

**REVIEW OF FOREST HARVESTING PROJECTS  
BEING PROCESSED TOWARDS A TIMBER  
PERMIT OR A TIMBER AUTHORITY**

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**REVIEW METHODOLOGY**

*Prepared For:*

**THE GOVERNMENT OF PAPUA NEW GUINEA  
C/- THE INTER-AGENCY FORESTRY REVIEW COMMITTEE**

*Prepared By:*

**THE INDEPENDENT FORESTRY REVIEW TEAM**

**MARCH 2001**

**NOTE:**

The output of the Review consists of the following:

1. Thirty-two individual project review reports which include project specific recommendations.
2. A report setting out the background for the review and the methodology adopted.
3. A report setting out overall review observations and recommendations for consideration by the PNG Government. This report may assist in defining the work program under the planned Forestry and Conservation Project which includes provision for a review of forestry sector policy, and planning and control mechanisms.

This report sets out the **Background for the Review** and the **Methodology** adopted.

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# 1. INTRODUCTION

## 1.1 Background to the Review

Key regulatory and administrative changes were introduced to the Papua New Guinea forestry sector throughout the 1990s to better regulate forest harvesting; to better protect environmentally fragile areas from harvesting impacts; and to better manage the forest resource on a sustainable timber yield basis<sup>1</sup>. The combined effect of the new measures have included a significant slowing down of the rate at which new forestry projects are being processed and approved<sup>2</sup>.

Pressure on the PNG Forest Authority to “fast-track” new projects increased during the later part of the 1990s, leading to fears that some aspects of the formal resource acquisition and allocation process set out in the Act may have been circumvented, or improperly applied.

### Loopholes in the Act

In addition there were perceived attempts to use loopholes in the Act to fast-track the availability of additional forest resources for exploitation, in particular the addition of large forest areas to existing Timber Permit areas as “extensions”, and the use of Timber Authorities designed for forest conversion to agriculture or road line clearing. The perceived loopholes have been dealt with by Government by an amendment to the Forestry Act 1991 which was certified in January 2001. The amendments provide that:

- With regard to extensions, that the PNGFA Board may determine an area of forest as an extension only where (amongst others):
  - The area is contiguous to an existing approved forestry project;
  - The area is too small to support a sustainable forestry development project on its own; and that
  - The forest resources are used primarily to sustain an existing processing facility.

The amendments further require that any extension shall be made only on the basis that the extension area will be consolidated with the existing approved forestry project under a single Timber Permit, and that the consolidated area will be managed and harvested on a sustainable basis.

- With regard to Timber Authorities for agricultural and road line clearing that:
  - (i) For agricultural clearing exceeding 50 ha:

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<sup>1</sup> All of the 51 new projects approved 1990-92 permitted the forest resource to be cut unsustainably – 87% over a period of 10 years or less. The range of terms was 2 to 20 years.

<sup>2</sup> The Forestry Act 1991 was certified in April 1993. Records show that the number of Timber Permits issued were as follows: 1990 – 12, 1991 – 17, 1992 – 22, 1993 – nil, 1994 – nil, 1995 – 8, 1996 – 4, 1997 – 1, 1998 – nil, 1999 - nil.

- A detailed agricultural development plan is required and is to be approved by the Department responsible for agriculture and livestock;
- The Board will hold a public hearing;
- The Board if satisfied must forward the proposal to the Minister, who in turn must pass it the National Executive Council for approval;
- If approved the Board must call for tenders for the harvesting operation, and the agricultural developer is prohibited from tendering;
- A phased Timber Authority will be issued where harvesting of the second and subsequent areas will be dependent on the successful conversion to agriculture of the areas already cleared of timber;
- A performance bond will be required.

(ii) That for road line clearing exceeding 12.5 km:

- A detailed road development plan is required and is to be approved by the Department responsible for transport;
- Certification that the design meets the Department's standards is required;
- A certificate from the Provincial Government that it approves construction is required;
- The Board will hold a public hearing;
- The Board if satisfied must forward the proposal to the Minister, who in turn must pass it the National Executive Council for approval;
- If approved the Board must call for tenders for the harvesting operation, and the roading developer is prohibited from tendering;
- A phased Timber Authority will be issued based on stages 20 km in length where harvesting of the second and subsequent stages will be dependent on the successful construction of the road in the previously harvested stages;
- The cleared corridor is to not exceed 40 meters in width;
- A performance bond will be required.

The above amendments are expected to close the loopholes, although a number of new forestry projects have been progressed in the expectation of taking advantage of the now superseded provisions of the Act. All of these projects are covered by this review. Regulations to support the amendments have been drafted and were submitted to the PNGFA Board for approval at their meeting 69 in early February 2001.

### The Moratorium

The Government, anxious to ensure that all Timber Permits, extensions and Timber Authorities are being processed correctly, imposed a moratorium (NEC Decision 84/2000 of 18 May 2000) on the further processing of new forestry projects. Further it has ordered a review of all "in process" forestry projects by an independent team to evaluate compliance with the requirements of the Forestry Act 1991 and supporting regulations, legislation, plans, procedures and guidelines. The methodology applied by the independent Review Team is the subject of this report.

The PNG Forest Authority (PNGFA) has interpreted the moratorium to mean that there should be no further processing of new forestry projects, and hence has, with a few exceptions, ceased all acquisition and allocation activity pending the outcome of the review.

## The Government Inter-Agency Forestry Review Committee

To oversee and direct the review, the Government has set up an Inter-Agency Forestry Review Committee under the auspices of the Department of the Prime Minister and National Executive Council, headed by the Chief Secretary to Government. The independent review team reports directly to this committee, and it is the committee's responsibility to address the findings of the review. The Government has made a commitment that the review will be transparent and that the review reports will be made public.

### Donor Support

The PNG Government's review of "in process" forestry projects has received strong international donor approval and support, and has been included as a conditionality for the partial funding of the Government's structural reform program by the World Bank and the International Monetary Fund. Other conditions include a review of operational forestry projects, which is provided for under the Government's Forestry and Conservation Project.

### **1.2 The Review Team**

With the assistance of the World Bank, the Government selected five independent specialists who were contracted to undertake the review. The individuals are:

Mr Ben Everts (Team Leader) – Forestry and Forest Policy Specialist  
Mr Kanawi Pouru – Forestry Specialist  
Mr Graham Powell – Legal Specialist  
Mr Tony Power – Landowner Specialist  
Mr Lukis Romaso – Landowner Specialist

A copy of the team's Terms of Reference is presented in Appendix 1. The team initiated its work in late October 2000, and completed the preparation of the individual project review reports by early March 2001.

### **1.3 Initial Meetings with PNG Forest Authority, and Review Methodology and Timetable**

Under the Forestry Act 1991, the acquisition and allocation of forestry projects on behalf of the Government is the responsibility of the PNGFA. The Review Team held a number of preliminary meetings with PNGFA management and staff (also referred to as the National Forest Service or NFS), and received a briefing from the PNGFA Managing Director (Mr Thomas Nen). At these meetings the PNGFA provided the Review Team with its list of "in progress" forestry projects (28 projects being developed under Forest Management Agreements (FMAs)), plus a summary statement setting out basic project details and the stage of processing reached. Also provided were extracts from the files. At the request of the Review Team all Timber Authorities being developed (being 4 in number) were added to the list. At the request of the team direct access to all PNGFA files was approved and arranged.

The PNGFA General Manager (Mr Goodwill Amos) appointed the Manager of the Forest Planning Division (Mr Martin Goldman) as the primary liaison person for the Review Team. Mr Goldman in turn set up a working group to support the team which included:

The Manager Acquisition Branch – Mr Joe Badi  
The Manager Resource Development Division – Mr Keai Semese  
The Officer Timber Permits – Elizabeth Helali

At the request of the Review Team the PNGFA provided copies of the following documents:

- National Forest Policy 1991
- Forestry Act 1991 (as amended)
- National Forestry Development Guidelines 1993
- Planning Monitoring and Control Procedures 1995
- PNG Logging Code of Practice 1996 (and proposed revision dated 2000)
- National Forest Plan 1996
- Forestry Regulations 1998
- Forestry Amendment Bill 2000 (dealing in part with extensions and Timber Authorities and now enacted)
- NEC Decisions NG 99/99 and NG 84/2000 (dealing with the moratorium)
- NEC Decisions NG 15/97 and NG 113/96 (dealing with Timber Authorities for agricultural conversion and road line clearance)
- NFS map showing current and “planned” forestry projects as at 2000
- NFS checklist for the issuance of Timber Permits (undated)
- The Regulations drafted to support the Forestry Amendment Bill 2000

Based on the information obtained at the briefing meetings and from the above documents the Review Team developed a draft review methodology and timetable which was considered by the Forest Authority support team, and improved after further discussions. It was agreed that the review would proceed on the basis of three batches to afford the PNGFA the opportunity to recommence its work as soon as possible (provided always that the outcome of the review supported this)<sup>3</sup>. Once agreement was reached, the Managing Director indicated the Authority’s agreement to the Government Inter-Agency Forestry Review Committee, and provided them with a copy for its comment.

#### **1.4 Projects Reviewed and Order of Review (Batches)**

The agreed methodology included a proposed order in which the projects would be reviewed. Three projects were selected on which to test the proposed methodology including one at an early stage of processing; one at a mid stage of processing; and one for which the acquisition and allocation process had been almost completed. The balance were arranged in order with priority given to those projects at an early stage of processing. The rationale was that the Review Team would become increasingly familiar with the acquisition and allocation process, and the sources of information for the review, and consequently be in a well informed position undertake the more extensive review required for those projects which had progressed furthest through the process.

To ensure that all projects being progressed by the PNGFA were included in the review the Review Team undertook an exhaustive examination of all the potential forestry projects listed in the Provincial Forestry Plans, the National Forest Plan, various submissions made to the Board, or listed on the map (dated 2000) prepared

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<sup>3</sup> Given the PNGFA’s view that the Moratorium prohibits all further processing of “in progress” forestry projects, it was unable to take advantage of this opportunity.

by the PNGFA showing all areas with the potential to be developed for commercial forest harvesting.

Given that the PNGFA (and its predecessor the Department of Forests) has undertaken preliminary field inventory in a wide range of locations, it was necessary to make a decision regarding the point at which a potential forestry project should be considered "in process" and subject to review. Not all inventoried areas have the potential to become commercial scale forestry projects. It was decided that where the PNGFA had deliberately initiated landowner awareness (as required by the Act), then the project should be considered to be "in process". On this basis 43 project names were identified and reviewed with PNGFA staff in addition to the 32 projects already listed for review. Only one project was identified where it appeared that some landowner awareness work had been initiated, and this project was included in the list to ensure that all "in process" projects were captured by the review process. The final list at the commencement of the review included 33 projects, being 29 Forest Management Agreement (FMA) areas, and 4 Timber Authorities. These were split into three Batches of eleven.

During the early stages of the review process, two requests were received to bring forward the review of specified projects. One came from the Government Chief Secretary seeking an urgent review of the impending Kulu Dagi project (a Timber Authority for agricultural conversion to oil palm) which was about to begin forest clearing. The object of the request was to ensure that timber harvested would not be burnt, but could instead be sold for the financial benefit of the landowners. The second request came from the Minister for Forests via the Government Chief Secretary, and sought that the Minister's priority projects be given priority for review. Given that the review process is being undertaken at the behest of the PNG Government, and that the order in which the projects are reviewed has no impact on the findings of the review, these requests were accommodated and the projects listed in Batches 1, 2 and 3 revised accordingly.

During the initial work on the three Timber Authority projects included in Batch 3, questions were raised as to whether or not there was a project "in process", and consequently whether or not the project was properly the subject of this review. The following notes set out the order of events for each of the three projects and explain the basis for deleting two of these from this review.

#### Collingwood Wanigela TA (Forest clearing for oil palm development)

- On 4 May 1999 Deegold (PNG) Ltd applied for two Timber Authorities for agriculture clearance. Within 22 days these were both granted. While it is true that the procedures appear to have been followed, there are real doubts as to whether due process was observed. The PFMC Minutes of Meeting 01/99 held on 19 May 1999 note that a resolution was passed endorsing the grant of these Timber Authorities. The Minutes frankly state that the approval was given because of "undue intervention by political directives".
- In June 1999 the Acting Registrar of Titles cancelled the relevant State Leases as they had been "fraudulently issued and registered". This action prompted legal proceedings by both landowner representatives who supported the cancellation, and by the company who sought to have it reversed.

- In September 1999 the two Timber Authorities were cancelled due to the company's failure to lodge performance bonds in an acceptable form and within the prescribed time.
- Later in the same month a new application for a Timber Authority for agriculture clearance in this area was lodged by Raku 32 Limited. A letter addressed to the Oro PFMC on 28 September 1999 purported to give the Managing Director's endorsement to this application. It has been confirmed that the Managing Director's signature on this letter was a forgery.
- On 1 December 1999 the application was formally rejected and the application fee was returned. The rejection was based on six very valid grounds.

As there is no current application, this project is not "in process" and hence does not fall within the team's Terms of Reference. Any future application will have to meet the strict requirements laid down in the Amendments made to the Act in 2000.

#### Aitape Oil Palm TA (Damansara)

- A number of Timber Authorities have been granted in relation to this area since an Oil Palm Project was first proposed in the early 1990's. The first application lodged in March 1995 was deficient in many respects and the PNGFA regularly voiced its suspicions about the bona fides of the project as an agricultural development. They noted that the developer had no background in the agriculture sector. They were disturbed by the fact that about 25 per cent of the area to be clear felled was never proposed to be developed as part of the oil palm project.
- Until 1999 the project proceeded under successive Timber Authorities with varying degrees of controversy. Operations were halted at times and at one time the contractor was found to be unregistered as a Forest Industry Participant under the Act. Even allegations of marijuana selling became a concern of the PNGFA. The Timber Authority was finally cancelled in November 1999 due to non-payment of the performance bond. At that time many remained convinced that the project was a just a scam intended to be a means of securing a log export operation. The operating company is now being liquidated.

As there is no current application, this project is not "in process" and hence does not fall within the team's Terms of Reference. Any future application will have to meet the strict requirements laid down in the Amendments made to the Act in 2000.

There is evidence that a number of parties are interested in reviving the project. One of the parties that has expressed an interest is not a Registered Forestry Participant.

#### Aiambak-Kiunga Road TA

This is a project that remains the subject of extensive litigation and controversy. It is clear that no Timber Authority was ever issued under the Act in a manner that complied with the provisions of the Act. It has been said that the original Timber Authority (TA No 24) was issued under the former Act and saved by s137 of the

current Act. This is not correct. The Timber Authority was granted by Minister Neville nearly one year after the current Act was certified.

Although it is considered that there is no valid Timber Authority and that there has been no proper extension of the original Timber Authority, the Review Team has reported on this project as there remains a submission to the National Executive Council seeking Cabinet approval for a further extension. The Review Team regards this as an attempt to put the project “in process” even though it must surely be an abuse of due process.

On the basis of the above findings the Review Team has prepared an individual project review report only for the Aiambak-Kiunga TA, and has not further reported on the other two.

At a late stage of the review the Review Team decided that it was appropriate to consider the Hekiko project as two separate project areas, being the Gulf Province portion and the Southern Highlands Province portion. The final number of “in process” projects for which individual project review reports were prepared was 32. The final list of projects reviewed, the order in which they were reviewed, and the stage of processing for each, is shown in Table 1.

