Various levies 	PNGFA unable to provide any statistics on royalty payments, Review estimate K2.5 million 1997-2003 based on log export data
Vailala 2&3	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ Log export premium (5% of fob) ▪ Various levies 	PNGFA unable to provide any statistics on royalty payments, Review estimate K5.5 (US\$1.65) million 1997-2003 based on log export data
Turama	<ul style="list-style-type: none"> ▪ K10 royalty on logs scaled ▪ Log export premium (7% of fob) ▪ Various infrastructure funds 	PNGFA unable to provide any statistics on royalty payments, Review estimate K14.3 (US\$4.3) million 1997-2003 based on log export data
Watut	<ul style="list-style-type: none"> ▪ K10-15 royalty on logs harvested ▪ Various levies 	1992-2003 K1.1 (US\$0.33) million royalty paid and K500,000 (US\$150,000) in levies
Ania Kapiura	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ Project Development Levy (K2-13+) 	1993-2003 K7.75 (US\$2.3) million royalty paid 1997-2003 K3.4 (US\$1) million development levy
Open Bay	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested 	1995-2003 K4.2 (US\$1.25) million royalty paid
Vanimo	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ K5 export premium ▪ K1 agriculture levy 	Company claims 1990-2002 K19 (US\$5.7) million paid in royalties and K20 (US\$6) million in premiums and levies
Wawoi Guavi	<ul style="list-style-type: none"> ▪ K10 royalty on logs harvested ▪ K6 premium on logs harvested ▪ Various lease payments 	1992-2003 K24.5 (US\$7.5) million royalty paid and company claims K9.75 (US\$3) million in premiums and levies

Source: All data derived from the Individual Project Reports from the Review of Current Logging Projects

⁹⁷ The Review was as “unable to substantiate the amount actually paid”

The information in the Reviews on the amounts that resource owners are actually receiving on a project-by-project basis is very limited and often incomplete. The largest projects appear to be distributing up to around K1 million (US\$300,000) in cash payments each year.⁹⁸ How equitably this money is distributed, who actually receives it and whether it provides any long-term benefit is unclear.

The Resource Economists engaged as part of the *Review of Current Logging Projects* found:

“Few lasting benefits are reaching landowners because payments to the poorest and most remotely located communities are too small and ephemeral to have a lasting impact and are not complemented by investment in public services by government. Payments that reach rural populations, furthermore, are primarily used to purchase consumables⁹⁹ by men and infrequently invested.”¹⁰⁰

There are a number of factors at play here. Because of the difficulties of distributing cash payments to individual families, financial benefits are usually paid to clan agents or landowner companies for distribution. This is one source of many grievances expressed by resource owners who claim there is no transparency or accountability in how these sums are distributed.¹⁰¹ This can to some extent be seen as a social consequence of the failure to properly identify and consult with resource owners during the project development stage that was discussed in Section 1.2 above as part of the issue of informed consent. As the resource owners have never been accurately identified or mobilized into representative groups it seems logical that it may be almost impossible for cash payments to later be distributed equally and fairly.

Other concerns expressed by resource owners during the Reviews include the large expenses incurred by local leaders travelling to provincial centers or the capital to collect payments¹⁰² and the involvement of ‘loan sharks’ who advance monies to individuals and groups and then charge very high interest rates when reimbursed directly from royalty or premium payments.

There is also the problem that because logging is not managed on a sustained yield basis, cash incomes to local groups only exist for a few years as the logging company moves through a particular forest area and do not provide ‘*sustained and certain income streams.*’¹⁰³

⁹⁸ This assessment can be compared with the analysis in Appendix 8 of the Observations and Recommendations Report that concluded in the six projects studied landowners were entitled to about K2.1 million in cash payments each year (page 25)

⁹⁹ Which were ‘often available at a single outlet, sometimes under the ownership and control of logging companies’ Observations and Recommendations Report, Appendix 8 (page 20)

¹⁰⁰ Observations and Recommendations Report, Appendix 8 at page i

¹⁰¹ This lack of accountability was confirmed by the Review of Current Logging Projects which was itself unable to verify the total amounts paid by logging companies over time or identify recipients

¹⁰² A graphic example of this was provided in November 2005 in a court case involving a claim for K226,000 for accommodation and entertainment costs incurred in Port Moresby by a group of seven clan agents from the Makapa project who had gone to the capital city to collect timber royalty payments. *The National*, “Hands Off Landowner Funds, Top Court Rules,” 7 November 2005 (www.thenational.com.pg)

¹⁰³ Observations and Recommendations Report, Appendix 8 (page 20)

The 2001 Review of the Forest Revenue System found that “...many of the stakeholders we consulted were of the view that most of the payments to landowners had been wasted and those from logged areas were made worse off by logging.”¹⁰⁴

This view was confirmed somewhat in the overall findings of the Review of Current Logging Projects in 2004 which concluded:

*“Personal income is directed to immediate consumption, and community income tends to be squandered by so-called land owner companies who purport to represent the landowners... the level of income under current arrangements is generally too small to impact significantly on rural living standards. It is evident that in general landowners are not able to manage their affairs in the democratic way they are expected to with regard to their organization and the management of cash flows from logging projects for long term benefits.”*¹⁰⁵

It was also noted that:

*“Little of the royalty payments were flowing to the women and children in the villages, even where the society is matrilineal and ‘the flow of royalty payments in most cases resulted in an increased dependence on shop bought foods, especially rice, tinned fish, and soft drinks. There is little evidence of expenditure on improved housing for example.”*¹⁰⁶

3. 2 INFRASTRUCTURE OBLIGATIONS: Resource owners cite the promise of local infrastructure developments as another major inducement to granting logging company access to forest resources.

Specific infrastructure development obligations are usually imposed on a company when it is granted timber harvesting rights. These obligations most commonly include: roads of a set standard (with permanent bridges and culverts) to link villages to a main highway; buildings such as classrooms, aid posts and houses for service providers and sometimes churches; and other facilities such as airstrips or sporting venues.

Table 11 summarizes the main findings of the Review of Current Logging Projects on the performance of logging companies in satisfying their infrastructure obligations in individual concessions.

Logging company compliance with infrastructure obligations is generally fairly poor. Notable exceptions were the projects in Open Bay, Makapa, Seraji and Watut.

