

1.0 INTRODUCTION

A National Forest Plan (NFP) is a legislative requirement under the Forest Act 1991 (as amended) Section 47, Subsection 1 that reads, *“The Authority shall cause to be drawn up a NFP to provide a detailed statement of how the National and Provincial Governments intend to manage and utilize the country’s forest resources”*

Furthermore Section 47, Subsections (2) to (5) states that;

- (2) *The National Forest Plan shall*
 - (a) *Be consistent with the National Forest Policy and relevant government policies; and*
 - (b) *Be based on a certified National Forest inventory which shall include particulars as prescribed; and*
 - (c) *Consist of;*
 - i) *National Forest Development Guidelines prepared by the Minister in consultation with the Board and endorsed by the National Executive Council; and*
 - ii) *National Forest Development Programme; and*
 - iii) *A statement prepared annually by the Board of annual cut volumes, being the amount of allowable cut for each province for the next succeeding year which will ensure that the areas of forest resource set out in the Provincial Forest Plan, for present or future production, are harvested on a sustainable yield basis.*
 - iv) *Provincial Forest Plans*
- (3) *For the purpose of Subsection (2) (c) (iii), ‘allowable cut’ means the amount of timber which can be cut annually.*
- (4) *The NFP shall be reviewed every five years from the date of coming into operation of the Forestry (Amendment) Act, 2005 and shall be submitted to the National Executive Council (NEC) for its approval.*
- (5) *Where the NFP is not approved by the NEC, it shall be referred to the Authority for review and recommendation for approval to the NEC which shall grant its approval.*

Since the release of the first NFP in November 1996, a lot has happened in the forestry sector and this review is to reflect on the past and plan for the future based on the changes that have taken place. Much of the accessible forests areas have been logged out or cleared for agriculture projects and other land uses. Only minimal accessible forest areas are remaining while much of it is in the hinterland where there is limited access. The issue of climate change has taken centre stage in recent years where forests are considered to be the cause and cure and PNG is playing an active role in mitigating the impact of climate change.

Many timber project areas have merchantable or commercial trees logged out while only a handful of new projects have come into operation. Others are yet to be inventoried and acquired for timber harvesting. Most if not all older timber projects acquired under the provision of the old Forest Act Chapter 216, resulting in a Timber Rights Purchase (TRP) or the Private Dealings Act Chapter 217, resulting in a Local Forest Area (LFA) prior to the concept of Forest Management Agreement (FMA) under the current Forest Act 1991 were mostly not sustainable forestry operations.

The overall forestry sector in PNG has received much attention and commentary by national and international NGO's, Government's, private organizations, individuals and other stakeholders. Additionally the pace of forest resource exploitation and or development has increased dramatically resulting in the decline in accessible forest resources areas. The global economic crisis in 1997 drastically affected the prices of logs as well as other goods and services thereby resulting in the closure of a number of logging operations in the country. The closure was also attributed in part to the depletion of forest resources as those earlier projects were not meant to be sustainable projects but vehicles for delivery of goods and services to the rural people.

Other global issues such as climate change, biodiversity conservation, forest certification etc, have become major issues facing the international communities at large and impact also on the forestry sector of PNG. These are noted toward the end of this document and shall be given due consideration in the next review or sooner.

The NFP shall now be reviewed every 5 years as per the Forestry Act 1991 (as amended).

2.0 FOREST POLICY OBJECTIVES

The 1991 Forest Policy is guided and based on the fourth goal of the constitution which states: *"For Papua New Guinean's natural resources and the environment to be conserved and used for the collective benefit of us all, and to be replenished for the benefit of future generations"*.

Subsequently two main and three supportive objectives were formulated and shall form the basis of the National Forest Plan

The 1991 National Forest Policy's main objectives are;

- i. Management and protection of the nation's forest resource as a renewable natural assets.
- ii. Utilization of the nation's forest resources to achieve economic growth, employment creation, greater Papua New Guinean participation in industry and increased viable onshore processing.