**TABLE 1 : SUMMARY OF PROGRESS OF PROJECTS THROUGH THE ACQUISITION AND ALLOCATION PROCESS**

<u>PROJECT NAME</u> <u>(BATCH 1)</u>	PROJECT PROCESSING STAGE						
	LAND OWNER AWARENESS AND ILG FORMATION	FOREST MANAGEMENT AGREEMENT	DEVELOPMENT OPTIONS STUDY	PROJECT GUIDELINES	PROJECT AGREEMENT	ENVIRONMENT PLAN	TIMBER PERMIT
1 Musa Pongani	S In progress	Not yet	Not yet	Not yet	Not yet	Not yet	Not yet
2 Rottok Bay Consolidated	S Completed	S Executed (4 parts)	S Completed	S Approved and Project advertised	S 1 Proposal received Awaits negotiation	Not yet	Not yet
3 Mukus Tolo	S Completed	S Executed	S Completed	S Approved and Project advertised	S Executed	S Submitted to OEC (b)	Not yet
4 Kulu Dagi TA	(a)						
5 Trans Vanapa	To commence	Not yet	Not yet	Not yet	Not yet	Not yet	Not yet
6 Wes	S In progress	Not yet	Not yet	Not yet	Not yet	Not yet	Not yet
7 Vailala (Meporo)	S In progress	Not yet	Not yet	Not yet	Not yet	Not yet	Not yet
8 Kerevat Plantation	S Completed	S In process of being signed and executed	Not yet	Not yet	Not yet	Not yet	Not yet
9 Morobe South Coast	S In progress	S Draft prepared	Not yet	Not yet	Not yet	Not yet	Not yet
10 Nungwaia Bongos	S In progress	S Draft prepared	Not yet	Not yet	Not yet	Not yet	Not yet
11 Amanab Blks 5&6	S Completed	S Draft prepared	Not yet	Not yet	Not yet	Not yet	Not yet

S = Document(s)/files sighted and reviewed

<u>PROJECT NAME</u> <u>(BATCH 2)</u>	PROJECT PROCESSING STAGE						
	LAND OWNER AWARENESS AND ILG FORMATION	FOREST MANAGEMENT AGREEMENT	DEVELOPMENT OPTIONS STUDY	PROJECT GUIDELINES	PROJECT AGREEMENT	ENVIRONMENT PLAN	TIMBER PERMIT
12 East Awin	S Completed	S Executed	S Completed	S Approved and Project advertised	S Executed	S Submitted to OEC (b)	Not yet
13 Josephstaal	S Completed	S Executed	S Completed	S Approved and Project advertised	S Draft prepared Negotiations Terminated by Board	Not yet	Not yet
14 Semabo	S Completed	S Executed	S Completed	S Approved and Project advertised	S 1 Proposal received Agreement to be Negotiated	Not yet	Not yet
15 Amanab Blks 1-4	S Completed	S Executed	S Completed (c)	S Approved and Project advertised (c)	S 7 Proposals received Await evaluation	Not yet	Not yet
16 Kamula Doso	S Completed	S Presented to Board (d)	Not yet	Not yet (e)	Not yet	Not yet	Not yet
17 Ioma Blk 5	S Completed	S Executed	S Completed	S Drafted	Not yet	Not yet	Not yet
18 Aitape East Coast	S Completed	S Executed	S Completed	S Drafted and sent to Board	Not yet	Not yet	Not yet
19 Middle Ramu Block 1 (Kumlam)	S Completed	S In process of being Signed and executed	Not yet	Not yet	Not yet	Not yet	Not yet
20 East Pangia	S Completed	S In process of being Signed and executed	Not yet	Not yet	Not yet	Not yet	Not yet
21 East Collingwood	S Completed	S Executed	Not yet	Not yet	Not yet	Not yet	Not yet
22 Asengseng Consolidated	S Completed	S Executed (3 parts)	Not yet (f)	Not yet	Not yet	Not yet	Not yet

S = Document(s)/files sighted and reviewed

<u>PROJECT NAME</u> <u>(BATCH 3)</u>	<b>PROJECT PROCESSING STAGE</b>						
	<b>LAND OWNER AWARENESS AND ILG FORMATION</b>	<b>FOREST MANAGEMENT AGREEMENT</b>	<b>DEVELOPMENT OPTIONS STUDY</b>	<b>PROJECT GUIDELINES</b>	<b>PROJECT AGREEMENT</b>	<b>ENVIRONMENT PLAN</b>	<b>TIMBER PERMIT</b>
23 Rai Coast	TRP (g)	TRP (g)	S Completed	Not yet	Not yet	Not yet	Not yet
24 Pondo	TRP (g)	TRP (g)	S Completed	S Drafted and sent to Board	Not yet	Not yet	Not yet
25 April Salumei	S Completed	S Executed	S Completed	Not yet	Not yet	Not yet	Not yet
26 Cloudy Bay	S Completed	S Executed	S Completed	S Drafted and sent to Board	Not yet	Not yet	Not yet
27 Tuwapu	S Completed	S Executed	S Completed	S Drafted and approved by PFMC	Not yet	Not yet	Not yet
28 South West Wapei	S Completed	S Executed	S Completed	S Drafted and sent to Board	Not yet	Not yet	Not yet
29 Wipim Tapila	S Completed	S Executed	S Completed	S Approved and Project advertised	1 Proposal received Awaits negotiation	Not yet	Not yet
30 Hekiko (Gulf Portion)	S Completed	S Executed	S Completed	S Approved and Project advertised	S Executed	S Submitted to OEC (b)	Not yet
31 Aiambak-Kiunga Road TA	(a)						
32 Hekiko (Southern Highlands Portion)	S Completed	S In process of being signed and executed	Not yet	Not yet	Not yet	Not yet	Not yet

S = Document(s)/files sighted and reviewed

(a) Timber Authorities – These require a different process as set out in the Act under amendments certified in January 2001.

(b) Environmental Plans are submitted as a requirement of the Environmental Planning Act, and are evaluated by the Office of Environment and Conservation.

(c) Replaces an earlier DOS and Project Guidelines which covered Amanab Blocks 3&4 only.

(d) Replaces an earlier FMA which was declared invalid.

(e) A previously prepared set of Project Guidelines were declared invalid. A new set is to be prepared when the new FMA and DOS have been completed.

(f) A DOS was previously prepared for Asengseng only - yet to be replaced by a DOS for Asengseng Consolidated.

(g) Acquired under the old Forestry Act as Timber Rights Purchase areas - NFS consider that ILGs and an FMA is not required.

## **1.5 Field Work**

The issue of field visits by the Review Team was the subject of much discussion. These revolved mainly around the landowner aspects of the review.

One point of view was that field visits would raise unrealistic landowner expectations that there would be progress with the forestry projects being progressed in their area, and that some landowners would use the review to try and legitimise one or other so called “landowner company” as the “true representative” of all the ILGs (and thus the legitimate recipient of some financial benefits on the landowner’s behalf) when there was clear dissent on this issue.

Another point of view was that there was insufficient time and resources for the Review Team to undertake field investigations for the projects the subject of this review. This might have involved dealing with 32 projects, 17 Provincial Government administrations, 17 operating Provincial Forest Management Committees, 17 Provincial Forestry officers, an estimated 2000 ILGs, and an estimated 50 bodies claiming to represent the landowners.

It was the view of the Review Team that full field investigations were not only impractical, but also unwarranted. However the team considered it essential to at least sample a number of project landowners, ILG Chairpersons and Provincial Forest Management Committees, particularly in relation to the three projects selected as a basis for testing the proposed methodology. A modest field visit program was designed and agreed on. This allowed members of the team to undertake the following field work:

- November 2000 – Visit by the landowner specialists to Oro Province for discussions with provincial administrators, members of the respective Provincial Forest Management Committees, the respective PNGFA’s Provincial Forestry Officers, and a sample of landowners.
- November 2000 – Visit by the legal and landowner specialists to East New Britain and West New Britain Provinces for discussions with provincial administrators, members of the respective Provincial Forest Management Committees, the respective PNGFA’s Provincial Forestry Officers, and a sample of landowners in villages accessed by helicopter.
- February 2001 – Visit by the landowner specialists to Western Province for discussions with provincial administrators, the PNGFA’s Provincial Forestry Officer, a number of ILG chairmen, and a selection of landowners in town and in one large village accessed by helicopter.

An NFS staff member from the PNGFA review support team accompanied the Review Team during the field work. A number of NGOs arranged field patrols to support their submissions to the Review Team.

## **1.6 Public and NGO Submissions**

At the direction of the PNG Government the review process was to be transparent. Whilst a decision regarding the degree of public consultation by the Inter-Agency

Forestry Review Committee regarding the draft individual project reports has been left to Government to decide, the Review Team made a pro-active effort to elicit submissions on the projects to be reviewed from NGOs. To this end the Review Team initiated meetings with a number of relevant PNG based NGOs and provided them with copies of the team's draft methodology, the proposed timetable and a list of the "in process" forestry projects to be reviewed under each of the three batches. In summary the responding NGOs and their contact with the Review Team are as follows:

- Greenpeace Pacific – which met formally with members of the team, provided written submissions covering most of the projects listed for review, some email comments on the Musa Pongani project, and telephone discussion on a number of issues.
- WWF South Pacific Program - PNG – which met formally with members of the team, and provided some comments on the PNGFA's year 2000 map showing potential new forestry projects, a written submission on the Nungwaia Bongos project, a verbal presentation to the Review Team (with notes) on the Wipim Tapila, Kiunga-Aiambak Road TA, Semabo and East Awin projects.
- Centre For Environmental Law and Community Rights (CELCOR) – which provided a written submissions on Musa Pongani (jointly with Conservation Melanesia), Kamula Doso and the Josephstaal projects, plus some email comments. It also met formally with the Review Team (with the Environmental Law Centre) for a discussion regarding the Kamula Doso project and the Aiambak-Kiunga Road Timber Authority. CELCOR also presented the Review Team with a letter signed by about 270 landowners expressing dissatisfaction with aspects of the Aiambak-Kiunga Road Timber Authority, and a submission on the East Collingwood project.
- Forest Industries Association of PNG – which informally met with the team a number of times and provided verbal comment on a number of issues related to the moratorium, the review, and the resource acquisition and allocation process.
- The Nature Conservancy (TNC) – which met formally with members of the team, and provided written material on their experience in tending for the Josephstaal project (included with the PNG Eco-forestry Forum's submission).
- Conservation Melanesia Inc – which provided email discussions with particular reference to land owner issues, a written submission (jointly with CELCOR) on the Musa Pongani project, and a copy of their letter to the Department of Oro Province regarding the East Collingwood and Musa Pongani projects.
- The PNG Eco-Forestry Forum (representing some 16 PNG based NGOs including all those listed above) – which provided a copy of it's submission to Government regarding the moratorium, a series of correspondence from their files dealing with the Mukis Tolo project, and allowed the Review Team to respond to a draft report regarding the review methodology which it indicated it intended to publish. It also provided submissions on the April Salumei and Hekiko (Gulf) projects prepared by WWF.

In addition to the above consultations, the Review Team Leader made a presentation regarding the intent and methodology of the review to a meeting of the Association of Foresters of PNG which was widely reported in the newspapers. The newspapers also reported the views of some of the above NGOs regarding the moratorium, the review and aspects of the forestry conditions on the World Bank's structural adjustment loan. As a consequence of the publicity a number of phone calls and letters were received from interested members of the public. Discussion with the review team were also held with a number of PFMC members and individual landowners who volunteered discussion and documents to the team.

The Review Team received a number of requests for copies of the team's individual project review reports, especially from NGOs. Given that the reports have been commissioned by the PNG Government; that the Review Team reported to the Government Inter-Agency Forestry Review Committee; that the reports were submitted by the team to the Committee as drafts subject to any errors and omissions identified by the Committee, the response given was that requests should appropriately be directed to the Inter-Agency Committee.

### **1.7 Sources of Information**

The main sources of information for the review were:

- PNGFA/National Forest Service:
  - Inventory reports and data base.
  - The FIM GIS system (maps and data).
  - PNGFA data base.
  - NFS reports including field reports, reports related to the allocation process (Development Options Studies, Timber Project Guidelines), proposal evaluation reports and various miscellaneous reports.
  - Contracts including Forest Management Agreements and Project Agreements.
  - Records kept in relation to the tendering process.
  - Forest Industry Participant registration data base.
  - General files including project files.
  - PFMC meeting minutes.
  - File material held by the Managing Director and other senior PNGFA managers.
  - Project proposals.
  - Discussions with management and staff.
- The PNGFA Board:
  - Papers presented to the Board.
  - Board meeting minutes.
  - Board general files.
  - Discussions with Board members and the Board Secretary.

- Office of Environment and Conservation:
  - Protected area data base.
  - Various reports including that on Fragile Forests.
  - Copies of Environmental Plans.
  - Discussions with management and staff.
- Lands Department:
  - Information on individual ILGs from the Registrar of Titles.
  - Documentation regarding various lease-lease back schemes.
- Investment Promotion Authority:
  - Company details of various Forestry Industry Participants and landowner companies.
- NGOs:
  - Various submissions and discussions as set out in Section 1.6
- Landowners:
  - Discussions with a sample of landowners and ILG chairmen through both public meetings in towns and villages, and meetings with individuals.

The Review Team acknowledges the willing support it received from all PNGFA/NFS staff they had contact with during the course of the review, and in particular those staff members who went to extra-ordinary lengths to locate requested files or reports which were not easily at hand.

### **1.8 Reporting**

The Review Team delivered it's reports to the Inter-Agency Forestry Review Committee as follows:

- Individual Project Review Reports:
  - Batch 1 (Reports 1 – 11) 12 December 2000
  - Batch 2 (Reports 12 – 22) 5 February 2001
  - Batch 3 (Reports 23 – 32) 5 March 2001
- Review Methodology Report: 5 March 2001

### **1.9 Treatment of Timber Authorities**

Of the 32 forestry projects reviewed, 30 were being developed on the basis of forest acquisition through a Forest Management Agreement and the eventual activation of the project through a Timber Permit issued by the Minister. This methodology report sets out in detail the approach adopted by the Review Team to reviewing these projects.

Two of the 32 projects were being developed on the basis of a Timber Authority. Timber Authorities are designed to permit very small scale logging (up to 5,000 m<sup>3</sup>/a), or the clearance of forest for either agricultural conversion or new roading development. Consequently Timber Authorities are not designed to support the logging of forest on a sustainable timber yield basis, and the review of these projects has focussed on the observance of due process, and the dealings with landowners, rather than forest resource issues. Amendments to the Forestry Act 1991 enacted in 2000 set out the detailed administrative procedures and requirements for Timber Authorities.

## **2. FORESTRY SECTOR PLANNING AND CONTROL, AND PROJECT RESOURCE DESCRIPTION**

### **2.1 Forestry Sector Planning and Control**

Compliance with the various Policies, Acts, Regulations and Guidelines requires that there be a Provincial Forest Plan including a Provincial Forestry Development Program; a National Forest Plan including a National Forestry Development Program; a set of National Forestry Development Guidelines; a certified National Forest Inventory; an annual statement of the provincial annual allowable cut; and that any new forestry project must be listed in the National Forest Plan for development.