¹⁰⁴ Final Report, March 2002 at page 102

¹⁰⁵ Observations and Recommendations Report, Executive Summary at page ii

¹⁰⁶ Observations and Recommendations Report at page 42

Table 11: Performance on infrastructure obligations

Permit	Operator	Review Team findings
Iva Inika	Kerawara	<ul style="list-style-type: none"> • Ten permanent bridges or causeways not provided • Road not constructed to required two wheel drive standard • One house, rural lockup, aid post and double classroom constructed • No evidence of any lasting infrastructure built used a required trust fund
Manus West Coast	Rimbunan Hijau	<ul style="list-style-type: none"> • Two 'key infrastructure benefits' not provide were a township and veneer mill • Sawmill provided but not operational • Roads provided but not gravelled • Various buildings had been constructed as required
Buhem Mongi Busagi	Willis Kent	<ul style="list-style-type: none"> • A Project Development Levy frozen by a court dispute but 40% paid as cash directly to resource owners • Logging roads not of the required standard with no permanent bridges or culverts • Promised water supply for fourteen villages not yet provided
Makapa	Innovision	<ul style="list-style-type: none"> • Infrastructure funds used to build classrooms and aid posts, purchase vhf radios and generator set for electricity supply
Kapuluk	Samling	<ul style="list-style-type: none"> • Substantial number of key infrastructures are yet to be implemented or completed to the approved standard
Seraji	Deegold	<ul style="list-style-type: none"> • Required roads of logging standard only with no permanent bridges or culverts • Classrooms, aid posts, religious buildings and cocoa plantations, two portable sawmills and a vehicle all provided as required
Vailala 1	Rimbunan Hijau	<ul style="list-style-type: none"> • Three permanent bridges, road culverts, road maintenance, sawmill and urban development not provided • 'No evidence' that other required infrastructure obligations complied with
Vailala 2&3	Rimbunan Hijau	<ul style="list-style-type: none"> ▪ No permanent bridges and culverts installed along roads constructed by the permit holder ▪ 4 double classrooms and three teachers houses have been constructed
Turama	Rimbunan Hijau	<ul style="list-style-type: none"> ▪ Poor compliance with need to provide infrastructure development funds ▪ Clinics and school buildings constructed were of an unacceptable size and quality
Watut	PNGFP	<ul style="list-style-type: none"> ▪ Community development paid and managed by the local people
Ania Kapiura	SBLC	<ul style="list-style-type: none"> ▪ Most infrastructure requirements met but sustainability after construction a problem
Open Bay	Open Bay	<ul style="list-style-type: none"> ▪ Quality of roads, bridges and stream crossings generally good ▪ Other infrastructure including sports facilities, houses and a police station completed
Vanimo	WTK	<ul style="list-style-type: none"> ▪ Infrastructure levy payments absorbed into the Provincial Governments general account and used for budget shortfalls ▪ Most health and education facilities required have been provided but most water supply projects remain outstanding
Wawoi Guavi	Rimbunan Hijau	<ul style="list-style-type: none"> ▪ All roads of logging quality only with no permanent bridges of culverts and maintenance abandoned once logging ceases ▪ Landowners fear a new infrastructure levy will be insufficient to provide outstanding obligations
Summary		Compliance is generally poor; the notable exceptions being Open Bay, Makapa, Seraji and Watut

Source: All data derived from the Individual Project Reports from the Review of Current Logging Projects

The general findings of the Review in individual logging projects were reflected in the Observations and Recommendations Report where it was stated:

“The infrastructures that the landowners place greatest value on are roads and bridges, and infrastructure which will facilitate the delivery of services such as education, health, and law and order.

In nearly all cases landowner’s expectations regarding roading are met only as long as logging continues in that location. Not only are logging roads not constructed to be used for the long term, but maintenance ceases as soon as the company no longer requires the road. The general expectation that the local level Government will take over road maintenance once the road is no longer cared for by the logging company, is only rarely achieved, causing much dissatisfaction.¹⁰⁷

In some instances the logging company, despite the forest resource being nearly exhausted, has not yet delivered the required infrastructure. This situation is exacerbated by poorly written Timber Permits which typically do not set out an agreed delivery schedule, any minimum standards, and sometimes depend on the input from other Government Departments which is not forthcoming.”¹⁰⁸

These findings are underpinned by the following conclusions of the resource economist:

“Some infrastructure is developed, but it is generally planned around logging requirements, and is not maintained after logging ceases; The value of infrastructure provided by the logging companies is diminished due to the lack of public investment, consequently reducing the potential for significant multiplier effects; and lasting infrastructure that does accrue (schools, roads, health facilities, increased access to political processes etc) are off-set by social and environmental costs borne primarily at the local level.”¹⁰⁹

3.3 COMMUNITY EXPECTATIONS: Resource owners often feel short-changed by the process of timber harvesting and their general expectations are not being met, according to the Reviews.

The 2001 Review of Forest Harvesting Projects being developed towards a Timber Permit or Authority concluded that in new projects:

- *“The forest land owners will remain uninvolved in the use of their lands.”*
- *“Given that their development expectations are not subject to any formal discussion, it is likely that their development expectations will not be met.”*
- *“The landowner’s patrimony will disappear before their eyes. Two generations will pass before there is an opportunity for the landowners to regain control over their lands. Future generations are unlikely to accept this position.”*

¹⁰⁷ One of the reasons that landowners support a change in land use to oil palm production is that the oil palm processors build and maintain higher quality roads.

¹⁰⁸ Observations and Recommendations Report at page 44

¹⁰⁹ Observations and Recommendations Report at page 67

- *“Because there is no effective plan for investment in potentially viable business opportunities, landowner’s dependence on the forest for subsistence will not be reduced over the long term. Typically there are no plans to set money aside for the next generation.”*
- *“Unassisted, landowners will not have the management skills to profitably exploit potential business opportunities which arise from the forestry operations. There are no business support mechanisms in place to assist. They are not likely to participate in spin-off opportunities.”*
- *“Without any form of control, LANCOs, where they have been formed, will not work for the benefit of the people they purport to represent. Typically they serve only the employees and office holders of the company.”*
- *“Only a few land group leaders will know what is going on, while the landowners at large will remain poorly informed or not informed at all.”¹¹⁰*

This pessimistic view of resource owners’ likely participation in the ‘development’ of their forest resources and the likelihood of any long-term positive benefits is endorsed in the findings of the Review of Current Logging Projects, which found local people consistently expressed concerns about the quality of the benefits that logging had been supposed to deliver.