Supportive objectives are:

- i. The collection of information and advancement of knowledge relating to the utilization and maintenance of Papua New Guinea's forest resources through forest research.
- ii. Increased acquisition and dissemination of skills, knowledge and information in forestry through education and training.

- iii. Effective strategies, including administrative and legal machinery, to manage the forest resources, and incorporating national, provincial and local interests.

Over the period of this plan, strategies based on the Forest Policy will be formulated to address reforestation and afforestation, establishment of permanent forest estate, carbon trading, down stream processing, research and others .These strategies are in line with the Government's Medium Term Development Strategy and also formulated to address global responsibilities and obligations.

3.0 NATIONAL FOREST DEVELOPMENT GUIDELINES

The 2009 National Forest Development Guidelines (NFDG) also provides the basis for the sound management of the nation's forest resources taking into account the success, failures and the emerging issues such as climate change and phasing out of log exports. It provides the road map of how the Government wishes to see the forestry sector manage in the medium term. The 2009 NFDG draws strength from the National Forest Policy in realizing its objectives of sustainable management of the forest resources. It emphasizes the importance of a more intense forest management prescription with establishing Permanent Forest Estate (PFE) through the natural forest management and plantation forest development, particularly in strategic locations of the country to enable social, economical and environmental sustainability.

The main thrust of the Government's initiative has and continues to be towards achieving economic recovery and nation building through the development of the nation's natural resources including the forest resources. In doing so the Government bears in mind the need for environmental preservation, social and cultural values of the forests in PNG. This can be achieved through among other means, sustainable forest management and optimizing financial benefits from any forest based projects.

The 2009 National Forest Development Guidelines is aimed to:

- i. Improve the capacity of the public administrative unit, the PNG Forest Authority, to fulfill its role under the National Forest Policy and as contained in the objectives of the Forestry Act.
- ii. Promote the input of the resource owners, local and provincial interests in co-ordination with reliable investors to engage in and better develop secure resource access, protection and sustainability of based industries and a designated Permanent Forest Estate for Papua New Guinea.
- iii. Develop a focus in wood and non-wood products and in relation to future carbon based schemes for adaptation and mitigation action to combat climate change.
- iv. Assist to develop diversified markets and encourage the development of national enterprises in the forestry sector.
- v. While maintaining the existing strong investment base, promote general diversification in forest sector private investment, based on merit in the demonstration of, or capacity for, performance to compliance criteria.

- vi. Maintain a healthy and secured resource based environment conducive to attracting and retaining a private enterprise investment base which is efficient and capable and which promotes good corporate governance and citizenship.
- vii. Establish a uniform and capable management structure and administration of the forest sector in Papua New Guinea while acknowledging the diversity of forest dynamics, and the existing variation in the objectives of local economic, cultural and social influences.
- viii. Develop strong corporate public sector leadership and management within the PNG Forest Authority, which is fashioned as the co-ordinator of all forest based activity in the national interest.

It is intended to provide for the orderly development of the forestry sector to conform to Government's policy directives of the day and is subject to change. The National Forestry Development Guidelines (NFDG) forms one of the bases of the NFP

Apart from the NFDG, the National Government's Development Strategies and Vision 2050 will also provide some form of guidelines for the Forest Authority to sustainably manage our forest resources.

While it is not attached herewith, the NFDG can be a separate document being available from the PNGFA.

4.0 PROVINCIAL FOREST PLANS

It is a requirement under Section 49 of the Forestry Act 1991 (as amended) that each province shall as soon as practical have in a place a Provincial Forest Plan (PFP) that will state how the province wishes to manage its forest resources.

The National Forest Plan (NFP) shall then be a summation of all the Provincial Forest Plans (PFPs). For practical reasons the NFP includes only those areas that are planned for forest resource development in the provinces. Besides forest related activities, protected and other significant areas for conservation are also captured in the plans, therefore concerned agencies should make reference to these plans prior to implementing their programs. It would be useful that these agencies and other stakeholders make reference to the Provincial Forest Plans.