#### Provincial and National Forest Plans and Development Programs

The provisions of the National Forest Policy and the Act (when read together), indicate the following order of events:

1. National Forestry Development Guidelines prepared by the Minister (Act s2(c)(i));
2. Provincial Forest Plans prepared by the Provincial Government (in consultation with the Provincial Forest management Committee). These are to be in conformity with the National Forestry Development Guidelines (Act s49(1)), and include a 5 year Forestry Development Program (Policy page 14);
3. National Forestry Plan drawn up by the PNGFA (Act s47) which includes a National Forestry Development Program which is “to accord with priorities” specified in the Provincial Forest Plan (Policy page 13).

Under s54 of the Act forest resources “shall only be developed in accordance with the National Forest Plan”, which in turn must be tabled in Parliament. However this is more a statement of policy than a legal issue, and it is questionable whether this is enforceable in law.

Given the above order of events, it is logical and sensible that the National Forestry Development Program should in effect be the sum of the Provincial Forestry Development Programs. In 1995 when the then Minister of Forests wished to progress the development of new forestry logging projects, he found that he could not do so given the then lack of a National Forest Plan. Wishing to adhere to the policy and the Act, he directed the PNGFA to prepare a National Forest Plan. The PNGFA was at that time supporting the Provincial Governments to prepare their Provincial Forest Plans (as precursors to it’s development of the National Forest Plan), and indicated to the Minister that it would not be possible to prepare a National Forest Plan until all of the Provincial Forest Plans (including the respective Provincial Forestry Development Programs) had been approved by their respective Provincial Executives.

In response the Minister set up his own committee (including staff of the PNGFA) to prepare a National Forest Plan. This was completed in May 1996, and as required (Act s48) this was tabled in Parliament in July 1996. A result of this course of events is that there are inconsistencies between the projects listed for development in the National Forest Plan and a number of the Provincial Forest Plans – some projects appear in the National Forest Plan but not in the respective Provincial Forest Plan, and some appear

in a Provincial Forest Plan but not in the National Forest Plan. This course of action by the Minister has not supported the National-Provincial consultation and co-operation envisaged by the Policy and the Act.

Under s47 of the Act, the National Forest Plan is required to include the National Forest Development Program, and it is logical that the requirement of s54 Act that forest resources shall be developed only in accordance with the National Forest Plan is a reference to this program. The National Forest Plan 1996 document presents the “program” as Chapter 7. The introductory remarks state that the Program “comprises a list of projects and activities that have been identified by provinces under their Provincial [Forestry] Development Programs”. As indicated above, this is not entirely correct – nor does the Plan set out a list of projects which are to be developed. The document goes on to state that “These projects ..... are shown in the various attached appendices”. The Plan includes 14 appendices. However the only appendices which set out a list of project names are Appendix 1 – National Forest Inventory Program, and Appendices 2 and 2a – Forest Resource Acquisition Program 1996 and 1997-2000. Consequently for the purposes of this review the inventory and acquisition programs set out in appendices 1, 2 and 2a are taken to represent the National Forestry Development Program. It is noted that the document includes provincial forest maps which identify a number of forest areas as either “likely to be developed” or as “potential areas for future development”. However these maps are not linked in the document to the National Forest Development Program, and consequently are deemed to be not part of it.

#### National Forestry Development Guidelines

The National Forestry Development Guidelines are to be prepared by the Minister in consultation with the Board (Act s47(2)), and are to be reviewed every 3 years (Policy page 13). The only existing set of guidelines were prepared by the then Minister in 1993. They have not been reviewed, and in this respect the National Forest Policy has not been complied with.

In the Introduction to the Guidelines the Minister states that the Guidelines “will comprise the primary statement of government policy in respect of forest development”, which effectively sets the Guidelines against the National Forest Policy of 1991. In the Foreword to the Guidelines the Minister sets out his view that “..... the Guidelines do, and must, introduce radical changes .....”. Significant policies put forward by the Minister in the Guidelines include:

- A progressive reduction in permitted log exports to “encourage” domestic processing.
- Proposed fiscal incentives for domestic processing.
- Development of a domestic log market by ensuring cost competitive coastal log transport.
- Timber Supply Agreements affording domestic processors the first right of refusal to all timber produced from within defined Timber Supply Areas (TSAs).
- Restrictions on the proportion of the national cut which any one forestry company (or group of companies) may be permitted to harvest.
- A forest revenue system based on appraised logging costs and a predetermined logger’s profit allowance. The proposed system includes a forest administration

- levy (as agreed to through the National Forest Policy 1991 – page 40), of K14.00/m<sup>3</sup> payable to the PNGFA to fund its operations.
- A review of existing forestry projects including a performance audit, and variation of permit conditions to bring them into line with the new Act.

Despite being endorsed by the National Executive Council, none of the above policies have come to pass. Some, such as the TSA concept, were progressed but were eventually rejected by the National Executive Council. Others, such as the forest revenue system, were not generally supported by other Government Departments or the industry, and were subsequently replaced by alternative options.

In addition to significant policy proposals, the Guidelines set out a forest resource acquisition process (Guidelines Part C) which requires the Development Options Study to be undertaken prior to the resource being acquired under a Forest management Agreement. Whilst this order of events is supported by many as the appropriate approach to facilitating informed land owner decision making with regard to the use of their land and forests, it conflicts directly with the order of events set out in the Act, and consequently the order of events implemented by the PNGFA.

Given the situation as set out above, and the fact that the Guidelines have effectively expired, the Review Team is of the view that checking new “in process” forestry projects for compliance with the Guidelines would add little of substance to the review findings. The only meaningful observation that can be made is that some Ministers are in breach of the National Forest Policy in that they have neglected to review the National Forestry Development Guidelines every three years.

The PNGFA has over a period of years drafted a revised set of National Forestry Development Guidelines. These were presented to the Board at its meeting 69 in February 2001. It is unclear to what degree the Minister has been involved in preparing this document. Given that the document has no formal status, and that the task of the Review Team is to check compliance with existing guidelines, this document has been ignored by the team for the purposes of a compliance review.

### National Forest Inventory

The National Forest Policy (page 11) requires a “Rapid Resource Appraisal” within one year (of the Policy date which is September 1996), to be followed by (page 12) “A four to five year program ..... to undertake inventories of the commercially accessible forest resources”. The Policy notes that the latter is intended to be the basis for “drawing up national and provincial forest development programs and forest management plans”. The Policy also states that (page 15) the National Forest Inventory is the responsibility of the NFS or “as contracted by” the Board. The Act (s47) requires that the National Forest Plan be based on a “certified National Forest Inventory. Some requirements for the National Forest Inventory are set out in the Forestry Regulations 1998.

No formal National Forest Inventory has been undertaken to date. The Forestry Development Guidelines 1993 requires that the Development Options Study (required under the Guidelines before a Forest Management Agreement is negotiated with land owners) includes a forest inventory. The National Forest Plan 1996 “accepts the Rapid

Resource Appraisal data as an interim certified National Forest Inventory”<sup>4</sup>. It also sets out a program and budget for a National Forest Inventory Program. The Forestry Regulations 1998 require the National Forest Inventory to be certified by the Chairman pursuant to a resolution of the Board.

The Forest Inventory Mapping (FIM) system (essentially a Geographic Information System or GIS) was created for the PNGFA in 1997 as a further development of the Rapid Resource Assessment<sup>5</sup> to provide an in-house ability to interrogate forest area information. A topographic mapping base was provided by the PNG National Mapping Bureau, and it was overlaid with the existing PNG Resource Information System (PNGRIS), which includes physical land information and forestry typing updated in 1993-94<sup>6</sup>. Area information was updated to take into account areas logged between 1975 and 1996, and boundaries of existing forestry concessions were added. The accuracy of the underlying mapping is limited as pointed out by the relevant report. The mapping of forest types and/or concession areas can be done with an approximate accuracy of +/- 250 hectares. When the land is classified according to physical characteristics (such as the limitations on logging set out in the PNG Logging Code of Practice), the accuracy reduces to +/- 500 hectares. As a consequence the FIM based maps provide forest area information which is of acceptable accuracy for national or provincial level planning purposes; of reasonable accuracy for the planning of individual projects (provided they are relatively large in area); but which is not sufficiently accurate to underpin the planning and control of specific logging operations.

The exercise undertaken to update the forest type maps in 1993-4 also reviewed all of the available forest volume inventory information, and assessed a gross merchantable volume per hectare figure for each forest type in each province for all trees with a diameter above buttress of 50 cm or more (which is the harvesting limit imposed by existing Timber Permits). Forest types carrying a gross volume of 15 m<sup>3</sup>/ha or more were classified as “merchantable”. This data is available though FIM, and can be incorporated into national and provincial level forestry planning exercises. The view of the PNGFA is that the volumetric data contained in the FIM is unreliable and over states the actual volumes. Consequently when planning new forestry projects, the PNGFA relies on the FIM for [some] area information, and on its own volumetric inventory data base (FIPS) for volumetric information.

The NFS claims that it is still lacking in up-to-date forest inventory. In a paper to the Board in May 2000 (Paper B3 – Meeting 65) the NFS asked the Board to endorse “the current NFS efforts to obtain external support to conduct a National Forest Inventory”. Again in a paper to the Board in November 2000 (Paper B9 – Meeting 68) the NFS asks the Board to endorse “the current NFS efforts to address the existing problem of outdated inventory data”. In the same paper the NFS illustrates the problem by noting that “it is quite likely that the actual sustainable harvest volumes for many of the proposed projects may be substantially below the estimated amounts, as the forest

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<sup>4</sup> The Rapid Resource Appraisal referred to in the National Forest Plan is contained in “Forest Resources and Vegetation Mapping of Papua New Guinea”, PNGRIS Publication No. 4, AusAID Canberra 1995.

<sup>5</sup> See “Forest Resources of Papua New Guinea – Summary Statistics From The Forest Inventory Mapping (FIM) System”, J McAlpine and J Quigley. AusAID 1998.

<sup>6</sup> See “Forest Resources and Vegetation Mapping of Papua New Guinea”, E T Hammermaster and J C Saunders. CSIRO for AusAID 1995.

inventory data is outdated. For instance the AAC granted for the East Awin project was calculated at 141,000 m<sup>3</sup> per annum, whereas the actual sustainable harvest volume is likely to be less than half this amount. This is because there has been major land clearance by settlers and fire, since the last inventory survey<sup>7</sup>. The minutes for Meeting 65 note that the Board “notes the current efforts being taken by the Managing Director in addressing the existing problem of out-dated inventory data”; the minutes for Meeting 66 note that the Board endorses “the Managing Director’s efforts in seeking external assistance for the conduct of a National Forest Inventory” and “Directs the Managing Director to prepare for the Board’s consideration a detailed proposal for the carrying out of a National Forest Inventory, and also to seek external assistance for the inventory”.

It is the view of the Review Team that there is sufficient information of sufficient accuracy in the FIM for it to be considered a National Forest Inventory. What is lacking is sufficient detailed field inventory of forest areas being considered for logging on which to base reliable loggable volume estimates for inclusion in the Forest Management Agreement, and on which to base a reliable annual sustainable cut estimates for inclusion in the Timber Project Guidelines. Although tenderers for forestry projects are advised to check the volumetric data provided by the PNGFA, many do not. The Review Team is of the opinion that potential developers (as well as the PNGFA Board and the landowners) should be able to place reasonable reliance on the resource data provided by the PNGFA.

#### Annual Statement of Provincial Annual Allowable Cut

The Act (s47) and the Policy (page 14) require the PNGFA Board to produce annually a statement of the Annual Allowable Cut (AAC) for each province. The Policy states that this is to “ensure that the areas of forest earmarked in the Provincial Forest Plan for present or future production are harvested on a sustained yield basis”. This statement infers that the Board’s AAC statement in some way acts or can be used as a control mechanism to ensure sustainable timber harvesting. However it is unclear to the Review Team how the statement contributes to effective sectoral control, either on a provincial or a national basis. Given the private (or customary) rather than public ownership of forest resources in Papua New Guinea, State control of harvesting can only be exercised on a project by project basis, and this is properly effected through the project specific terms and conditions of the Forest Management Agreement. This fact is recognised by the NFS when it prepared the Statement of Provincial Annual Allowable Cut for the year 1998, and recommended to the Board that it “consider amendment to s47(2)(c)(iii) of the Forestry Act such that it reflects the AAC based on a defined project area rather than on the whole province”. The relevant Board minutes show that whilst the issue received the attention of the Board, after some amendments the Statement of Provincial Annual Allowable Cut for 1998 was approved without resolving to accept the recommendation.

The Review Team verified the Board’s annual production and endorsement of an Annual Statement of Provincial Annual Allowable Cut as recorded in the Board minutes. However the statements for the years 2000 and 2001 present data only for the areas actually allocated under Timber Permits, and are therefore in breach of the Policy requirement that the statement refer to “present and future production”. The Forestry

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<sup>7</sup> Although not specifically identified for the Board, the deficiency in the inventory information here relates to the assessment of forest area, and not necessarily the assessment of standing merchantable volume.

Regulations 1998 (Regulation 69) require the Statement by the Board to be in the form set out in Form 67 of Schedule 1. The Board used this form for the first time in December 2000 to distribute copies of the Board endorsed Statement for the year 2001.

Although formally endorsed by the Board each year, the successive statements indicate that the NFS is gaining a better appreciation of the resource situation year by year. The year 2000 statement indicates that for existing forestry project areas the potential national sustainable cut is 2.1 million m<sup>3</sup>/a compared to a permitted cut of 5.7 million m<sup>3</sup>/a.

The Board Paper setting out the Statement Of Provincial Annual Allowable Cut For 2000 also alerts the Board to “the uneconomic size of many of the proposed new forestry projects” based on the Board’s own guideline of a minimum potential log production of 70,000 m<sup>3</sup>/a for a stand alone log export project. There is no evidence in the Board meeting minutes that the Board considered this issue further. The Board Paper setting out the Statement of Provincial Annual Allowable Cut for 2001 again raises the issue, and notes that the briefing prepared for the consultants undertaking the Review of Projects Currently Being Processed (this review) indicates that 16 out of 28 listed projects have an estimated sustainable cut “less than the Board stipulated minimum size for new projects - of 80,000 m<sup>3</sup> per annum”<sup>8</sup>, and that “this issue is likely to arise in the current Project Review”. The Board meeting minutes record that the Board resolved to direct “the Managing Director to address the issue of the minimum sustainable economic size for commercial forestry projects as discussed in the paper after which he submits to the Board his views and recommendations on the matter”.

It is the view of the Review Team that the annual Statement of Provincial Annual Allowable Cut is ineffective as a sectoral control mechanism, and adds nothing to the Government or PNGFA's understanding of the national forest resource, or their ability to manage it. As no other purpose is evident, the Review Team has not analysed the compliance of “in process” forestry projects with annual Statement of Provincial Annual Allowable Cut.

#### Sectoral Planning and Control Compliance Criteria

Based on the above considerations the Review Team determined what it considered to be material criteria to test compliance of the various “in process” forestry projects with the sectoral planning and control requirements of the existing Policies, Acts, Regulations and Guidelines. These were deemed to be:

##### Provincial Forest Plan

1. Does a PNGFA Board endorsed Provincial Forestry Plan exist?
2. Is the Provincial Forestry Plan current?
3. Is the Project listed in the Provincial Forestry Plan?