“Many meetings with landowners were held during the field work, and many project specific concerns are reported in the Individual Project Review Reports. The common areas of concern expressed by landowners were as follows:

- *“Mismanagement of financial benefits by clan agents or landowner companies.”*
- *“The often close relationship between the clan agents or the landowner company executives, with the logging company, and the perception that this works against the best interest of the landowners at large.”*
- *“That landowners have not received a ‘fair return’ for the depletion of their forest and the environmental impacts of the logging operation.”*
- *“That the National and Provincial Governments have failed to make any contribution to effective development, especially with regard to the provision of basic services such as health, education, agricultural extension, and business development. This is despite the log export tax.”*
- *“The lack of sustainable and durable infrastructure, especially roads.”*
- *“Law and order concerns, and in particular that in some instances the police stationed at logging project sites are perceived to act as company police, rather than ensuring the observance of PNG laws and the protection of PNG citizens. This is of particular concern in the Southern Region.”¹¹¹*

The negative social impacts, or costs, that logging can bring and which are probably not factored in to their decision making processes by resource owners prior to the commencement of logging were summarized in this way in the Review of Current Logging Projects:

“Social effects resulting from a variety of conditions that can be precipitated or facilitated by forestry projects: human conflict, gender effects (especially in relation to the workload and status of women), substance abuse, change in dietary habits, interpersonal relations with foreign nationals who are employed by logging companies,

¹¹⁰ Observations and Recommendations Report, Appendix 6 (page 11)

¹¹¹ Observations and Recommendations Report (page 39)

income volatility and uncertainty, and undermining of control by landowners over customary lands and the choice of economic options developed upon them.”¹¹²

3.4 COMMUNITY DEVELOPMENT REPORTS: The Gender and Development Division of the Department of Community Development is responsible for social welfare issues in PNG and was involved in some of the Reviews. The Division’s findings highlight the social impact of logging operations for forest resource owners, employees and their families and the community at large. As noted in the preamble to the reports:

“Large Project Developments such as mining, petroleum, and logging affect women and children disproportionately. The well being of children and women provide the most sensitive indicators of the human impact of development yet they tend to be neglected in the planning and development process of these projects and issues that directly affect them are generally accorded low priority.”

The Gender and Development Division visited four projects - Ania Kapiura, Open Bay, Vanimo and Wawoi Guavi - which are all operated by separate logging companies in four different Provinces. The four projects were respectively ranked fourth, seventh, second and fifth in size based on the volume of their log exports among all logging projects in 2004. Together the four projects accounted for almost 29% of all log exports in that year.¹¹³

The information in the reports tends to focus on the negative aspects of the logging operations for women and the evidence that the projects were not providing long-term benefits in either service delivery or improvements to the general standard of living.

The Open Bay project stood out for praise and this mirrors the findings in other parts of this report that indicate this project is something of a model operation in many of its different aspects.

Overall, the picture provided by the four reports is an unfavourable one in terms of the social impacts of logging, particularly for women and children. It is important to note that this is identified as a consequence not only of logging company attitudes and practices, but also of government neglect and a lack of investment in infrastructure and services in rural areas.

¹¹² Review of Socioeconomic and Financial Impacts at Appendix Eight of the Observations and Recommendations report from the Review of Current Logging Projects (page 12)

¹¹³ See the Statistical Overview in above

Table 12: Social welfare findings

Issues	Ania Kapiura	Open Bay	Vanimo	Wawoi Guavi	Summary
Employment	Local people do not benefit from direct employment	Non locals are blamed for causing trouble in the local area	Large numbers of Manus ¹¹⁴ women employed in log camps. Local people involved in spin-off businesses	Working conditions are very poor and pay is only 63toea (19 US cents) an hour. Alleged racial discrimination and sexual abuse ¹¹⁵	Employment opportunities are not necessarily beneficial for local people
Finances	Royalties paid to and used by the men only	Royalty money is shared equally between men and women	Royalty payments are men's business and women do not participate	No comments on this aspect	Women can struggle to access monetary benefits
Environment	Problems include oil spills destroying fish stocks; firewood shortage; destruction of medicinal plants; river pollution	Logging has reduced access to medicinal plants and watercourses have dried up	Logging has reduced access to medicinal plants and watercourses have dried up while others are polluted	No comments on this aspect	Environmental impacts are generally negative
Marriage	Part-time marriages with company workers	Patrilineal society where money is kept by the wife	Large number of illegitimate children fathered by foreign workers and allegations of sexual abuse of women engaged as maids	Expatriate workers leave behind single mothers and mixed race children	Broken families are a common problem
Children	Clear signs of malnutrition	Company built and maintained school	No schools in the logging camps	No comments on this aspect	Mixed findings
Health	Polluted river used for washing and bathing. Still no pit toilets.	Company operates a fully staffed health centre	No health facilities in the logging camps and sanitation problems seen	Company operates a fully staffed health centre	Findings vary from positive to negative
Housing	Bush materials	No comments on this aspect	Employees forced to live with their families in one room	Employees housing is very poor and overcrowded ¹¹⁶	No positive comments
Women's views	Logging has brought more damages to the women than they can ever bargain for	Women are the closest gender to the environment. The land is their livelihood	Men must never be allowed to proxy for women, they will not be able to represent women's issues	Task Force Police were there to protect the Company and their supporters and not local people	Women can suffer most from the negative impacts

Source: All data derived from the Community Development Reports that are part of the Individual Project Reports from the Review of Current Logging Projects

¹¹⁴ Manus is PNG's most northerly island Province

¹¹⁵ This included allegations of Asian men forcing women to engage in sexual relations where the men placed ball bearings under their foreskins which caused damage and mutilation to the women

¹¹⁶ "Seven people (single) live in one room. Similarly, two families share a room with a single switch to the light/fan and only a curtain separating them (very poor marriage accommodation)."

3.5 HUMAN RIGHTS ISSUES: Human Rights are one specific area that should be considered as part of any assessment of the social impacts of a large-scale development project such as a commercial timber harvesting operation.

The analysis presented above of the legal and environmental aspects of timber harvesting in Papua New Guinea as revealed in the five government sponsored Reviews has already touched on a number of issues that relate to human rights as defined in the Universal Declaration adopted by the United Nations in 1948.

Table 13: Human Rights Articles relevant to timber harvesting in PNG

Universal Declaration of Human Rights	
<p>On December 10 1948 the General Assembly of the United Nations adopted and proclaimed the Universal Declaration of Human Rights. It included these clauses:</p>	
Article 3	Everyone has the right to life, liberty and security of person
Article 5	No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment
Article 9	No one shall be subjected to arbitrary arrest, detention or exile
Article 19	Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.
Article 23	<ul style="list-style-type: none"> i Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment. ii Everyone, without any discrimination, has the right to equal pay for equal work. iii Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection. iv Everyone has the right to form and to join trade unions for the protection of his interests.
Article 24	Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay

Amongst the sixty odd reports produced as part of the Review processes, two focused specifically on issues related to the infringement of human rights. These are the *Report to the Independent Review Committee into the Operations of the Royal PNG Constabulary* and the *Brief Situation Report on Wavoi Guavi*. Both were produced as part of the Review of Current Logging Operations and both are considered in detail below.

There are also two further sets of reports, those from the Departments of Labor and Community Development that provide quite a considerable amount of further data relevant to any considerations of human rights issues (considered in Sections 1.7 and 3.4 respectively).

3.5.1 Police Committee Report

The Review Team engaged to carry out the 2004 Review of Current Logging Operations wrote a submission to the *Independent Review Committee into the Operations of the Royal PNG Constabulary* that occurred at the same time as the 2004 Review. The submission was based on the Review's findings relating to the activities of police squads in five of the fourteen logging projects reviewed. These were Iva Inika, Turama, Vailala Blocks 2&3, Vanimo and Wavoi Guavi.