Unless an area of potential is listed in the PFP there shall be no inventory or other activity leading to an FMA and project development undertaken over the area. Additionally it should conform to the NFDG.

Over the medium term PNGFA shall ensure that every province continues to have in place a current PFP that will reflect the aspirations of the province on how they wish to have their forest resources managed and developed. These plans will be subject to review every 5 years and then incorporated into the review of the NFP.

Under the 2005 amendment to the Forest Act, all PFP's are required to be reviewed every fifth year as in the past when these were expected to be reviewed every 3 years. Furthermore, under the same amendment the NFP is now a summation of the 19 provincial forest plans.

For more details on the Provincial Development Programmes, reference should be made to the respective Provincial Forest Plans.

5.0 FOREST AND LAND CLASSIFICATION

5.1 FOREST CLASSIFICATION

The Forest Policy stipulates that the forests of PNG be classified into the following broad categories that reflect more on the end use of the forest rather than the biological classification of forest types. These categories are;

- Production Forest – identified as timber production areas in the long term.
- Protection Forests – by virtue of their location, topographic constraints, and ecological, cultural, or environmental considerations.
- Reserve Forests – not yet otherwise classified, but upon which a decision will be reached later.
- Salvage Forest – forest to be cleared for other land use.
- Land suitable for reforestation.

These areas are, and shall continue to be identified by the Provincial Governments with the assistance of the PNGFA. When designating these areas, consideration is given to the multiple use of the forest including but not limited to environmental consideration, recreation, provision of subsistence and cultural requirements and the supply of timber and other forest products.

The forest classification is shown below in **Table 1** and **Figure 1**. Other information is provided in **Appendix 2** and also in the **Forest Cover and Land use Map of PNG**.

5.2 LAND CLASSIFICATION

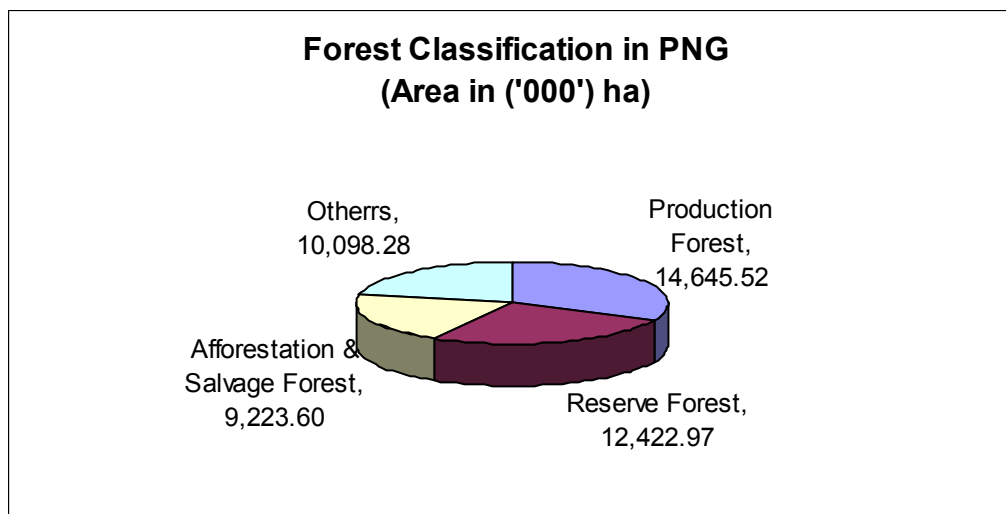
Land has also been classified using the current PNG Forest Authority's Forest Inventory Mapping Systems (FIMS) into categories primarily to differentiate between those areas that have to be excluded from logging operations due to the nature of their location. Factors such as altitude, topography, geology, and level of inundation form the basis for this classification.

More information on the land and type of constraints is shown in **Appendix 3**.