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<sup>8</sup> There appears to have been some confusion at this time as to whether the Board imposed minimum is 70,000 m<sup>3</sup>/a or 80,000 m<sup>3</sup>/a. Subsequently the figure of 70,000 m<sup>3</sup>/a is used consistently.

### National Forest Plan

1. Is the Project listed in the National Forest Plan as required under s54 of the Act?

In addition to considering the various submissions made to the Review Team, the work undertaken to check compliance with the above criteria was as follows:

### Provincial Forest Plan

- Obtaining copies of all the Provincial Forest Plans.
- Verifying approval of the plan by the Provincial Executive.
- Verifying Board approval of the plans as recorded in Board meeting minutes.
- Recording the plan expiry date.
- Extracting a summary of the forestry projects listed for development.
- Checking each “in process” forestry project for compliance with the plan.

### National Forest Plan

- Obtaining a copy of the Plan.
- Verifying the tabling of the Plan in Parliament and the formal noting of the Plan (as recorded in the records of Parliamentary debates).
- Extracting a summary of the forestry projects listed for development (in Appendices 1, 2 and 2a of the Plan as discussed above).
- Checking each “in process” forestry project for compliance with the plan.

The above criteria and the Review Team findings in regard to each for the 32 “in process” forestry projects reviewed are set out as check-list questions and answers in each of the individual project review reports.

## **2.2 Project Resource Description**

### Project Area Data

Project area data is available from the PNGFA’s FIM system. This enables staff to determine the gross project area and net loggable area (after deduction of non-forested areas; declared conservation areas; and areas environmentally unsuitable for logging as defined in the PNG Logging Code of Practice 1996) for any area which they define<sup>9</sup>. The Review Team obtained a project map printout and an area statement for each of the projects being reviewed. Any material differences between the gross area statement extracted from the FIM system and area estimates shown in the files were investigated and satisfactorily resolved. Mostly differences related to one or more land groups deciding to join or extract itself from a project area before the FMA document was signed and the project area finalised.

Printouts from the PNGFA’s Forest Inventory Processing System (FIPS) also contain project gross area data. However these are estimates made at the time of the field work which may bear no relation to the area finalised under the FMA. Consequently these

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<sup>9</sup> The accuracy of the area statements is discussed in Section 2.1

area estimates were ignored except for the purposes of commenting on the size of the inventory sample (see later).

### Project Volumetric Data

Project specific volumetric (and species distribution) data is obtained by the PNGFA from field inventory. The field work undertaken for the projects subject to this review was undertaken at various times from 1986 to 1999. The data is stored in FIPS. The Review Team obtained full print outs of the field inventory data and extracted from these the estimated gross harvestable volume per hectare and the data on species distribution.

The PNGFA have an informal target inventory sample of 1%, which is considered appropriate. This has never been achieved, and for some project areas the sample is considered to be unacceptably low. This is an important issue given that the inventory results are used by the PNGFA to determine the loggable volume estimates set out in the FMA document (on which the land owners base their expectations of income), and the Timber Project Guidelines (from which industry draws the resource estimates on which to base their feasibility studies and project proposals). An assumption made by all parties is that the volume data is reliable within reasonable limits. Currently this is not the case.

The PNGFA is aware of the deficiencies in its resource inventory. It prepared an extensive inventory program and budget which was tabled in Parliament as a component of the National Forest Plan 1996. It has also subsequently prepared amended inventory programs and budgets (as for example presented to the Board in July 1997), but it appears that only very limited funds have been allocated for this purpose. The PNGFA have continued to undertake a very limited amount of forest inventory in areas which are of interest for logging. For a few project areas no project specific inventory has been undertaken, and staff note that when under pressure to progress a project they have at times relied on a "best guess" estimate.

As discussed above, there is a perception within the PNGFA by some staff that what is needed is a new National Forest Inventory, and with the endorsement of the Board donor funding for such an exercise is being pursued. The need however is for more intense field inventory of project specific areas to improve the reliability of the estimates.

### Determining Total Net Loggable Volume

The PNGFA standard approach to determining the estimate of total net loggable volume (and subsequently the estimate of the sustainable timber yield) as demonstrated in most of the FMA documents is to apply a discount factor of 15% to the gross area statement (to allow for non-loggable areas within the project area); a discount factor of 30% to the gross volume per hectare estimate (to allow for defect); and to multiply the resulting figures together. In some cases when officers are aware that a substantial proportion of the gross area is not forested, a higher area discount factor will be applied. A number of the FMA documents present gross loggable area estimates which are unexplained.

It is clear that the PNGFA is not basing its estimates of the gross loggable area on the best information it holds in its data bases. The FIM system is capable of making a specific and objective determination of the project gross loggable area by deducting from the gross project area the areas excluded from logging by virtue of being non-forest,

declared conservation areas or areas environmentally unsuitable for logging as defined in the PNG Logging Code of Practice 1996.

The Project Review team has used the best available information to produce its own estimate of the net loggable volume (and hence the sustainable annual timber yield) for each project by:

- Determining the gross loggable area using the data extracted from the FIM system (gross project area less non-forested areas, less declared conservation areas, less areas excluded from logging due to environmental constraints as set out in the PNG Logging Code of Practice 1996);
- Estimating the net loggable area by applying a standard reduction factor of 15% to allow for riparian strips and small scale exclusions from logging;
- Accepting the gross volume per hectare data from FIPS (based on PNGFA field inventory);
- Estimating the net volume per hectare by applying a standard reduction factor of 30% to allow for defect etc; and
- Multiplying the net area data with the net volume data.

The above approach and the results achieved have been used by the Review Team as a benchmark against which the estimations produced by the PNGFA are judged. Whilst it is difficult to make an assessment of accuracy, it would seem that the benchmark approach utilises the best available data, and is sufficiently conservative to ensure that permitted sustainable yield are unlikely to exceed the capacity of the forest resources in the project area.

#### Project Specific Resource Description Compliance Criteria

Based on the above considerations the Review Team determined what it considered to be material criteria to test compliance with the various requirements to properly define the forest resource available for logging. These were deemed to be:

1. Is the gross loggable area properly defined?
2. Has the total gross merchantable volume been properly estimated?
3. Has the net merchantable volume been properly estimated?

In addition to considering the various submissions received by the Review Team, the work undertaken to check compliance with the above criteria was as follows:

#### Gross loggable area definition

- Interrogating the FIM system to obtain a gross project area statement.
- Interrogating the FIM system to obtain an estimate of the area within each project precluded from logging either due to the non existence of forest, its declaration as a conservation area, or its exclusion as environmentally unsuitable for logging as defined in the PNG Logging Code of Practice 1996.
- Obtaining a FIM system map for the project.
- Obtaining from the Office of Environment and Conservation an updated list of the declared (and gazetted) and planned forest conservation areas and checking their inclusion in the PNGFA's FIM system.

- Obtaining and verifying the status of the Forest Management Agreement (the key contract with land owners), and reviewing and checking the forest resource data presented by the PNGFA in the agreement (area description, map, resource data), and the how the gross loggable area has been determined.
- Obtaining, reviewing and checking the forest resource data presented in the documents prepared by the PNGFA to facilitate the resource allocation process (the Development Options Study, the Timber Project Guidelines and the Project Agreement).
- Obtaining and reviewing the forest resource data presented in the Environmental Plan prepared by the selected permit holder.
- Where there were material inconsistencies or errors, seeking an explanation from the PNGFA.
- Formulating an opinion regarding the definition of the gross loggable area.

#### Total Gross Merchantable Volume Estimation

- Interrogating FIPS to obtain a printout of the field inventory data based on the volumetric inventory undertaken by the PNGFA (sample size, species distribution data, volume per hectare data).
- Reviewing the sample size against the target of 1%.
- Comparison of the volume per hectare data and species distribution data with similar data extracted from the FIM system.
- Checking the FIPS volume data against that presented in the FMA document.
- Checking the calculations set out in the FMA document.
- Cross checking this with the data set out in the Development Options Study, the Timber Project Guidelines, the Project Agreement and the Environmental Plan.
- Where there were material inconsistencies or errors, seeking an explanation from the PNGFA.
- Formulating an opinion regarding the definition of the gross merchantable volume.

#### Total Net Merchantable Volume Estimation

- Checking the use of the standard conversion factor applied by the PNGFA.
- Checking the calculations set out in the FMA document.
- Cross checking this with the data set out in the Development Options Study, the Timber Project Guidelines, the Project Agreement and the Environmental Plan.
- Comparing the PNGFA's net merchantable volume estimates against the benchmark calculation undertaken by the Review Team.
- Where there were material inconsistencies or errors, seeking an explanation from the PNGFA.
- Formulating an opinion regarding the estimation of the net merchantable volume.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

## 2.3 Conservation Issues

### Regulations under the Environmental Planning Act (Chapter 370)

Following the findings of the Barnett Inquiry in 1989 that the forestry sector was out of control, the then Department of Environment and Conservation formulated and in November 1993 gazetted specific guidelines for log harvesting operations in forest management areas. The intent was to put in place some controls on harvesting given that the PNGFA was not yet effective. The guidelines were in the form of a regulation under the Environmental Planning Act and set out the requirements for the Environmental Plan. Under the Forestry Act (s77) an application for a Timber Permit must be accompanied by an Environmental Plan which has been approved under the Environmental Planning Act.

The Environmental Plan guidelines included requirements (amongst others) for:

- A full feasibility study (technical and economic);
- Five year Forest Working Plans;
- Detailed maps of roads and snig tracks, landing sizes and locations;
- Design details of water crossings;
- A final land-use plan;
- A summary of alternate/possible non-timber uses of the forest area;
- An evaluation of benefits and liabilities;
- A full description of the socio-economic environment, clan and tribal history, social issues and problems;
- Social demographics; and
- A description of forest resource harvesting alternatives.

As well as being considered by industry to be an impractical “wish list”, many of the requirements impinged on the responsibilities of the PNGFA. The PNGFA has since specified and standardised these through the PNG Code of Logging Practice, the PNGFA’s Planning Monitoring and Control Procedures 1995, and the PNGFA’s requirements for the feasibility study component of project proposals.

In 1993 the then Minister for Forests attempted to reduce the onerous requirements of the regulations through a statement in the National Forestry Development Guidelines which said that “Relevant parts of the forest development plan and industrial development plan will comprise the environmental plan to be submitted under s4 of the Environmental Planning Act. This will avoid unnecessary duplication of documents and ensure that forest management and environmental standards are integrated”. Department of Environment and Conservation staff have reviewed and amended the guidelines a number of times, but have not seen any amended versions through to gazettal. In late 2000 Parliament passed new environmental legislation, which when certified will effectively make the regulations redundant. Discussions with OEC staff indicate that they expect to review the need for regulations covering the environmental planning requirements for timber harvesting projects over the next two years.

Given that the regulations under the Environmental Planning Act are considered to be impractical; that they have never been fully enforced; that many of the requirements are now dealt with under PNGFA guidelines, standards and planning requirements; and that they are in the process of being made redundant; then these regulations have been ignored for the purposes of this review.

### Fragile Forests

In response to a 1997 internal review of the PNG Logging Code of Practice 1996, the then Department of Environment and Conservation (DEC) commissioned work aimed at refining the environmental constraints on logging set out in the code. The work (undertaken by Dr E Brown in 1997) identified a number of forest vegetation types which in the opinion of the author “should not be logged by commercial logging interests on the standard 35 year cutting cycle”. These forest types were labelled Fragile Forests. The report notes that “some of these forests are sensitive because they occur on wet soils at high altitudes, whilst others are likely to convert to grassland if they are logged. Some of these fragile forests occur in swamps or other seasonally inundated areas where logging may cause hydrological disturbances that can result in permanent inundation of these areas. When permanently inundated, the remnants of these forest types are unlikely to regenerate. Several of the forest types are found at high altitude where cold and wet conditions inhibit regeneration and increase likelihood of severe environmental damage”. The report goes on to suggest that the Fragile Forest areas should be added to the existing environmental constraints on logging (which are set out in the PNG Logging Code of practice 1996).

The Review Team has sighted an unsigned letter from the Secretary of Environment and Conservation to the Managing Director of the PNGFA dated September 1998 offering the report on Fragile Forests as a discussion paper. However the team was unable to confirm from DEC records that the letter had actually been sent. A review of the PNGFA files did not turn up a copy. The forest types considered to be fragile have been flagged in the PNGFA FIM system, and consequently staff of the Mapping Section of the Forest Planning Division are aware the work, but claim that it has not been properly explained to them, or for what purpose it should be used. Other sections of the Forest Planning Division appear to be unaware of the work and no one in the PNGFA appears to have a copy of the report.

There is no evidence that the PNGFA have considered Fragile Forests, and currently the organisation has no formal position on the matter. Review Team analysis indicates that “Fragile Forests” make up a varying proportion of the gross loggable area of the “in process” projects subject of this review. The range is 0% to 98%. Clearly a decision that Fragile Forests should be excluded from logging will have a significant impact on the sustainable timber yield of those projects where Fragile Forest makes up a significant percentage of the gross loggable area. In the extreme cases, there would no longer be a viable forestry project.

Review Team analysis indicates that about 7% of the national gross loggable forest area is classified as Fragile Forest.

### Consideration of Environmentally Sensitive Areas

Recognised environmentally sensitive areas are those formally gazetted as Conservation Areas, and those excluded from logging by the PNG Logging Code of Practice 1996.

The gazettal of conservation areas is the responsibility of the Office of Environment and Conservation (OEC). The Review Team sought a copy of the OEC register of gazetted conservation areas in order to check that these were recorded in the PNGFA FIM system, and consequently recognised and respected as unavailable for logging.

Investigation by the Review Team indicated that during the period 1993 to 1996 the then Department of Environment and Conservation and the PNGFA built up a strong working relationship. This resulted in part from DEC having set up a 6 person Forestry Monitoring Group which focussed on forestry and logging issues. It was strengthened through the collaboration of the two organisations in producing the PNG Logging Code of Practice 1996. At this time the two organisations operated the same Geographic Information System (also used by a number of other Government Departments), and were able to easily exchange data regarding gazetted Conservation area boundaries, and logging concession boundaries.

Since that time:

- The Department has been down-graded to the status of an Office;
- The organisation has been restructured, including the dis-establishment of the Forestry Monitoring Unit; and
- OEC (with donor assistance) has installed a new GIS system which is incompatible with the system which continues to be used by the PNGFA (and a number of other Government Departments).

The Review Team was able to verify that all conservation areas gazetted up to about 1997 were recorded in the PNGFA FIM system. Boundary information for the larger areas was derived from the gazettal notices. The smaller areas are recorded as map points alerting users to their presence. At the Review Team's request OEC produced a list of gazetted conservation areas, but were unable to confirm that it was complete or up to date.

### Conservation Set Asides

In about 1994 when the Forest Management Agreement was being drafted, the then DEC made a case for the protection of sample areas of the forest types that were being logged. To facilitate this a clause was added to the standard FMA which gives the PNGFA the right to set aside up to 10% of the gross loggable area from logging.