In each of these projects the Review Team was presented with allegations of police squads being used to beat and intimidate landowners and employees who complained about the activities of the logging company. In each case the suggestion was that the police were brought in and paid by the logging company to abuse local people and their own staff.

In relation to Vailala, the Review Team noted the following as an issue of 'broad concern':

*"The presence of police at logging camps, who are considered to be pro-logging company and are housed, and either paid or paid allowances by the logging companies.... This concern is exacerbated when the Police Task Force is flown into the logging concession area in the logging company's own airplanes and seen to be doing the company's bidding."*¹¹⁷

This followed complaints from landowners who:

*"Expressed concern that Rimbunan Hijau (PNG) Ltd is able to access the use of the Police Task Force to silence complaints by the landowners against logging practices that do not comply with the PNG Forestry Logging Code of Practice, for example destruction of places of cultural significance (The incident was narrated to the Review Team by a very senior villager in front of the whole village and included house burnings and beatings. The Review Team has since found that there is much more to this story, and confirms that an investigation is necessary)."*¹¹⁸

In Turama, the allegations related to the use of police against both local people and company employees.

¹¹⁷ Page 3

¹¹⁸ Page 2

“The company uses the members of the Police Force to assault employees who raise concerns on personnel issues. There is evidence of this abuse and suppression of workers rights amounting to violation of human rights by the company.”¹¹⁹

In Wawoi Guavi, another Rimbunan Hijau operation, the situation seemed even more serious.

“The use of physical force by the Police Task Force to intimidate employees and landowners was one of the major issues raised by all members of the community. The people most certainly welcomed the presence of police in the area but not in the manner they were behaving and under total control of the company. The concerns raised by landowners in this report are not new. Previous investigations and correspondence by a former PNGFA project supervisor on the issue was circulated to relevant authorities including the Police Commissioner, Managing Director PNGFA and General Manager of Rimbunan Hijau PNG Ltd with the expectation that something would be done about the use and actions of the police force at Kamusie and Panakawa. This has not eventuated.”¹²⁰

The Review recommended that police stationed in the area of the logging project should be replaced by ‘trustworthy’ officers and that this be expedited as ‘a matter of National Security.’ It recommended a formal investigation of police officers ‘with regards to human rights abuse raised by landowners and company employees.’

3.5.2 Wawoi Guavi Situation Report

This Report describes the Review Team’s inspection visit to the Wawoi Guavi logging project operated by Rimbunan Hijau and sets out some of the allegations of human rights abuses and other illegal activities that were not considered suitable material for the main project report. The Report was addressed personally to the Chief Secretary, Director General National Security and the Police Commissioner and was hand delivered.

Table Fourteen is reproduced from the Report and summarizes the main issues relating to human rights and other illegal activities identified to the Review Team during their seven-day visit.

It should be emphasized that these findings relate only to one logging project of the fourteen visited as part of the Review of Current Logging Projects, although it is also true that Wawoi Guavi is a very large and significant operation encompassing both a sawmill and a veneer plant that are fed from other concessions along the southern coastline and is operated by PNG’s largest logging firm.

¹¹⁹ Page 4

¹²⁰ Page 4

Table 14: Issues identified in the Report

Issue	Comments
Task Force Police	Several reports were received about actions of the Task Force Police, most described actions against landowners and individuals and involved forcing people to strip naked at gun point and forcing them to engage in acts of an explicit sexual nature, parading naked in front of fellow villagers or climbing Pawpaws/Banana plants naked. ¹²¹ Several names of victims and perpetrators available.
Guns and Drugs	<p>Names of people accused of gun and drug smuggling and involvement of police, eg Gerry Biamaga (letter requesting assistance from Mr Ling also sighted). Mode of operations appears to be that when the Cessna 206 flies to Mendi for service, it carries bags of guns disguised as saksak and returns with marijuana which is then sent to Balimo and overseas. (Nb at Kamusie pilot informed RT that he does not check cargo but is suspicious of large amounts of saksak being consumed by highlanders). Guns come in on log ships and are offloaded and stored in a workshop opposite sawmill, under curfew imposed at the camp by Task Force police. Names of suspects available.</p> <p>RH planes arriving at Kamusie are often seen to taxi to the end of the airstrip where it is assumed that contraband goods are being unloaded.</p> <p>Name of person profiting from selling drugs at Kamusie given to RT (same person “disciplined” for insubordination by Thaddeus see * below)</p>
Law and Order at Panakawa and Kamusie ¹²²	<p>Claims of Martial Law imposed by Camp managers Ling and Wong at these camps using their own guns and task force police. Boom gates were removed during the field visit but can be manned to control movement at the company’s will.</p> <p>Ling and Michael Patias,* being trained as Reserve Police, due to complete course in June.</p> <p>The Review Team is seriously concerned for the safety of those workers and landowners seen talking with the team. One long-serving worker jumped into dense vegetation to avoid being seen by Ling when he was walking away from a meeting with us.</p> <p>Now that we have left the Camp, the company has complete control of whatever police are on the camp, hence the warnings to Ling and caution to the landowners.</p>
Illegals	<p>Landowners reported that many foreigners hid in their houses during the visit by the Labor and Foreign Affairs officers; many had travelled out of Kamusie to Omuda by tug. So although documents revealed more than eighty illegals (Labor report¹²³), we believe there are many more who have no records on government files and who have been smuggled in by log ships. The foreigner who operates the trade store near the sawmill hid during the Labor and Foreign Affairs officers presence but reopened her shop two days after they had departed. Many more stories collaborate the presence on illegals in this operation.</p> <p>Some camps were not visited by Labor and Foreign Affairs.</p>
Suspect Industrial Activities	IPA ¹²⁴ did not send an officer on this field visit. Review Team observed shipbuilding industry at Kamusie, which needs further investigation, photos available.

Source:: Table copied from the Brief Situation Report on Wawoi Guavi

¹²¹ A list containing specific details of some of these incidents was provided as an annex to the Report.

¹²² Panakawa and Kamusie are the locations for the veneer mill and sawmill

¹²³ Findings considered in Section 1.7 above

¹²⁴ Investment Promotion Authority

CHAPTER 4. FINANCIAL ASPECTS

Two Reports from the review process focus particularly on financial aspects of the logging industry and large-scale forest management in Papua New Guinea. The 2001 Review of the Forest Revenue System presents the more comprehensive picture, with a final report that runs to some 184 pages, while the 2004 Review of Current Logging Projects included a rather more limited look at the social and economic impacts of the logging industry which were presented as an annex to the main Report.