Table 1: Forest Classification

Forest Classification (Function)	Area ('000ha)	Remarks
Production	14,645.52	Identified as timber production areas in the long term. An estimated total of 5.5 million ha is available for development under concessions while 9.1 million ha is considered as future production forest.
Reserve Forest and (Protection Forests)	12,442.97	While decisions have yet to be made on their functions, a large proportion would be for protection although only 1.796 million hectares have been either been officially gazetted as conservation areas and or being proposed. Other forested areas are classified as protection forest by virtue of their location, topographic constraints, and ecological, cultural or Environmental considerations.
Afforestation & Salvage Forests	9,223.60	Grassland areas and forests cleared for other uses.
Others	10,098.29	Areas taken up by other land-use including urban settlements, agriculture and so forth
TOTAL	46,410.38	

Note: Due to insufficient information, areas for afforestation and salvage forest cannot be classified separately.

Figure 1: Forest Classification of PNG

Source: FIMS DATABASE

6.0 NATIONAL FOREST INVENTORY

The National Forest Board of PNGFA in 2005 endorsed the Forest Inventory Mapping Systems (FIMS) as the official National Forest Inventory (NFI) of PNG. This internal PNGFA data base commonly referred to as FIMS was developed in 1997/98 and meets the requirements as prescribed by both the Forest Policy 1991 and subsequent Forestry Regulation 1998. It generally contains all the prescriptions of an NFI except for the capture of minor forest products and a growth and yield model. The latter called the 'PINFORM' model is yet to be tested by FRI before it can be used for growth and yield prediction.

The appendices and tables in this plan have been sourced from the FIMS database, for example **Appendix 1** relating to the "Forest Resource of PNG" and **Table 1** referring to the "Forest Classification of PNG".

The FIMS database will be subject to changes as land use and other relevant information is updated from time to time. Besides forest related activities, protected and other significant areas for conservation are also captured in the Provincial Forest Plans therefore concerned agencies should make reference to those plans prior to implementing their programs.

Noting that the forest cover is rapidly changing through commercial, recreational and subsistence activities, PNGFA shall use its best endeavors to ensure that the NFI data is updated periodically. Addition new technologies such as remote sensing will be pursued in the work of NFI, such as the current JICA funded Remote Sensing and GIS being implemented by the PNGFA.

The National Forest Board at its meeting of the 14th May, 2012 approved a joint project financing agreement from the EU Technical support and the UN-REDD to implement a continuous and multi-purpose NFI. The project duration is three years (3) years commencing early January 2013 at a funding of EUR 8,541,000 (21,900,000 kina). The project is to contribute to the implementation of the Government's policies and measures for climate change mitigation as well as to support the PNGFA to implement a continuous and multi-purpose NFI as part of the National Forest Monitoring System that PNG will have to establish to fulfill the UNFCCC Cancun Agreement with respect to the Monitoring, Reporting and Verification (MRV) of forest cover change.

7.0 FOREST RESOURCES OF PNG

Many literatures published about the forests of PNG portray it as the last frontiers or the remaining tropical rainforest in the world with rich biodiversity. It is one of the largest and the most diverse blocks of tropical forest in the world and of the highest global conservation significant. PNG has by far the greatest area of tropical rainforest, twice as much as the remainder of the region combined. PNG and Indonesia's West Papua together is said to have the largest contiguous area of forest in the Asia-Pacific and the third largest tropical rainforest after the Amazon and the Congo forests. The mangrove forest is also considered to have a significant area, rich with different marine species.

These forests have been the main source of livelihood for the people of this country, many of whom still live in rural areas. It had also been the main source of income to those landowners whose timber had and continues to be extracted through industrial forestry operations. Although timber is the main source, forests also contain minor forest products such as eaglewood, rattan

etc which are not significant earners due to their occurrence to certain localities in the country however has the potential to perform through adequate policy directives. Other economical benefits from the forest include ecotourism, carbon trading and pharmaceutical values.