### Conservation Specific Compliance Criteria

Based on the above considerations the Review Team determined what it considered to be material criteria to test compliance with the various requirements aimed at ensuring that forest conservation imperatives were being met. These were deemed to be:

1. Have “Fragile Forest” areas (OEC definition) been considered?
2. Have environmentally sensitive areas been considered?
3. Have conservation set asides been appropriately implemented?

The work undertaken by the Review Team to check compliance with the above criteria was as follows:

#### Fragile Forest Areas

- Investigating the formal status (if any) of Fragile Forest areas within OEC and PNGFA.
- Based on the data contained in the PNGFA’s FIM system, ascertaining the extent of Fragile Forest areas within each project area.
- Determining the proportion of the gross loggable area which is classified as Fragile for each project.
- Assessing the impact of excluding the Fragile Forest areas from logging on the sustainable annual timber harvest estimate.
- Formulating an opinion on the relevance of Fragile Forest areas for each project.

#### Environmentally Sensitive Areas

- Obtaining from OEC the list of gazetted and proposed large and medium scale conservation areas.
- Discussions with selected NGOs regarding large and medium scale conservation project areas supported by them.
- Verifying the capture of large and medium scale gazetted conservation areas in the PNGFA FIM system, the ability of the system to identify these areas on maps, and the PNGFA approach to dealing with these.
- For each project ascertaining the extent of areas classified as “Conservation Areas” within the project boundary.
- Reviewing the classification of environmentally sensitive areas excluded from logging through the PNG Logging Code of Practice 1996 (exclusion areas and buffer zones).
- Checking compatibility between the Logging Code of Practice and the operational guidelines (as set out in the PNGFA Planning, Monitoring and Control Procedures 1995).
- Formulating an opinion on the treatment of environmentally sensitive areas.

#### Conservation Set Asides

- Verifying the right of the PNGFA to set aside 10% of the gross loggable area as a forest conservation area in the Forest Management Agreement for each project.
- Ascertaining the existence (or otherwise) of formal or informal guidelines for the implementation of Conservation Set Asides by the PNGFA.
- Checking that the right has been carried forward to the Project Agreement negotiated with the selected timber harvester.

- Formulating an opinion on the implementation of Conservation Set Asides.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

## **2.4 Estimate of the Sustainable Cut**

### Compliance With The Sustained Timber Yield Principle

The sustained timber yield principle requires that the annual allowable cut be based on the total net loggable volume spread over a cutting cycle of sufficient length to ensure that the forest can be harvested sustainably. The Review Team assessed whether this principle has been observed in the project planning and allocation process.

### Minimum Production for Financial Efficiency

A financially efficient logging operation is one that is able to keep production costs to a minimum. Financial efficiency ensures the ability of the operation to realise the maximising amount of economic rent, and consequently underpins the ability to pay the optimum amount of royalties, Government charges and landowner benefits, as well as earning adequate profit.

To operate in a financially efficient manner requires a sufficiently high level of production to keep all logging equipment fully utilised. Any machinery down time due to a lack of permitted production will increase unit costs. In this respect the critical piece of equipment is the loader used in the forest to sort logs and load the logging trucks. Typically a loader can support the production of 2 to 3 tracked skidders (bulldozers), and 2 to 3 tracked skidders if fully utilised can produce about 30,000 m<sup>3</sup> of logs per annum. Thus if a logging project is to be financially efficient, and be in a position to produce the maximum economic rent, then the sustainable allowable cut must be at least 30,000 m<sup>3</sup> per annum.

The impact of this is recognised in the standard Forest Management Agreement and the PNGFA’s Planning, Monitoring and Control Procedures 1995 which both correctly indicate that the minimum forest area required to support a sustainable logging operation is dependent on the net volume per hectare. Both documents set out the example of a net loggable volume of 10 m<sup>3</sup>/ha indicating the requirement for a minimum sustainable working area of 105,000 ha, and a net loggable volume of 30 m<sup>3</sup>/ha indicating a requirement for a minimum sustainable working area of 35,000 ha.

### Minimum Production for Log Export Operations

As an informal guideline the PNGFA Board has determined that a viable log export operation requires a minimum annual log production of 70,000 m<sup>3</sup>. This is a market driven guideline, and should not be confused with the minimum requirement for a financially efficient logging operation set out above. One is based on production criteria and applies regardless of how the logs are used, and the other is based on market criteria.

## Compliance Criteria Relating to the Estimate of the Sustainable Cut

Based on the above considerations the Review Team determined what it considered to be material criteria to test the correctness and interpretation of the estimates of the sustainable timber cut. These were deemed to be:

1. Has the sustainable annual cut been properly calculated?
2. Is the estimated sustainable yield sufficient to support a financially efficient logging investment (min 30,000 m<sup>3</sup>/a)?
3. Is the estimated sustainable yield sufficient to support a stand-alone log export operation (min 70,000 m<sup>3</sup>/a guideline set by PNGFA Board)?

The work undertaken by the Review Team to check compliance with the above criteria was as follows:

### Calculation of the Sustainable Cut

- Reviewing consistency of the cutting cycle used to determine the sustainable yield estimates.
- Undertaking the Review Team's own calculation of the sustainable annual cut for each project based on the data obtained from the PNGFA's FIM system, the FIPS data base, and the standard approach to estimating the net loggable volume set out in Section 2.2 of this report.
- Checking consistency with the sustainable yield calculations undertaken by the PNGFA and presented in the Development Options Study and the Timber Project Guidelines.
- Where inconsistencies were found, analysing the source of the inconsistency and seeking explanations from PNGFA staff.
- Assessing the impact of any Fragile Forest on the estimate of sustainable cut.
- Reviewing any volumetric inventory data and alternative assessments of the sustainable yield presented by potential developers in their tender documents.
- Formulating an opinion on whether the sustainable timber yield principle has been observed.

### Sufficiency to Support a Financially Efficient Operation

- Checking the assessed (and corrected if necessary) estimate of the sustainable timber yield against the guideline.
- Formulating an opinion on whether the estimated sustainable cut will support a financially efficient logging operation.

### Sufficiency to Support a Stand-Alone Log Export Project

- Checking the assessed (and corrected if necessary) estimate of the sustainable timber yield against the guideline.
- Formulating an opinion on whether the estimated sustainable cut will support a conventional stand alone log export operation.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

### **2.5 Consistency of data**

The consistency of resource data between the various documents was checked and any inconsistencies noted. The PNGFA prepared or negotiated documents checked include the Forest Management Agreement, the Development Options Study, the Timber Project Guidelines and the Project Agreement. The Environmental Plan prepared by the selected developer was also checked. Any inconsistencies in the documents prepared or negotiated by the PNGFA were brought to the attention of PNGFA staff, and an explanation was sought by the Review Team. Where found, inconsistencies are noted in the individual project review reports.

### **2.6 Any Other Material Non-Compliance Issues**

During the investigative and analytical work undertaken in addressing the compliance criteria described above, any other material non-compliance issues related to the forest resource which were found were noted. These are set out in each of the individual project review reports.

### 3. ASSESSMENT OF LEGAL COMPLIANCE

#### 3.1 The Legal Process and Requirements as to Form

A consideration of legal compliance involves matters of process and form. The process is primarily set out in many provisions of the Act. The Act also makes detailed provision for the form of Forest Management Agreements. There are also matters of process that are set out in the Regulations 1998, the National Forest Policy 1991 and in the National Forestry Development Guidelines 1993.

The details shown in the following table indicate the basis upon which each step in the process is included in the Checklist. It indicates the legal and/or policy source of the requirement as to process and form. The Checklist of Legal Compliance used for the purposes of the review (see later) was based on this table.

STEP	STEP IN PNGFA CHECK-LIST	SECTION (S) OF THE ACT 1991	REGULATION (S) 1998	FORM (S) – (Regs Sched 1)	POLICY (P) AND GUIDELINES (G)
<b>1. LANDOWNER CONSULTATION</b>					
- Awareness campaign	1				
- Vesting of title		57(1)			P p17 (iv)
- Or the consent of landowners		57(2)			
- PFMC certificate		58(f)	82	79	P p18 (v)
- Attendance of l/owners at meeting of PFMC		28(3)	43	41	
<b>2. FOREST MANAGEMENT AGREEMENT</b>	2-5				
- Form/content		58	79		P p17 5(b)
- Execution		56(1)			
- Ministerial approval		56(2)	80/81	77/78	
<b>3. DEVELOPMENT OPTIONS STUDY</b>	6-7				
- Board to arrange		62(1)(3)	84	81	
- Exemption		62(2)			
- Directions from PFMC		62(3)(b)	85/86	82/83	
- DOS given to Minister and PFMC		62(4)	87	84	
<b>4. PROJECT GUIDELINES</b>	8-9				P p19 (iii)
- PFMC to consult with l/owners and Prov Govt		63(1)			
- PFMC to prepare draft		63(1)			

- PFMC to submit draft to the Board		63(2)	88	85	
- Board to issue final guidelines		63(2)	89	86	
<b>5. ADVERTISEMENT</b>	10(a)&(b)				<b>P</b> p19 (iv)
- Project to be advertised		64(2)			
- Expressions of interest received			90(a)	87	
- Extensions may be exempted		64(3)	91/92	88/89	
- Expression(s) of interest received			90(b)	92	
<b>6. FEASIBILITY STUDIES</b>					<b>P</b> p19 (iv)
- Registration of proponents		105	208	209	
- Application to do study		65	94	91	
- M/D may approve		65	93	90	
- Bond to be lodged					<b>G</b> p7
- DOS cost reimbursement					<b>G</b> p7
- Landowner advance					<b>G</b> p7
<b>7. PROJECT PROPOSALS</b>	11-17				
- Registration of proponents		105	208	209	
- If advertised – placed in in tender box		64(2)(d)			
- If not advertised – sent to M/D					
- Proper as to form and content		66(2)	95		
- Referred to PFMC		67(1)	96	93	<b>P</b> p19 (v)
- Evaluated by PFMC with assistance from NFS		67(2)			<b>P</b> p20 (vi)
- Invitation for further information		68(1)	97	94	
- Evaluation of further information		68(3)			
- PFMC makes report and recommendations for the Board		69	98	95	
- Board considers report and consults with the Minister		70(1)(a)	99	96	
- Minister gives views			100	97	
<b>8. NEGOTIATIONS</b>	18-20				
- Board directs PFMC as to proponent for further negotiations		70(1)(b)	101	98	
- Board and PFMC set parameters		70(1)(c)	102/104	99/101	<b>P</b> p 20 (x)

- PFMC negotiates agreement		71(a)			
- PFMC submits final draft to Board		71(b)	106	103	P p 21 (xi)
<b>9. PROJECT AGREEMENT</b>	20-23				
- Board considers draft agreement		72(1)(a)			P p 21 (xii)
- Board may return draft to PFMC for further Negotiation		72(1)(c)	108	105	
- PFMC refers back revised agreement		72(2)	109	106	
- Finance Minister's approval sought for execution	25	PFM Act			
- Board consults with l/owners, Prov Govt and MP's	23	59	83	80	P p18(d)
- (Board consults with Prov Govt)	24	OLPG (115)			
- Board may execute agreement	26	72(1)(b)(i)			
- Board recommends to Minister to grant Timber Permit	27	72(1)(b)(ii)	107	104	
<b>10. TIMBER PERMIT</b>	28-31				
- Minister invites proponent to apply		73(1)	110	107	
- Application is made for Timber Permit		77(1)	119	116	
- Application must have Environment Plan (approved)		77(2)(c)(iii)			P p21 (xiii) P p22(c)(i)

#### NOTES:

1. PFM Act = Public Finance Management Act.
2. OLPG = Organic Law on Provincial and Local-Level Government
3. The Regulations were made in June 1998 but purport to have retrospective effect from 24 January 1996. The 1998 regulations repeal the regulations of 1992.

### 3.2 Comments Regarding the Legal Process and the Checklist

#### 3.2.1 Purpose

The Checklist is a re-draft of a checklist used by the National Forest Service to monitor progress of a project through the acquisition and allocation process leading to the issuance of a Timber Permit. It identifies the 10 basic elements of the process, and the steps to be taken at each of these stages.

The Checklist relates principally to the process for “stand alone” projects. It is applicable to extensions, but in such cases the requirement for advertising for proponents need not apply. Applications for Timber Authorities were not assessed as against the Checklist.

### **3.2.2 Some Specific Explanations**

#### Attendance of Landowner Representatives at PFMC meetings

Section 28(3) of the Act provides for the right of two landowner representatives to be present at meetings of the PFMC at which their project is under consideration. They have no voting rights at those meetings but may participate in deliberations.

This right is not said to apply to any particular stage or stages of the process and so the Checklist notes five meetings of the PFMC during the course of the acquisition and allocation processes at which such attendance is to be considered a right.

#### Consultation with the Provincial Government

Section 115 of the Organic Law on Provincial and Local-Level Government (OLPG) requires that consultation take place with a Provincial Government affected by a major development project. While this is an important provision, it should be noted that such consultation must take place under the Forestry Act in relation to the proposed grant of a Timber Permit. This is a requirement of section 59.

So long as there is compliance with section 59 then it is considered that the OLPG requirements have been met. Accordingly the OLPG requirement does not appear in the Checklist.

#### Delegated Powers of the Managing Director

The PNGFA Checklist indicates that three powers may be exercised under delegation to the Managing Director. These powers relate to:

- Step 9 Approval of draft project guidelines submitted by a PFMC
- Step 10(a) Advertising a forest development project
- Step 18 Setting negotiation parameters in conjunction with a PFMC

Under section 19 of the Act, the Minister may make a delegation after consultation with the Board. Regulations 21 – 23 provide for the use of three Forms as part of this delegation process. These are Forms 19 –21.

It has been confirmed that the relevant delegations (and others) were duly made by written instrument signed by the Minister on 28 August 1998.

#### Constitution of PFMC’s and their Procedures

Provincial Forest Management Committees play a pivotal role at many stages of the process. The process of using the checklist in this review of “in process” projects largely assumes that matters concerning the appointment of members and the deliberations of the PFMC’s are not irregular. PFMC minutes have been reviewed where available. A list

of PFMC members was obtained but it was not up to date. No attempt was made to verify the validity of appointment of each individual member.

### Registration of Forest Industry Participants

These provisions relate to developers/operators and to consultants.

The requirement of section 105 for forest industry participants specifically applies to two steps in the Checklist. Only registered persons may be approved to undertake feasibility studies under section 65 or to lodge project proposals under section 64. It follows, and is in fact expressly stated in section 105, that only a registered person may apply for a Timber Permit under section 77(1).

The former Forestry Regulations 1992 prescribed forms and procedures. These are now covered by Regulation 208 and Form 209. Application is made to the Managing Director under section 107. Further information may be requested under section 108. The Managing Director considers the application and makes a recommendation to the Board under section 109. He must take into account –

- (a) The financial resources of the applicant;
- (b) The applicant's experience and expertise in the relevant fields; and
- (c) The applicant's previous record.

Under section 110 the Board directs the Managing Director to effect registration or to notify the applicant of his rejection. In fact the Board's powers have been delegated to the Managing Director. This substantially defeats the process as the recommendation is now effectively made by the M/D to himself. An important check and balance is therefore lost.