4.1 FOREST REVENUE SYSTEM REVIEW

The 2002 Review of the Forest Revenue System presented a comprehensive overview and analysis of the financial aspects of the logging industry and presented a series of recommendations for equitable distribution of resource rents (returns over and above the cost of logging and a normal return on capital). The Review identified the three stakeholders with a financial interest in the logging industry as government, landowners and the logging companies. The Review's key findings were:

- Government returns from logging were far greater than those of the landowners¹²⁵ and there were *'no indications that the export duty collected from the forest sector is returned to landowners in either cash or non-cash form.'*¹²⁶
- Government revenue was derived primarily from a tax on log exports as very little revenue came through corporate income tax paid by logging companies. Government also collected a 'reforestation levy' and various other fees.
- The exemption from export duty of processed timber products *'imposed costs on the country'*¹²⁷ that substantially outweighed benefits generated by processing.'
- Landowner's incomes were also tied to log exports with a royalty and other 'premiums' calculated on a timber volume basis. The current royalty rate was fixed at ten Kina (about US\$3) per cubic meter but had declined significantly in its real value in recent years.¹²⁸
- Landowners did not receive much in the way of wages as labor tended to come from outside the logging area but they did benefit from infrastructure developments.
- Logging companies were not declaring profits and the declared income from log sales was only sufficient to cover the immediate or direct costs of logging. This situation was very

¹²⁵ In strict financial terms the return to government was estimated at Kina 65 per cubic meter while landowners received Kina 29. Review of the Forest Revenue System in Papua New Guinea - Final Report, March 2002 (page 121)

¹²⁶ Page 101

¹²⁷ Primarily the loss of log export duty

¹²⁸ In real terms the value of the royalty had fallen significantly over the previous five years as the value of the Kina had slipped from US\$ parity to about 30 US cents.

different from the mid 1990s when high log prices and lower levels of taxation had provided *'a much higher excess profit.'*¹²⁹

- Transfer pricing could not be confirmed but there were *'unexplained and substantial'* discrepancies in declared log prices between Papua New Guinea and its main markets in China, Japan and Korea that *'warrant further investigation.'*¹³⁰

The Review estimated the total average cost of actual harvesting operations was about US\$60 per cubic meter. This comprised a production cost of US\$39, depreciation on equipment of US\$12 and a return on capital (normal profit) of US\$9. The costs to landowners of logging were estimated to be about US\$6.5 per cubic meter. This was made up of an asset value of US\$2.10 an environmental cost of US\$3.25 and US\$1 for reforestation and other subsequent management costs.

The Review found the relative importance of log exports in the overall economy was small and had fallen in the previous five years and was expected to remain flat. In 2001 log exports had contributed 4.9% of total export revenues and were ranked third in the agriculture sector behind coffee and oil palm. In contrast, the minerals sector contributed over 77% of export revenues.¹³¹ Similarly, in 2000, log export duty had contributed 4.5% of total government revenue.

Table 15: Log exports, 2004

Total volume (cm)	2,012,000
US Dollar value	118,973,000
Kina value	355,660,000
Export Duty	104,208,000

Source: SGS Log Export Monthly Monitoring Report, December 2004

¹²⁹ Page 11

¹³⁰ The later 2004 Review of Current Logging Projects determined that “The financial incentives for underreporting FOB prices are substantial: an example shows how underreporting by 10% can increase company profits by almost 30%. Any profit increases by companies through transfer pricing is at direct expense to landowners and government.” Review of Socioeconomic and Financial Impacts at Appendix Eight of the Observations and Recommendations Report (page 13)

¹³¹ Page 14

The Review found log exports were dominated by the five largest operating companies, all of which were Malaysian-owned. These five companies, Rimbunan Hijau, Turama Forest Industries, WTK Realty, Concord Pacific and Kerawara controlled 72% of log exports by volume and value in 2002

Table 16: Log export market share in 2000¹³²

Company	Volume	% Share	Value	% Share
Rimbunan Hijau	669,000	33.5	49,654,000	34.5
WTK Realty	256,000	13	20,467,000	14
Turama Forest Ind.	210,000	10.5	14,857,000	10.5
Concord Pacific	151,000	7.5	10,993,000	7.5
Kerawara	149,000	7.5	8,035,000	5.5

Note: All volumes are cubic meters, values are US\$

The Review found that the concentration of industry participants in the forestry sector in PNG meant that there was no effective competition. As a consequence *'standard tendering process for the access rights to timber is extremely unlikely to be competitive'* and could *'lead to resource owners and the Government receiving too little for the forest.'*¹³³

The Review also estimated that ten international buyers were responsible for the purchase of 57% of Papua New Guinea's total log exports in 2000. By applying an estimated average cost of logging and the then current export duty regime to a range of log export prices, logging was not profitable at any level. Losses ranged from K19 (US\$6.75) per cubic meter at a log export price of US\$120 right up to K103 (US\$37) US\$40.¹³⁴ At the average declared price in 2000 of US\$72, the estimated loss per cubic meter was K60 (US\$21.5).

Though not noted in the Review report, a loss of this size on each cubic meter exported in 2000 would have put the whole industry over US\$ 43 million in the red in that single year.

In May 2005, average log prices were US\$60 and no changes had been made since 2000 to the export duty regime. Using the 2002 Revenue Review analysis, log export revenue losses would have been K76 (US\$27) per cubic meter. ***The 2002 Review posed the poignant question of why logging companies continue to operate when analysis shows they are operating at a loss.***

The answer suggested was that at prices above US\$55, companies could make small profits if capital costs (depreciation) and head office costs were excluded. This scenario assumes that head office costs can be paid by other non-logging costs and would be sustainable only in the short term and until capital machinery needed replacement. It was also pointed out that the issue of whether transfer pricing was being used to conceal profits remained an unresolved issue and should be included in future research.

¹³² Review of Forest Revenue System, 2002 (page 27)

¹³³ Review of Forest Revenue System, 2002 (page 100)

¹³⁴ Review of Forest Revenue System, 2002 (page 57)

4.2 SOCIOECONOMIC AND FINANCIAL ASPECTS: The 2004 Review of Current Logging Projects included an assessment of the socioeconomic and financial impacts of the logging industry, and its findings were presented in a forty-five page report as an annex to the main Observations and Recommendations.

Most of the assessment findings on the social and economic impacts of logging for resource owners have already been reviewed in the above section on the social impacts of forest management. This section of the report will therefore concentrate on the wider economic findings as they relate to the economy as a whole and the logging industry itself. The assessment presented its overall findings in these terms:

“The overriding conclusion drawn is that the full costs associated with logging projects reviewed appear to outweigh the benefits. In particular, market conditions cannot support an economically viable forest sector in PNG, few lasting benefits are reaching landowners and the majority of logging returns accruing to PNG result in a modest 5% increase in the central government’s budget.

The sector appears uneconomical because FOB log prices, on average, have not been high enough since 1997 to cover log production costs, landowner payments and the cost to the central government of administering the forest sector. The shortfall exists before considering log export taxes or non-monetary costs associated with environmental and social impacts of logging. Although uneconomic, logging continues because it can be driven by short-term financial payments.