A full printout of registered industry participants and consultants was obtained and proved to be a very useful reference. Further registration particulars from the PNGFA database were regularly and easily obtained in relation to companies identified during the review. These details related to the directors and shareholders of these companies. When necessary these details were cross-checked against particulars obtained from searches of IPA records.

### **3.2.3 A Further Explanation of the Stages/Steps**

#### Stage 1 - Landowner Consultation

Step 1 of the PNGFA checklist refers to conducting a "Landowner Awareness Campaign". The National Forestry Development Guidelines (page 4) set out the objectives of such a program. The justification for conducting the campaign at the outset is said to be that consensus support for the project must be indicated before any further step is taken. The PNGFA files were checked for some evidence that such a campaign was undertaken.

Section 57(1) of the Act requires that the title to customary land affected by a proposed Forest Management Agreement must be vested in a registered land group or registered under a law providing for the registration of customary land. Where sub-section (1) cannot be practicably given effect to, then under sub-section (2) a Forest Management

Agreement may be executed on the part of customary owners by authorised agents of customary groups providing the written consent of 75 % of the adult members resident on the land of each such group. In the absence of any system of customary land registration, it has been sub-section (2) that has invariably been relied upon. Some ILG incorporation files and documents were reviewed but as the number of ILG's involved with the projects under review is now approaching 2000 this was done very selectively.

Each Forest Management Agreement must contain a certificate from the PFMC to the effect that it is satisfied as to the authenticity of the landowner groups and as to the willingness of those landowners to enter into the agreement. This is a requirement of section 58(f). Under regulation 82 the relevant form is Form 79. In each case of a completed Forest Management Agreement the certificate forms part of the contractual documentation.

The PFMC meeting at which such a certificate is endorsed is a meeting to which the section 28(3) right of landowner attendance applies. Unless the relevant PFMC minutes were available it was not possible to confirm attendance.

### Stage 2 - Forestry Management Agreement (FMA)

The requirements of section 58 as to form are that an FMA shall:

- (a) Be in writing;
- (b) Specify the monetary and other benefits to be received by landowners;
- (c) Specify the estimated volume of merchantable timber;
- (d) Specify a term of sufficient duration to permit sound management principles;
- (e) Include a map of boundaries;
- (f) Contain the PFMC certificate mentioned above.

In addition, the Policy at page18 requires that “a specified portion of the FMA area has been dedicated by the resource owners for reforestation or agroforestry.....” or that the FMA makes provision for these areas to be determined later.

Under section 56(1) the FMA is made between the resource owners and the PNGFA. (Section 5(3) provides for the affixing of the seal of the PNGFA to an instrument pursuant to a Board resolution and with the signature of two Board members).

An FMA is not valid until approved by the Minister under section 56(2). The relevant forms are Forms 77/78 as prescribed by regulations 80 and 81.

### Stage 3 - Development Option Study (DOS)

Under section 62(1) the Board must arrange this study before a project is tendered. It is not required:

- (a) Where the proposed annual cut is less than 5000 cubic metres; or
- (b) For harvesting of forest plantations; or
- (c) For logging of salvage forest designated in the National Forest Plan (section 62(2)).

The DOS must comply with directions given by the PFMC under section 62(3)(b). It must also provide an inventory of forest resources in the area and identify feasible options for development by investigating:

- (a) The means of landowner participation in the development;
- (b) Environmental and social impacts; and
- (c) The feasibility of local processing and marketing prospects generally.

Under section 62(4) a copy must be given to the Minister and the PFMC. Regulation 87 prescribes Form 84 for this purpose.

#### Stage 4 – Project Guidelines

Under section 63(1) Project Guidelines are to be drafted after the completion of the DOS. This is done by the PFMC. The landowners and the provincial government must be consulted. The draft is submitted by the PFMC to the Board. (section 63(2)).

The Board reviews the draft and issues final guidelines. This power has been delegated to the Managing Director. Under section 63(3) the purpose of the guidelines is said to be:

- (a) To enable intending parties to submit project proposals;
- (b) To evaluate applications for Timber Permits; and
- (c) For the setting of conditions in Timber Permits.

#### Stage 5 – Advertisement (Tender)

After completion of the DOS and the Project Guidelines, the Board must advertise the project and seek expressions of interest from registered forest industry participants. Section 64(1) sub-section (2) relates to the manner of advertising. A time for lodgment must be specified. The Managing Director has been delegated the power of advertising. Expressions of interest are received by the Board in Form 87 (Regulation 90(a)).

Under section 64(3) the Board may consider proposals without advertisement if the project is an extension of an existing approved project and if it is consistent with the National Forestry Development Program. The Form for such proposals is Form 92 (Regulation 90(b)). During the course of this Review amendments were made to the Forestry Act 1991. These make further detailed provision in relation to the approval of projects as extensions. These amendments were passed by Parliament in December 2000 and came into effect in January 2001.

#### Stage 6 – Feasibility Studies

A feasibility study can only be done by a registered forest industry participant (section 105 and Form 209). An application to undertake a feasibility study is made to the Managing Director under section 65. The Managing Director may give his approval “if he is satisfied that the conditions of registration of the applicant are appropriate to the project” (section 65).

Under the National Forestry Development Guidelines (page7/8) a bond of K50, 000 and K2 per cubic metre of proposed annual harvest volume is required to be lodged by a

party undertaking a feasibility study. The Guidelines require that this sum be paid out as follows:

- (a) 60% to the PNGFA as reimbursement for the cost of the DOS; and
- (b) The balance as an advance to landowners to obtain independent financial advice.

It was discovered that the PNGFA never applied this requirement. In fact there have been very few applications to undertake feasibility studies and the imposition of such a charge would have discouraged even the few companies which sought to comply with the Act in this regard. Accordingly this matter was deleted from the Checklist even though on its face it seems to have some attraction.

### Stage 7 - Project Proposals

Only persons registered under section 105 may make project proposals (section 66(1)). Registration was confirmed in relation to each proponent.

If the project has been advertised the proposals are placed in a tender box. The tender register maintained by the PNGFA was checked in relation to each project that had progressed to this stage.

If the project is an extension and no advertising has been done the proposal(s) is sent to the Managing Director.

Proposals must be lodged before the date specified in the advertisement (section 66(2)(c)). Regulation 95 prescribes the required form and particulars. Under section 67(1) the project proposals are referred to the PFMC (Form 93). They are evaluated by the PFMC who may seek the assistance of the PNGFA (section 67(2)).

Meetings of the PFMC where proposals are considered are meetings at which the attendance of landowners is a right under section 28(3).

Further information regarding a proposal may be sought and evaluated (section 68). The PFMC prepares a report and makes recommendations (section 69). Meetings of the PFMC at which the report and recommendations are endorsed are meetings at which the attendance of landowners is a right under section 28(3).

The Board consults with the Minister (section 70(1)(a)). The views of the Minister are given in accordance with regulation 100 on Form 97.

### Stage 8 - Negotiations

Under section 70(1)(b) the Board directs the PFMC as to which proponents it should enter into further negotiations with a view to concluding a Project Agreement. The Board and the PFMC set the parameters of the negotiations (section 70(1)(c)). This power has been delegated to the Managing Director.

The PFMC negotiates the Project Agreement (section 71(a)) and the final draft is submitted by the PFMC to the Board (section 71(b)). The meeting of the PFMC is a meeting at which the landowners have a right of attendance under section 28(3).

## Stage 9 - Project Agreement

Under section 72(1)(b) the Board considers the draft Project Agreement (regulation 101 Form 98), and may return the draft to the PFMC for further negotiation (section 72(1)(c) Form 105). The PFMC conducts further negotiations and refers the revised draft back to the Board (section 72(2) Form 106). The meeting of the PFMC at which the revised draft is finalised is a meeting at which landowners are entitled to be in attendance under section 28(3).

Prior to execution of the Project Agreement:

- (a) The approval of the Finance Minister is sought (requirement of the Public Finance Management Act); and
- (b) The Board consults with landowners, Provincial Governments and MP's representing the project area (section 59).

The consultation with the Provincial Government meets the requirement of the OLPG.

Under section 72(1)(b) the Board may then execute the agreement. At the time of execution the Board recommends to the Minister to invite the developer to apply for a Timber Permit (regulation 107 Form 104).

## Stage 10 - Timber Permit

Under section 73(1) the Minister invites the party to apply for a Timber Permit (regulation 110 Form 107). An application is made for the Timber Permit (section 77(1) Form 116).

The application must include an approved Environment Plan (section 77(2)(c)(iii)). (Refer to pages 8 and 22 of the Policy).

## General Policy Requirements

While these matters do not really constitute a step in the process they are important statements of policy that need to be confirmed, particularly in the context of the executed Project Agreements. These policy objectives are:

- The encouragement of on-shore processing;
- The participation of Papua New Guineans and PNG companies in resource developments and the related business activities;
- The recruitment and training of local staff; and
- The creation of joint ventures.

The review therefore reviewed finalised Project Agreements for provisions that further these goals.

### **3.3 The Legal Compliance Checklist**

Based on the above considerations the following Legal Compliance Checklist was compiled for the purposes of this Review:

## CHECKLIST OF COMPLIANCE WITH LEGAL REQUIREMENTS

### PROJECT -

Step	Compliance	Non-Compliance	Not clear
<p><b><u>1. Landowner Consultation</u></b></p> <p>Awareness campaign</p> <p>Vesting of title</p> <p>Or consent of landowners</p> <p>PFMC certificate</p> <p>Attendance of landowners at PFMC meeting</p>			
<p><b><u>2. Forestry Management Agreement</u></b></p> <p>Form and content</p> <p>Execution</p> <p>Ministerial approval</p>			
<p><b><u>3. Development Option Study</u></b></p> <p>Board to arrange</p> <p>Or exemption</p> <p>Directions from PFMC</p> <p>DOS given to Minister and PFMC</p>			
<p><b><u>4. Project Guidelines</u></b></p> <p>PFMC consults with L/owners and Prov Govt</p> <p>PFMC to prepare draft</p> <p>L/owner attendance at PFMC meeting</p> <p>PFMC to submit draft to the board</p> <p>Board issues final guidelines</p>			
<p><b><u>5. Advertisement</u></b></p> <p>Project to be advertised</p>			

Expressions of interest received

**6. Feasibility Studies**

No application appears to have been made

**7. Project proposals**

Proponents must be registered  
Under section 105

Placed in tender box

Proper as to form and content

Referred to PFMC

Landowner attendance at PFMC meeting

Evaluated with assistance of NFS

Invitation for further information

Evaluation of further information

PFMC reports and recommends

L/owner attendance at PFMC meeting

Board consults Minister

Minister gives views

**8. Negotiations**

Board directs PFMC as to proponent  
for further negotiations

Board and PFMC set parameters

PFMC negotiates agreement

PFMC submits final draft to the Board

L/owner attendance at PFMC meeting

**9. Project Agreement**

Board considers draft agreement

Finance Minister's approval sought

Board consults l/owners, Prov Govt  
and MP's of the area

Board may execute agreement  
Board recommends to Minister to grant  
Timber Permit

**10. Timber Permit**

Minister invites party to apply  
Application is made for TP  
Application must have approved  
Environment Plan

**11. General Policy Objectives**

Encouragement of on-shore processing  
Participation of Papua New Guineans  
Recruitment and training of local staff  
Creation of Joint Ventures

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**3.4 The Use of Prescribed Forms**

The Forestry Regulations 1998 prescribe the use of Forms for nearly every step in the acquisition and allocation processes. There are in fact 232 Forms currently required by the Regulations.

While the Regulations were made in 1998 they purport to apply from 24 January 1996. They repeal and replace the Forestry Regulations 1992. Those Regulations prescribed only four Forms and these related only to the registration of forest industry participants and consultants.

The requirement to use prescribed forms since 1998 has been generally observed by the PNGFA. The existence of these signed and dated forms on the PNGFA files has greatly facilitated the review of the relevant procedural steps. It is hardly surprising however that actions taken by the PNGFA between 1996 and 1998 have not complied with the Regulations, even though they are deemed to have had application in that period. In most cases forms have been used appropriately after 1998.

At some times in the past there have been other forms used by the PNGFA that do not accord with the forms prescribed by the 1998 Regulations. These appear to have been used in anticipation of the Regulations being made.

The Checklist for each project notes the date and form number of each step where a form has been used. If no form has been identified then no adverse conclusion is drawn in the notes on legal compliance.

### **3.5 Amendments to the Act (Effective January 2001)**

During the course of this Review there were significant amendments to the Forestry Act 1991. These affected provisions relating to:

- The composition of the Board.
- The selection of the Board Chairman.
- The delegation of Board powers.
- The exemption from tendering by the grant of “extensions”.
- The granting of Timber Authorities.
- The lodgement of performance bonds.
- The keeping of registers of documents and the right of public inspection.

These amendments have had a small impact in relation to the review of projects involving extensions. The approval of extensions after the coming into effect of the amendments is now the subject of a considerably stricter regime. In each project where the Board had approved a project to be an extension (and in Rottok Bay where this purported approval appears to have come from the Managing Director) the team has recommended that the decision be reviewed and that the Board requires that a tender take place. In any event it is the team’s view that the current projects which are being progressed as extensions should be re-considered in the light of these amendments. It is only in this way that Parliament’s intention can be given effect too.

The effect of the Amendments in relation to the review of Timber Authorities was not significant for reasons noted below.

### **3.6 Timber Authorities**

It has been explained earlier why only two Timber Authorities were considered under the Review.

The Kulu Dagi TA was assessed against the requirements of the Act before the amendments were effected. A Checklist was devised and applied to the project. This was done as part of Batch 1.

The problems with the Aiambak-Kiunga TA are so great and the lack of compliance with legal requirements so manifest that there was no point in attempting to review this project against a Checklist. Suffice to say that there has been no compliance with any legal requirement as to process or form. If this project is ever regularised it will have to be in accordance with the recent amendments to the Act.

### **3.7 Review of Legal Compliance**

Each of the “in process” forestry projects was processed through the Legal Compliance Checklist, and notes were made regarding specific issues which arose as a result of this process. The Checklist (completed to various stages depending on the progress of the project through the acquisition and allocation process) and the notes are set out in each individual project review report.

## **4. REVIEW OF LANDOWNER ISSUES**

### **4.1 Landowner Involvement**

Landowners are recognised as the owners of the forest resource in PNG, and any forest harvesting project requires both their approval, and their involvement. Landowners are also expected to benefit from any logging which might take place in their forests.

Landowner approval is mainly indicated by their signing of a Forest Management Agreement. Their further involvement in the forest acquisition and allocation process is set out in the Forestry Act 1991.

For the purposes of this review landowner involvement issues have been considered under the following headings:

- Forest Resource Acquisition
  - Landowner Awareness
  - Landowner Mobilisation
  - Forest Management Agreement
  
- Forest Resource Allocation
  - Development Options Study
  - Project Guidelines
  - Project Agreement
  - Environmental Plan

The Review Team's approach to each of the above is set out in turn.