Moreover, logging in PNG, on average, does not appear to be a financially profitable operation for private companies. Economic viability and company profitability, however, are not absolutely verifiable because both estimations require using prices and costs declared by logging companies. The notion that declared prices and costs are biased is supported by the observation that logging companies in PNG continue to pursue control over additional timber resources despite the appearance of unprofitable conditions. Transfer pricing through underreporting of FOB prices, in particular, is identified as a viable if unlawful strategy to dramatically increase profits.”¹³⁵

The Report opens with what it considers to be the ‘challenges to economic development’ in Papua New Guinea. These provide an interesting overview of Minority World¹³⁶ perceptions of PNG and are presented in Table 17. Whether these issues really present a challenge to all forms of development is debatable.

¹³⁵ Appendix Eight to the Observations and Recommendations Report of the Review of Current Logging Projects at page i

¹³⁶ Sometimes also called the Developed or Western World or the North

Table 17: Challenges to economic development

Challenges to economic development
<ol style="list-style-type: none">1. About 31% of the population lives below the international poverty line of 1USD per capita per day. The majority (about 93.5%) of the poor live in rural areas.2. The majority of the population depends on the semi-subsistence sector, which has seen little real growth in recent decades: per capita real GDP in the non-mining economy grew at the average rate of 0.2 % in the period 1978-1998.3. Many communities are isolated, thus the cost of accessing goods and services or transporting goods to markets to be sold is chronically unaffordable under all but the most pressing circumstances. During field activities, it was common to experience mechanized travel costs in excess of 10 USD – each way- for trips between remote communities and town centres.4. Household size averages between five and six individuals. Consequently, education and healthcare costs are high relative to the population size because they typically need to accommodate families with 3-4 children.5. During field activities, observed infrastructure was often inadequate for providing affordable access to important goods and services. Moreover, roads, bridges and public structures were often not being actively maintained or sufficiently staffed (in the case of aid posts and schools).6. To the extent that populations are isolated and dispersed, it is difficult to capitalize on economies of scale in order to reduce the cost of developing infrastructure and providing health care and education services.

Source: *Socioeconomic and financial impacts report at page 3*

Taking the log export price declared by logging companies, the Review calculated that on average across the six projects studied in detail, the logging companies retained seventy-three percent of their income and twenty-seven percent was paid to government and landowners.¹³⁷ Of the proportion paid to government and landowners, sixty-two percent was retained by the central government, four percent went to provincial governments and thirty-four percent was paid to resource owners.¹³⁸

The Report emphasised how resource owners' direct financial returns through the timber royalty have declined in value over recent years:

“Devaluation of the Kina and domestic inflation have sharply reduced the real value of royalty payments. Kina devaluation has reduced the USD value of the royalty from 5.25 USD in 1997 to about 3 USD.¹³⁹ [This] diminishes the ability... to purchase imported durable goods [and] reduces the value of any investments in international markets... The reduced value of the royalty is reflected by annual domestic inflation rates averaging almost 12 % per annum since 1997. Landowner royalties are not currently indexed to inflation. The purchasing power of 10 Kina, consequently, has declined in real terms to about 4.6 Kina, making it less than half as valuable as it was in 1997.”¹⁴⁰

¹³⁷ Page 6

¹³⁸ Page 10

¹³⁹ March 2004 exchange rates

¹⁴⁰ Page 13

CHAPTER 5. POLICY IMPLICATIONS AND RECOMMENDATIONS

Clearly the current state of forest management in Papua New Guinea is not acceptable, whether viewed from the perspective of the customary resource owners, those concerned with good governance at a national level or the international timber trade.

In this Section we look at the recommendations generated by the Reviews and their current status, and make our own suggestions for positive measures to address the current impasse.

5.1 RECOMMENDATIONS FROM THE REVIEWS

The different Reviews set out a whole series of general governance and project specific recommendations. These range from a proposal to divide the PNG Forest Authority into two separate organizations and the implementation of a Commission of Inquiry with powers to summons documents and cross-examine witnesses through to remedial actions to correct procedural errors in the development process for individual projects. The main recommendations from the Reviews are summarized in the three Tables 18-20.

The majority of these recommendations have been for the most part ignored. This demonstrates government acquiescence, or preference, for the status quo and a lack of political will or leadership to implement reform.

A fundamental problem is corruption, as is most clearly stated in the *Review of Disputed Allocations* which described logging companies as acting like robber barons and being encouraged by persons whose proper role was to exercise control. Corruption is an underlying theme throughout the Review reports.

Specific examples of corruption were not exposed in the Reviews and their investigation formed no part of the Review processes. But the Reviews uncovered many situations (illustrated in Table 20) where it was recommended further investigations be conducted to reveal the truth behind actions that were seen as highly suspicious.¹⁴¹ These recommendations have also been ignored.

At the Ministerial level, the Reviews found a dichotomy between those that wished to see improved forest management and better enforcement of laws and polices and those committed to the allocation of further logging projects to existing industry participants ‘without further hindrances.’¹⁴²

The stated aims of the latter political group, which is crystallized around the current Minister for Forests, are to ensure further Government revenues and the delivery of services to rural communities. It is difficult to find either of these arguments credible. Firstly, the evidence shows the projects will make an insubstantial contribution to government revenue at a time when the budget is

¹⁴¹ The Review of Disputed Permits recommended a Commission of Inquiry was necessary to “unravel the web of deceit” – Confidential Report (page 1)

¹⁴² See variously the Compliance Audit reports

already showing a surplus and debt is being retrenched. Secondly, the evidence of the Reviews is that logging as currently practiced does not deliver long-term or sustainable benefits and even in the short-term does not significantly impact rural living standards.

In any event, if Government revenues and returns to landowners are to be maximized and sustained, the best approach would clearly be to ensure that projects are sustainable and lawful. But, that is not the approach that is being followed.

5.2 FOREST TRENDS RECOMMENDATIONS FOR FURTHER ACTION

The situation in Papua New Guinea's forestry sector is that there is a lack of political will to challenge the status quo and a complete breakdown in governance mechanisms, such that illegalities are the norm rather than the exception. Therefore, the broad policy recommendations from the Reviews and the specific action points with respect to individual concessions are unlikely to change the dominant paradigm unless other measures are taken to address the more fundamental problems.¹⁴³ A number of different mechanisms need to be utilized to achieve meaningful change, and should engage a range of different actors both inside PNG and internationally.

A first target must be to stop the cycle of illegal and unsustainable logging and break the nexus between the logging companies and the political and administrative elite. The cessation of current logging operations and the prevention of the allocation of new projects on the same terms and to the same operators is essential. This would provide the opportunity to refocus the system of forest management and to break the current linkage between the logging industry and key politicians and administrators. Clearly this cannot be achieved directly through government action as the necessary political will does not exist. But, as this is primarily a governance issue, we should look to governance systems for some possible solutions.

In addition there are clearly areas where work needs to be done to further our understanding of current issues and three recommendations for further research are set out below together with the suggestion of a Regional Forum to strengthen ties and create the opportunity to deal with issues bilaterally.

Ensure that Papua New Guinea garners the donor attention it deserves: While the World Bank and Australian governments have used their position as donors to try to effect change in the forest sector in Papua New Guinea, both have left the sector when deliberations with the government over core governance issues became too difficult.

¹⁴³ The 1989 Commission of Inquiry uncovered widespread corruption and the findings led to a whole new system for forest management based around the 1991 Forestry Act. This was supported with considerable donor and other international support for the National Forestry and Conservation Program through the 1990's and the ill-fated Forestry and Conservation Project more recently. The Review findings clearly show that all these measures have been ineffective and that the forestry sector is now in an even worse mess than it was in the mid 1980's.

Donor programs should not shy away from countries with difficult governance problems, but should be encouraged to engage in the sector with innovative programs that get to the root of the underlying problems of corruption, transparency and inadequate public participation.

Establish Legal fund for Civil Society: One governance mechanism that does exist outside of political control and which could be utilized is the legal system. The Courts in PNG have a successful record of ruling against illegal logging and in 2003 stopped the most notorious rogue operation.¹⁴⁴

The Reviews reports provide plenty of evidence that if presented could be effective against both proposed and existing logging operations. The key need here is the establishment of a legal fund that can be accessed by civil society to financially support legal challenges through the court system.

Support Capacity of Ombudsman Commission: Another independent governance mechanism with a track record of successful involvement in the forestry sector is the Ombudsman Commission. Capacity is a key issue here but that can be fairly easily addressed both in the short and long-term. Priorities should be to enforce implementation of the recommendations in the Ombudsman Commission's Kamula Doso report (which are summarised in Table 18) and to support the Supreme Court challenge that has been filed with respect to the 2005 Forestry Bill. These could be small but vitally important first steps in re-establishing a measure of governance control in the forestry sector and challenging the nexus between the industry and the political elite.

Establish Commission of Inquiry: A Commission of Inquiry was recommended in the Review of Disputed Permits and Permit Extensions to expose the connections between key stakeholders that are undermining governance and to ensure a measure of accountability. Although this may be difficult to achieve in the short-term, consistent international pressure – together with opportunities provided by the political election cycle – could be successful in securing a Commission.

Investigate capital flows between industry and political elite: Some industry participants have used the capital generated by timber harvesting activities to make significant investments in other sectors of the PNG economy, including banking, retailing, manufacturing and property such that they now control or exert significant influence. Much of this expansion has been hidden behind a veil of off-shore ownerships and a myriad of different company names and is little known and poorly understood.

Understanding the extent of the network and how capital has flowed into other parts of the economy and to the political elite is key to understanding the extent of the web, the profits that have been concealed and bringing some measure of control. International assistance should be given to Statutory Authorities to enable them to fully investigate the linkages and capital flows between timber industry participants and other sectors of the PNG economy and the political elite. This could be reinforced by engaging independent auditors and other experts.

¹⁴⁴ Kiunga-Aiambak

Better Understand Factors that Support Good Management: (e.g. Open Bay and Watut examples) The Review findings were positive in relation to the logging operations in Open Bay and Watut and these projects stand out as a possible beacon of opportunity for the future of the logging sector. Further research is needed to identify key factors that have contributed to the success of these projects and an understanding of how far they can be replicated.

Investigate Possibilities of Transfer Pricing: The Reviews were inconclusive on the issue of transfer pricing, but did find sufficient inconsistencies to suggest that a comprehensive investigation is justified into whether this practice is being used to hide profits and defraud government and resource owners.

Improve Market intelligence and Tracing of PNG Exports: Illegally and unsustainably harvested timber from PNG is being shipped to overseas markets for further processing and onward sales. With increasing international interest in combating the trade in illegal and unsustainable timber, it is vitally important that PNG wood is tracked through the trade system and on to its end users so that effective measures can be taken to inform consumers and block market access.

Support a Regional Forum to Share Experiences with Solomon Islands: There is clear evidence emerging that the Solomon Islands shares similar problems to PNG in its forestry sector with some of the same actors involved in both countries. A bi-lateral approach through a regional forum supervised by an international organization would clearly create new opportunities to challenge the current governance and management issues.

CONCLUDING REMARKS

We conclude by noting that these, as well as other, steps to establish legality, respect for human and property rights and people's participation in the development and monitoring of forest policy and practice are necessary not only for the successful implementation of industrial logging, but also for any and all forestry activities – be it logging, improved forest protection, collection of non-timber forest products or payments for ecosystem services. Taken together, they would help transform PNG's forestry sector to one that not only ensures sustainable forestry and conservation, but to one that provides satisfactory livelihood opportunities for forest dependent communities and promotes sustainable economic development for the nation as a whole.

APPENDIX

Table 18: General governance recommendations from Reviews

Review	Issue	Actor	Principle recommendations	Implementation
Projects Under Development (2001)	Governance structures	Government	1. Remove policy functions of PNGFA to a separate and independent body	1. Not implemented
	Individual projects	Forest Authority	1. Four projects to proceed with remedial actions 2. Six proceed subject to policy decisions & remediation 3. Twenty projects put on hold	1. Progressed without any remedial action 2. Progressed without policy decisions or remedial action 3. Remain on hold
Ombudsman Commission (2002)	New permits and current operations	Government and Forest Authority	1. Reduce Ministerial powers 2. Bar poor performing companies from future logging 3. Remove Wari Iamo ¹⁴⁵ from National Forest Board 4. Scrutiny of all RH operations and future proposals	1. Ministerial powers increased ¹⁴⁶ 2. Poor performing companies given new permits ¹⁴⁷ 3. Wari Iamo remains on the Board ¹⁴⁸ 4. No special scrutiny
Disputed Allocations (2003)	Errant logging companies	Government and Forest Authority	1. Increase and enforce performance bonds	1. Performance bonds increased; no enforcement
			1. Commission of Inquiry into Rimbunan Hijau ¹⁴⁹ 2. Further investigate the actions of Wari Iamo	1. No Commission of Inquiry 2. No investigation into Wari Iamo
Current Logging Projects (2004/5)	Governance control	Government	1. Political will and support from NEC and Minister for Forests for sustainable forest management 2. Investigation of transfer pricing 3. Review commitment of senior staff in Forest Authority and replace those found wanting 4. Dept of Labor investigate terms of employment of logging company workers	1. No political will shown 2. No investigation of transfer pricing 3. No staff review or replacement 4. No investigation of employment terms and conditions

Source:: Review reports

¹⁴⁵ Secretary of the Department of Environment and Conservation and National Forest Board Member