### **4.2 Resource Acquisition**

#### **4.2.1 Landowner Awareness**

Once PNGFA determines that an area of forest is to be acquired for development as a forestry project, landowner awareness work is required by the Act to ensure that the landowners understand what a forestry project will mean for them; how they are required to be organised; what rights and obligations they will have under a Forest Management Agreement; their role in the allocation process; and what they can reasonably expect in terms of project benefits. The importance of adequate awareness work cannot be overestimated as it is the basis for a very long term contractual arrangement between the landowners and the State. If the landowners are not made properly aware, then it is almost certain that their expectations will not be met, and that any future forestry project will need to deal with this over a long period, if indeed the project survives landowner dissatisfaction. The onus is squarely on the PNGFA under the Act to ensure that adequate landowner awareness work is undertaken.

Awareness is a rather vague term that may be taken to mean the transfer of knowledge from the outside world to villagers living in a traditional way. In any given area there are typically a number of organisations which influence the landowner's understanding of their land and forests. In addition to the PNGFA (which will have undertaken volumetric inventory in the area), there are church missions, schools, various non-governmental

organisations (NGOs), landowner companies (LANCOs) which may have been set up for any number of reasons, local-level governments and other government offices, and commercial enterprises operating in or near the proposed project area. Clearly there are opportunities for the PNGFA to collaborate with some of these organisations in order to deliver effective awareness. However, challenges and landowner confusion can arise where some of these organisations work against the concept of a forestry project for their own reasons.

As the PNGFA has not developed any formal landowner awareness program, any resources, or any approach for testing whether adequate landowner awareness has been achieved, there is no well defined basis on which to gauge the PNGFA's understanding or abilities in relation to the delivery of landowner awareness. Instead the Review Team had to rely on information contained in the PNGFA files recording formal PNGFA field work aimed at awareness delivery, resource inventory, and to assist landowners with land group incorporation.

### Representative bodies

As well as Incorporated Land Groups (ILGs) representing individual land owning clans, there are typically one or more LANCOs which are set up by one or more landowners or ILGs which claim to represent the landowners with respect to the planned forestry project. This is in part a hang-over from the old Forestry Act where a landowner company typically held the Timber Permit, engaged a logging contractor, received payments, and distributed/invested this (purportedly) on behalf of the landowners. Under the current Act the contractual relationship under the Forest Management Agreement is directly with the ILGs, although there is nothing to stop landowners from authorising a company to represent them. Consequently the Review Team deemed it important to review the role of the LANCOs during the often many years lead up to the signing of a Forest Management Agreement. The key reasons for doing this were that:

- Often LANCOs are set up and claim to represent the landowners in a potential forestry project area even before the ILGs are incorporated.
- Individual office bearers of the LANCOs are typically the movers and shakers amongst the landowners who often push for “development via forestry” and who are often supported by their local politicians both local and national. It is not always clear that they act in the best interests of the landowners at large.
- LANCOs often undertake the incorporation of the land groups. Their rapport with the people and their skill or lack there-of in applying the Land Groups Incorporation Act are thus of critical importance in determining the quality of the work done, the impact on the landowners, and whether or not landowners are in any way empowered by the process.
- Shareholding in LANCOs is the test of their credentials as a representative body. Often companies purporting to be representative are not, and can cause much conflict and disunity in the project area. The typical response to such disunity is the proliferation of LANCOs. Very few LANCOs maintain current Companies Act compliance.

- It must however be remembered that often project areas contain more than one ethnic group. It is absolutely fundamental that each ethnic group have their own representative body which hopefully will be able to work with its counterparts in dealing with the forestry project, the developer, and often in addition a logging contractor.
- LANCO office bearers typically live in the towns and have a constant interface with forestry officials, logging company personnel and politicians. This tends to facilitate a strong understanding of what is happening with regard to the project. It is a mistake to assume that their understanding is shared with the ordinary villagers, and moreover that what the LANCO office bearers are prepared to commit to has been cleared with the landowners as a group, or automatically reflects the views of the village people.
- The fact that the PNGFA no longer deals directly with LANCOS (and therefore does not authenticate their credentials), and that under the new Act the LANCOS are not the holders of the Timber Permit (and hence the employers of logging contractors), does not remove the LANCOS as interested parties in the project areas. They continue to operate, to influence events, and purport to represent landowners. Typically there are significant consequences for the quality of consultation by the PNGFA, and landowner representation at relevant PFMC meetings. It appears that in most cases the landowners are not informed that LANCOS no longer play a pivotal role in the FMA.

All the projects reviewed involved one or more LANCOS who have been promoting forestry project development, and taking the initiative to incorporate land groups in the expectation that this will speed up project realisation. It thus was necessary for the purposes of this review to audit the work and the involvement of LANCOS with their “supporting” clans and also to take note of their involvement with one or other of the logging companies already in the area or hopeful of coming into the area.

One important test of the representativeness of a LANCOS is its shareholding. Is this held by a few landowner individuals or is it held by the chairmen of the ILGs in trust for the ILG members?

Although under the new Act there is no provision for payments to go directly to LANCOS, they can however play an important and positive role if they are truly representative. Also Timber Permit holders may find it easier to deal with LANCO executives than a host of scattered ILGs.

The PNGFA files do not contain detailed information on LANCOS which would enable the Review Team to audit the LANCOS fully. Where the LANCOS had registered as Forest Industry Participants under the Act, the PNGFA was able to provide limited information about the companies at the time of registration. In relevant cases company searches with IPA were performed. However in many cases once incorporated, many LANCOS fail to provide annual returns and are eventually de-registered.

In the majority of cases there was insufficient information on which to base a comprehensive review of the LANCOS, their involvement in landowner awareness work, or the promotion of the project.

## Compliance Criteria

For the purposes of this review, the Review Team was looking for evidence of an awareness package containing information explaining the purpose, benefits and otherwise to be expected from the project. This could include general conditions that could be used for all prospective projects.

## Work Undertaken

In addition to considering the various submissions made to the Review Team, the work undertaken to check compliance with the above criteria was as follows:

- Reviewing files for evidence of PNGFA field activities, and filed visit reports.
- Reviewing the files for documentation of issues that had been brought to the attention of landowners by PNGFA Officers.
- Limited field trips, to in particular compare views on the ground with views generated from PNGFA file records, with particular attention to:
  - Landowner knowledge of the proposed forestry project, particularly in regard to the years before any impact will be felt in a particular area;
  - Landowner knowledge of the financial arrangements regarding the payment of royalty, Project Development Benefit payments;
  - Landowner 'development' expectations as per the PNGFA awareness messaging during resource acquisition;
  - The degree of active involvement in the project area of the relevant Local-level Governments;
  - The role of ILGs and the degree of empowerment conferred on them by the incorporation exercise;
  - The role of the LANCOS up to the point of signing the Forest Management Agreement, and any future role;
  - The representativeness of LANCOS versus their shareholding;
  - Any disputes both between and within ethnic groups;
  - Any evidence of inter ethnic land disputes;
  - The influence of outside logging contractors over the years; and
  - Any potentially adverse dealings between LANCOS and prospective logging contractors (for example debts incurred by the LANCO from the logging contractors which are expected to be paid back out of landowner income).
- Review of NGO submissions that in some cases were able to provide detailed information from their more extensive landowner consultation undertaken over a longer period of time.
- Forming an opinion regarding the adequacy of the landowner awareness work, and any defects in this work.

The Review Team found that the file material at hand was sufficient to make a finding on the level of understanding that the resource owners had about the development of the forestry project.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.2.2 Landowner Mobilisation**

The requirement of the Forestry Act to use the Land Groups Incorporation Act demonstrates an appreciation by the PNG Government that land and therefore the forest on the land is communally owned by land groups. The Forestry Act was the first Act to require the use of the Land Groups Incorporation Act 1974 (LGIA) in dealing with landowners in regard to their land based resources. The Oil and Gas Act 1999 now also formally requires the use of the LGIA in dealing with landowners, although this was already established practice in the petroleum industry. One significant improvement in the Oil and Gas Act is the requirement that, prior to the incorporation of the land groups, social mapping must be conducted in the project area to determine basic information regarding ethnic groupings and their relationship to each other and to the land.

##### Identification, Demarcation and Mobilisation of Resource Owners

The purpose of land group incorporation is to clearly identify the forest resource owners, demarcate their land and forest holdings, and to mobilise the land groups in a way that empowers the communal owners of the forest resource to enter into long term binding contracts. Experience has shown that in order to identify land groups and to mobilise them in an empowering way, a great deal of work has to be done to define and understand the ethnic groups and their relationship to each other and to their land. This study is called social mapping. Fundamental to this exercise is the need to correctly relate the group to the ground according to custom. A land group is made up of many families at the clan or sub-clan level. This is because traditionally land was held from a position of strength against enemy clans who would take over the land if able. Clearly a family could not hold land under these circumstances by themselves. Even clans could not prevail without allies. Hence there is a very strong underlying custom that land is held by groups. These groups are the land groups and are the correct groups to be incorporated.

Incorporation of family groups where two or three brothers owning the same land have incorporated separate ILGs has inappropriately been permitted due to the lack of expert supervision by the Registrar of Titles within the Department of Lands and Physical Planning. The Registrar of Titles also serves as the Registrar of Land Groups. The Registrar operates as a one person team without resources, and has no skilled staff to assist. The PNGFA, in order to facilitate the development of forestry projects, have seconded a staff officer full time to the Registrar’s office to assist.

The fundamental point the Review Team addressed was to establish whether the process of incorporation had led to empowerment. Was it simply a paper shuffling and registration exercise, or did the group learn something of modern management that would equip their Incorporated Land Group to make meaningful decisions with regard to the management and use of their land and forest.

Where land groups attempted to portray genealogies it was possible to determine whether the level at which the group was incorporated was appropriate. The recording of lists of clan members and lists of property owned by the clan are also important clues as to the degree of understanding and empowerment enjoyed by the land group as a result of incorporation.

### Compliance Criteria

As the landowners are required to be mobilised by means of the Land Groups Incorporation Act, the Review Team was looking to find evidence of full participation by landowners in the incorporation process. Particular attention was also paid to:

- Ensuring that the incorporation process recognised individual land groups and not collectives of land groups; and
- The formation of representative bodies for project consultations and negotiations.

### Work Undertaken

The work undertaken by the Review Team to check compliance with the above criteria was as follows:

- Discussions with PNGFA staff;
- Obtaining sample ILG files from PNGFA records;
- Where these were absent obtaining sample ILG files from the Registrar of Title;
- Examination of the ILG documentation to determine the quality of the ILG by checking the following points:
  - Is there a constitution?
  - Is it a standard or truncated form, and did it show some tailoring to suit the particular land group according to that land group's custom?
  - Were there any fiduciary clauses in the constitutions as are required under the Oil and Gas Act?
  - Were the names of the ILG Committee and the Land Dispute Authority clearly identified?
  - Were there clan lists?
  - Did the clan lists include women and children?
  - What were the numbers of people listed?
  - Was there any attempt to create genealogies?
  - Were there at least 4 to 5 generations indicating a clan level of incorporation?
  - Were there only two generations indicating family level incorporation?
  - Is there a property list, listing traditional names by which the clan claims ownership to land parcels, or did the list simply note items such as for example coconut and sago for example?
- Obtaining the PNGFA files regarding ILGs;
- Examining the ILG files to evaluate the degree of effort expended by PNGFA on the ILG process;
- Reviewing the problems encountered and how PNGFA responded to these

- Examination of actual names on the clan lists and cross-checking the signatures on the ILG documentation;
- Checking to see whether some landowners names appeared in more than one ILG;
- Considering the evidence and making a judgement on the adequacy of the landowner mobilisation exercise with particular reference to the following points:
  - Were the ILGs initiated by PNGFA or the LANCOS or the logging companies?
  - Where PNGFA did not do the initial work did PNGFA do a thorough vetting of the ILGs or were they simply accepted as is?
  - Were individuals or family groups breaking away from existing ILGs to form their “own” ILG, and if so was there any attempt to relate this to land ownership?
  - Was PNGFA aware that other entities such as Oil Companies and NGOs active in the project area had ILG material that had to be reconciled with any PNGFA ILG work?
  - In cases where NFS attempted to clear up problems of mis-incorporation were the landowners co-operative or not?

On the whole the documentation held by the PNGFA or borrowed from the DLPP was deficient, and gave the Review Team a negative view of the implementation of the Land Groups Incorporation Act right across the board. During the field visits by the Review Team contacts with village people enabled a first hand evaluation of the degree of empowerment achieved by the ILGs during the incorporation process. In most cases village visits reinforced the view that empowerment was not being achieved. The documentation in some cases provided direct evidence of poor empowerment such as in the comparison between ILG and FMA signatories and signatures mentioned below.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.2.3 The Forest Management Agreement**

The National Forest Policy and the Act require that commercial scale forest harvesting be controlled by the State. Control is achieved by means of a Forest Management Agreement between the Incorporated Land Groups and the PNGFA on behalf of the State.

The Forest Management Agreement is a key document in the development of forestry projects, as it underpins a very long term arrangement between the landowners and the State. Consequently the importance of adequate landowner awareness work and proper incorporation of the land groups cannot be overstated. If the awareness of the landowners is deficient, or they do not really have a good understanding of the implications of a 50 year contract through which they hand over their forest management rights to the State, then the arrangement must be considered to be on a weak foundation, and the likelihood that the landowners will respect the terms and conditions of the agreement for a number of generations is then very slight. If during the process of land group incorporation the landowners are not empowered in such a way that:

- They have identified their land parcels and the customary basis for their claim to ownership;
- They are confident that their land borders are not in dispute with their neighbours;
- They realise that they have to actively manage a finite estate for the future survival of their clan members;
- They have identified all their clan members and articulated the respective rights that they have to their communal land;
- They have identified a management committee and designated individuals who are empowered to sign contracts for the clan;
- They have put in place a financial control mechanism capable of equitably handling distribution of benefits that may accrue to the project; and
- They have put in place a Dispute Settlement Authority to handle their internal disputes;

then their ability to enter a conscionable Forest Management Agreement is severely diminished.

Part and parcel of the PNGFA message in the conduct of landowner awareness is the constant theme that once the Forest Management Agreement is signed that “development” will follow. Landowners have this clearly in their mind and this is typically the driving force behind their support of the FMA. Often they are isolated and consider themselves “the forgotten people” and the government in effect says that the only way to bring development is via forestry. During the final stages of PNGFA efforts to get the ILGs to sign the FMA the promise of development is repeated almost like a mantra. So successful is the acceptance of this “development” model that, from an audit point of view, it is important to determine if there is any significant opposition to the acceptance of an FMA from ILGs for whatever reason.

In terms of the formalities required for effective signing of the Forest Management Agreement the PNGFA Legal Counsel has produced guidelines which set out the conditionalities and pre-requisites for the signing of a binding agreement

#### Compliance Criteria

The Review Team evaluated the FMA documentation to determine if the following conditionalities had been attended to:

- Monetary benefits clearly specified;
- Area clearly defined in the agreement with a map;
- Existence of a PFMC certificate attesting to:
  - The authenticity of the tenure of the customary land, and
  - The willingness of customary owners to enter into FMA.

#### Work Undertaken

The work undertaken by the Review Team to judge compliance with the above criteria was as follows:

- Obtaining the relevant files from the PNGFA;

- Obtaining copies of the existing FMA documents;
- Checking to see if the PNGFA guidelines were being observed;
- Checking to see if the FMA document contained the required provisions regarding landowner payments and rights;
- Checking the PFMC certificate; and
- Checking to see if the ILGs received a copy of the signed FMA.

Since there are no protocols established to guide the PFMC in regard to their role in ascertaining the willingness of the ILGs to sign the FMA there was no way of auditing compliance other than viewing the signed certificate. Two techniques were used to form an opinion:

1. Comparing ILG documentation with the FMA documentation to determine:

- Whether the chairmen of ILGs as per the incorporation certificates are the same ones who signed the FMA.
- If the names are correct whether the signatures are the same
- Whether the terms of the ILG constitutions regarding who is to sign have been adhered to.

2. Limited field visits to ascertain at first hand the landowner's views in regard to:

- What "development" expectations formed the basis for their support for the forestry project?
- What did they understand "development to mean"?
- What was the basis for opposition by dissenting clans if any?
- What was the involvement of agencies other than the PNGFA (for example NGOs)?
- Did any ILGs have FMA documentation or had they seen a copy other than when they signed it?

The Review Team found that it had adequate information from PNGFA documentation, submissions from NGOs, ILG documentation and field visits to form an opinion on whether due process had been followed in obtaining landowner consent to the FMA.

The above criteria and the Review Team findings in regard to each of the 32 "in process" forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.3 The Allocation Process**

Clause 5.3 of the standard Forest Management Agreement requires the PNGFA to involve the ILGs "in selection of the forest industry participant and in determination of the terms and conditions under which the project is to operate." The Review Team has interpreted this as a requirement for the PNGFA to ascertain landowner aspirations with regard to the forestry project and to consider these in the Development Options Study, the Project Guidelines and the Project Agreement.

### 4.3.1 The Development Options Study

The requirement for a Development Options Study (DOS) is set out in the Act, which due to the fact that the DOS is required after the FMA has been signed, infers that the study should deal with production forestry options (which are generally limited). This is at odds with the National Forestry Development Guidelines which indicate that the DOS should be undertaken before an FMA is signed, and thus infers a much wider examination of options. Given that the Act has precedence over the Guidelines, the PNGFA have followed the requirements of the Act, and adopted a narrow interpretation of the DOS.

Clearly the involvement of ILGs in determining the terms and conditions under which a forestry is to operate requires that there be consultations with the ILGs. There are no formal PNGFA protocols to guide the consultation process or the inclusion of the ILG's views in the DOS (or subsequent allocation steps).

#### Compliance Criteria

The Review Team evaluated Development Options Study as one measure to help determine whether PNGFA had adequately:

- Consulted with the ILGs; and
- Catered for landowner concerns and aspirations.

The Review Team also considered whether all of the options presented for resource development had a realistic chance of being pursued.

#### Work Undertaken

The work undertaken by the Review Team to ascertain if the above criteria had been met was as follows:

- Obtaining copies of the DOS documents;
- Discussions with PNGFA staff;
- Review of the files to ascertain the level of landowner consultation;
- Review of the DOS documents; and
- Forming an opinion regarding landowner involvement at the DOS stage of the allocation process.

In evaluating the DOS documents from the point of view of landowners concerns, the following considerations were used:

- Was there a wish list of socio-economic projects actually discussed with the landowners or from a standard well-worn list?
- Was there any cost and design study done?
- Was the Local Level Government involved?
- Was there any allocation of responsibility for implementation distinguished between the logging company and the Local Level Government?
- Was the construction of these projects related to the Project Development Levy?

The Review Team was adequately able to report on compliance in regard to attention to landowner aspirations by examination of the Development Option Studies.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.3.2 The Project Guidelines**

The Project Guidelines are prepared by the PNGFA and offered to companies wishing to bid for a timber concession. They contain the parameters upon which the project bid must be based. The Project Guidelines are offered at a price to the interested companies along with the Development Options Study however it is not made clear that both documents need to be read together. This is important from the point of view of landowners as their development aspirations are not always contained in both of these documents.

It is obvious that any obligations that are imposed on the logging company must be clear before a Project Agreement is negotiated and a Timber Permit issued. In addition to this it opens up a competitive situation that would allow different project proponents to provide better involvement for landowners than competitors as part of their bid. Landowners’ aspirations to become involved in “spin-off” business activities is another area that could provide a competitive element in the bid process.

#### Compliance Criteria

Draft guidelines must be discussed and developed in consultation with the resource owners.

#### Work Undertaken

The work undertaken by the Review Team to ascertain compliance with the above criteria was as follows:

- Obtaining copies of the Guidelines
- Discussion with PNGFA staff
- A review of the documents for evidence of landowner aspirations
- A review of the appropriate files; and
- Forming an opinion as whether the criteria had been met

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.3.3 The Project Agreement**

Clause 5.3 of the Forest Management Agreement makes explicit provision for the involvement of landowners in selection of the Forest Industry participant and in negotiation of the Project Agreement. Auditing compliance with this requirement raises the challenging question of what constitutes involvement and what constitutes

consultation with landowners, especially when a project includes several tribal groups with different customs and different languages. Explicit PNGFA protocols to comply with this requirement do not exist.

### What Constitutes Consultation with Landowners?

There are several steps in the FMA protocols that require the PNGFA to consult with landowners. However there are no protocols, definitions or regulations to guide this process. This poses some problems for evaluating compliance.

As well as the PFMC appointing two representatives of “the provincial land owning groups” (s22(1)(d)) to serve on the Committee, the Act provides (s28(3)) for two landowner representatives to be present at any meetings of the PFMC at which their land is being discussed. Does this constitute adequate consultation with landowners? This would depend very much on the style of leadership exhibited by the representatives. How do two landowner representatives (probably those easy to contact) properly represent thousands of landowners some of whom traditionally may be enemy groups. How could one be sure that information from one representative got out to project landowners in a project containing five ethnic groups, especially if that person spends most of his or her time in town?

Even where a Port Moresby based PNGFA officer regularly visits the province and visits the project area with provincial officers and the landowner representative on the PFMC to provide regular updates with regard to project progress, some landowners will have complete confidence in PNGFA while others will be critical. NGO’s are quick to point out the difference between consultation with town based landowners and landowners in the remote villages.

Since PNGFA makes no effort to authenticate the representativeness of the LANCOS there is a dilemma in regard to consultation as there may be no properly representative body and PNGFA must theoretically consult with each and every ILG. It is evident to the Review Team that consultation at the ILG level is rarely done for the simple reason that it is too difficult and too expensive.

### Compliance Criteria

The PNGFA is required to involve landowners in selection of the “developer” and in negotiation of the Project Agreements according to the terms of the FMA.

### Work Undertaken

Once again the only way to check compliance in this issue was to review the appropriate PNGFA files to ascertain whether the aspirations of the landowners contained in the DOS are taken into account in the Project Agreement. Consequently the Review Team simply examined the Project Agreements generated for those projects so far advanced.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

#### **4.3.4 The Environmental Plan**

Before a Timber Permit can be granted the selected proponent must submit and have approved by the Office of Environment and Conservation an Environmental Plan. Only a few projects had reached this stage.

The Office of Environment and Conservation (OEC) is required to make a public presentation in project area regarding the plan, but the PNGFA is not necessarily involved. In spite of this requirement, landowners often complain that they know nothing of the Environmental Plan. Similarly often landowners complain that they know nothing of the Development Option Studies. One has to be careful in interpreting such complaints as one absentee landowner can claim that the awareness was never done just because he was absent.

The Review Team met with the OEC to ascertain their protocols for managing the evaluation of the EP. Review Process revealed to the Review Team is as follows:

- Copies of the EP go to Central Agencies, Forestry, Landowners, Provincial Government, Lands and sometimes DAL if there is follow up agricultural development.
- These departments are given 30 days to review and send comments.
- OEC evaluate the response.
- OEC conduct a public hearing on site.
- Final draft then gets approval by OEC.
- OEC meets with developer and outlines and gets agreements on conditions.
- OEC then recommends to Minister to approve or delay depending on outcome of meeting with the Developer.

#### Compliance Criteria

The Review team checked whether the selected developer had submitted an Environmental Plan to the Office of Environment and Conservation for approval. Evidence of consultation with landowners was also reviewed.

#### Work Undertaken

The work undertaken by the Review Team to ascertain compliance with the above criteria was as follows:

- Discussions with OEC officers;
- Discussions with PNGFA officers;
- Review of OEC reports on field presentations;
- Review of Plan documents;
- Forming an opinion regarding compliance.

The above criteria and the Review Team findings in regard to each of the 32 “in process” forestry projects reviewed, are set out as check-list questions and answers in each of the individual project review reports.

## **5. PREPARATION OF INDIVIDUAL PROJECT REVIEW REPORTS**

To undertake the review process the Review Team broke into three groups examining respectively forest resource issues, legal compliance, and land owner issues. Many sources of information were required by all three groups, and each group brought relevant information to the attention of the other groups as appropriate. This co-ordinated approach facilitated a great deal of informal discussion within the team on a wide range of relevant issues.

Each group determined the key compliance criteria relevant to its area of interest, and these were subjected to the review of the entire team before being adopted.

Each group undertook its investigation and analysis and wrote up their section of the individual project review reports. These were then amalgamated as a draft. Each draft was then the subject of a formal team meeting at which the key issues were highlighted and discussed; any outstanding issues resolved; consistency of findings checked; and team recommendations formulated. Subsequently each of the individual project review reports were finalised and submitted to the PNG Government.

## **APPENDIX:**

Team Terms Of Reference

## **APPENDIX 1**

### ***REVIEW OF TIMBER PERMITS, EXTENSIONS AND FORESTRY CONVERSIONS ESTABLISHED OR IN THE PROCESS OF BEING ESTABLISHED SINCE THE INTRODUCTION OF THE FORESTRY (AMENDMENT) ACT 1991***

#### **TERMS OF REFERENCE**

##### **Background and Rationale for Review**

Following a major Commission of Inquiry into the forest sector in 1989 sweeping changes were made throughout the forest sector to better regulate forest exploitation and to manage forest resources on a more sustained yield basis. Key regulatory and administrative changes included the formulation of a new National Forest Policy (1990), the gazetting in 1992 of a new *Forestry Act (1991)*, the adoption of the National Forestry Development Guidelines (1993), the adoption of a National Forest Plan (1996), the establishment of a PNG Logging Code of Practice (1996) and the adoption of new Forestry Regulations (1998). These focus on strengthening three crucial areas:

1. The acquisition of forest resources by the PNG Forest Authority (PNGFA), via Forest Management Agreements (FMAs), which require proper consultation with customary resource owners, and which take due consideration of environmental and biodiversity concerns.
2. The allocation of forest management rights to forestry companies, via Timber Permits, in a competitive and transparent manner, with operation conditions based on sustainable forest management principles.
3. Appropriate monitoring of forest operations to ensure that all aspects of the Act, Regulations and Logging Code of Practice are properly adhered to.

The combined effect of the new measures and more stringent processes has slowed down considerably the rate at which timber permits and extensions in area are being processed. Although there has been a concerted effort by the PNGFA to follow the correct procedures, pressures have been mounting to circumvent some requirements, and various perceived loopholes have been pursued in the 1990s to obtain timber resources, including through TAs for supposed forest conversion to other land uses, timber permit extensions, etc..

The Government is, therefore, anxious to ensure that all timber permits and extensions are being processed correctly. NEC decision No. NG99/99, amended by NEC Decision No 84/2000, imposed a moratorium on all current proposals for new Forest Management Agreements (FMAs), Timber Permits, Timber Authorities (TAs) for clearance of forest for large-scale agricultural or roading projects, geographical extensions to Timber Permits and TAs, current in various stages of processing for approval. The World Bank and other international donors, support this moratorium and the World Bank has included such a moratorium as a conditionality for negotiations of the Forestry and Conservation Project and Structural Reform Program.

This review would complement an audit of FMAs, Timber Permits and TAs, as well as actual forest operations, together with a review of procedures and regulations related to

the processing of FMAs, Timber Permits and TAs under the Forestry and Conservation project. Amendments may then be recommended to make the process more efficient.

### **Objective of the Study**

The review will determine the extent to which all FMAs, Timber Permits, permit extensions and TAs for clearance of agricultural land and roads in process are complying with the legal requirements specified by the Act, and all supporting regulations, procedural guidelines and manuals, as well as with other applicable legislation.

### **Work Program and Tasks**

The consultants will conduct a thorough legal and technical review of all FMAs, Timber Permits, permit extensions and TAs for agricultural or roadline clearance in the process of being granted. For each relevant project they should:

- Ascertain whether all legally required procedures for the acquisition of timber rights and resource allocation (as prescribed under Sections 4 and 5 of the current Act) were correctly complied with and where they were not, provide details of the nature and causes of the non-compliance.
- Ascertain whether all Project Agreements, Timber Permits, Timber Authorities, or any other legally binding agreements made in relation to any of the pipeline projects to be reviewed, are strictly in accordance with all legal requirements and in the spirit of the current Act and Policy, and supporting regulations and requirements, including other applicable legislation. Where they are not, the consultants should provide details of the nature and causes of the non-compliance.
- Determine if the areas of proposed FMAs and Timber Permits are appropriate for management purposes.
- Determine if the annual allowable cut proposed for Timber Permits and extensions is within the limits of a sustainable yield based on current forest management principles.
- Where specific operators are, in practice, being preselected to develop new project areas, notably, with timber permit extensions, undertake due diligence of the performance of that company in complying with legal and supporting requirements in the Timber Permit (or TA) area(s) currently being operated.
- Make recommendations for any necessary corrective measures for projects being developed to bring them into line with the requirements of the Act, Regulations and other supporting procedural guidelines and manuals.

In the process of the above assessment the consultants should note any ways in which the processes involved could be made more efficient and less time-consuming, while meeting the requirements of the Forestry Act and Regulations. They may also note the appropriateness of the procedural requirements in meeting the Objectives and Policies, as stated in the National Forest Policy.

The review will be conducted at the offices of the PNGFA. However, it will be essential for field trips to existing and proposed project sites, particularly with regards to consultation and representation in the development of FMAs. The consultants should report to the interagency committee established to facilitate the review, under the chairmanship of the Chief Secretary to the Government.

### **Outputs**

The consultants will produce a report that details the level of compliance for each project assessed, the reasons provided for any non-compliance, and an overall appraisal of the situation with regards to the satisfactory processing of timber permits, permit extensions and forest conversions. Comments should also be provided on any improvements that may be made to make the process more efficient. Recommendations will be provided on courses of action to bring non-compliant projects into line.

### **Manpower Requirements and Timing**

The review should be undertaken (at minimum) by:

1. A fully qualified lawyer with solid experience in forest sector legislation and forest resource use regulations.
2. A professional forester with at least five years tropical experience. The forester should have experience with forest harvesting operations and preferably some experience in PNG.
3. An qualified expert on landowner resource allocation and management issues.

Officers within PNGFA should co-operate with the review team, specifically those involved with forest resource acquisition and allocation. The PNGFA, and where applicable, officers from other relevant departments/Offices, will provide appropriate personnel to act in a support role to the review consultants, particularly with respect to liaison with landowner groups and logging companies.

The review will be conducted at the offices of the PNGFA. However, it will be essential for field trips to existing and proposed project sites, particularly with regards to consultation and representation in the development of FMAs. The consultants should report to the Managing Director, PNGFA and to the World Bank.

The assignment is expected to take about three months to complete.