¹⁴⁶ Forestry Amendment Act 2005 gives the Minister greater control over the National Forest Board

¹⁴⁷ For example Amanab 1-4 to WTK; Asengseng to Rimbunan Hijau; and Rottock Bay to Cakara Alam

¹⁴⁸ In 2003 when his Minister persisted in disciplinary action against his Secretary it was the Minister who was sacked

¹⁴⁹ Summary Report on Wawoi Guavi, Vailala and Passismanua (page 6)

Table 19: Project specific governance recommendations

Review	Permit	Company	Principle recommendations	Implementation
Projects under Development	Vailala 2&3	RH	Commission of Inquiry	No Commission of Inquiry
Ombudsman	Kamula Doso	RH	Revoke harvesting rights	No clear decision made
Disputed Allocations	Kiunga, Simbali, Bonua Magarida	Samling Kerawara MBI	<ol style="list-style-type: none"> 1. Cancel logging rights 2. Deregister and bar companies involved 	<ol style="list-style-type: none"> 1. Logging rights cancelled for Bonua Magarida only 2. Companies continue to operate
	Vailala 2&3, Wawoi Guavi Passismanua	RH	<ol style="list-style-type: none"> 1. Suspend the Vailala permit 2. Revise or revoke the Wawoi Guavi permit 3. Cancel logging rights for Passismanua 	<ol style="list-style-type: none"> 1. Vailala logging continues 2. Wawoi Guavi logging continues 3. Logging is not taking place
Current Logging Projects	Kapuluk	Samling	Independent audit of royalty, levies and premiums	No audit
	Vailala Block 1	RH	Review the legal basis for logging	No review
	Vailala 2&3	RH	Independent audit of all royalty and levy payments	No audit
	Turama	RH	Cancel and revoke the work permits of 3 non-citizens	No action taken
	Wawoi Guavi	RH	<ol style="list-style-type: none"> 1. Police Review investigate conduct of the Police 2. Cancel 64 non-citizen work permits 	<ol style="list-style-type: none"> 1. Task Force disbanded but then re-established 2. No permits cancelled
Compliance Audits	East Awin	GLN	Timber Permit void and no sustainability	Logging proceeding
	Wawoi Guavi	RH	No compliance with the Act or Policy and legislation needed	Logging continues
	Amanab 1-4	WTK	Timber Permit void and no sustainability	No action taken
	Asengseng	RH	In breach of the Act and no sustainability - remediation required	Project proceeding with no remediation
	Rottock Bay	CA	In breach of the Act and no sustainability - remediation required	Project proceeding with no remediation
	Vailala 2&3	RH	No compliance in acquisition/ allocation and logging should cease	Logging continues

Notes: RH: Rimbunan Hijau; MBI: Milne Bay Industries; GLN: G.L. Niugini; CA: Cakara Alam. Source: Review reports

Table 20: Summary Review findings on three Permit extensions

Permit	Wawoi Guavi	Vailala 2&3	Passismanua
Company	Rimbunan Hijau	Rimbunan Hijau	Rimbunan Hijau
Extension	4 February 2002	25 July 2002	23 January 2003
Review findings	<ul style="list-style-type: none"> ▪ The agreements the State used to acquire the timber rights from the landowners were not properly completed ▪ The granting of the permit deprived the resource owners of any clear and enforceable rights ▪ Landowner benefits are inadequate and unsatisfactory ▪ The Board has been remiss in not ensuring consistency with the current law ▪ The rights of landowners have been overlooked ▪ Serious questions arise as to the processing of the application ▪ It cannot be said the interests of the resource owners or the nation have been secured. ▪ The actions of the permit holder and a former PNGFA MD are deserving of a full inquiry 	<ul style="list-style-type: none"> ▪ Permit was unlawfully granted in 1992 ▪ The Holder is not an appropriate company to hold operating rights ▪ Report of the Committee does not satisfy sustainability requirements ▪ The rights of the resource owners have been denied ▪ There have been other serious departures from due process ▪ The logging operations cannot be said to be sustainable ▪ The actions of the permit holder and a former PNGFA MD are deserving of a full inquiry 	<ul style="list-style-type: none"> ▪ The Permit could not possibly have been lawfully extended ▪ It was given to a company that had already been deregistered ▪ The extension was given ten months after the expiration of the Permit ▪ The application was lodged after expiry and backdated ▪ Landowners were deprived of their right to be represented ▪ Report of the Committee did not satisfy sustainability requirements ▪ The logging operations cannot be said to be sustainable
Review conclusion	<p>“It is doubtful that the following observations are pure coincidence</p> <ul style="list-style-type: none"> ▪ In both reviews... the initial grant of the Timber Permit was highly irregular ▪ In both reviews... irregularities have arisen in relation to the grant of the extended Permit ▪ In both reviews officers of the PNGFA have acted in the company’s interest and not those of the landowners or the State <p>The time has come for a full investigation into the affairs of these companies. They should be compelled to produce documents and to account for their actions. Their relations with resource owners should be fully investigated. So, too should their relations with officers of the PNGFA”</p>		<ul style="list-style-type: none"> ▪ The permit had already expired ▪ There was no lawful power to extend ▪ The permit holder had already been deregistered <p>Even if the extension had been lawful there would still have been serious departures from due process</p>

Source: Reports from the Review of Disputed Permits and Permit Extensions

Table 21: The Thirty Four steps

1	Landowner awareness campaign
2	Timber rights acquired through a Forest Management Agreement
3	Consent of customary landowners obtained
4	Certification of landowners consent and authenticity of their tenure
5	Ministerial approval
6	Development Options Study
7	Study provided to the Minister and local Forest Management Committee
8	Draft project guidelines prepared
9	Project guidelines approved
10	Project advertised
11	Project proposals lodged
12	Proposals referred to Provincial Committees for evaluation
13	Evaluation of project proposals
14	Invitation to provide further information
15	Detailed report to the National Board
16	Board consider the report and consults the Minister
17	Minister provides comments to the Board
18	Negotiation parameters set by Board and Provincial Committee
19	Board directs further negotiations
20	Project Agreement negotiated
21	Board considers the final draft Project Agreement
22	Agreement returned for further negotiations as necessary
23	Board consults with other stakeholders
24	Minister for Provincial Affairs consults with the Provincial Government
25	Board obtains the approval of the Minister for Finance
26	Project Agreement executed
27	Board recommends to the Minister to grant a timber permit
28	Minister invites proponent to apply for a timber permit, or
29	Refers the recommendation back to the Board
30	Board considers the Ministers referral and makes a final recommendation
31	If the Minister accepts the recommendation he invites the proponent to apply for a timber permit
32	If the Minister does not accept the recommendation it is referred to the National Executive Council
33	NEC can accept or reject the project proposals and give directions. If the Minister is directed to accept the recommendation he must invite the proponent to apply for a timber permit
34	If NEC rejects the proposal it is renegotiated or readvertised