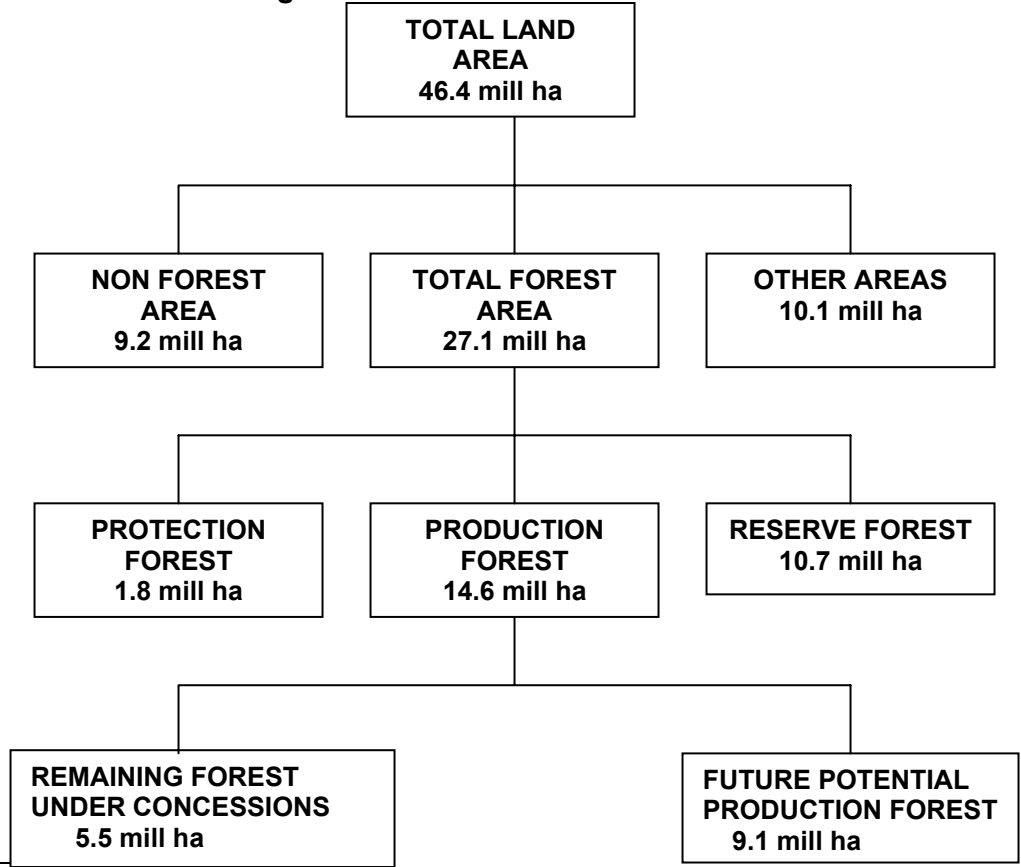
PNG has a total land area of 46.4 million hectares of which 63% is under total forest cover. A number of estimates have been given on the state of the forest in the country. In 1975 CSIRO through its surveys and aerial photo interpretation estimated the gross forest resources of PNG to be 33.1 million hectares. In 1996 this total had been reduced to a gross area of 29.0 million hectares and by 2007 to approximately 28.0 million hectares. Currently the forest cover in country is estimated to be 27.1 million hectares (PNGFA, Internal FIMS Report)

From a recent report, Shearman et al. (2008), using remote sensing, reported the forest area in 1972 to be 38.0 million hectares, of which 33.2 million hectares is rainforest. In 2002 the area was reduced to 25.3 million hectares.

The depletion of PNG’s forest is occurring considerable faster than previously recorded due to forest being deforested or converted to different land uses as the population and the demand for development increases. Logging, shifting cultivation, commercial agriculture, urban development, infrastructure development, mining, bush fires and various natural disasters were identified to be the main drivers of deforestation and forest degradations¹.

Small scale sawmilling operations using portable sawmills including large scale FCA operations also contributes to the loss of forest.

Figure 2: Forest Resources of PNG



¹ Sherman P., et al. 2008. The State of the Forests of Papua New Guinea, Port Moresby, University Of Papua New Guinea

Various reports also gave different percentages of the deforestation rates per annum; 0.5 percent (FRA, 2005)² and 1.41 percent (Shearman et al. 2008). Forest accessible to logging is estimated by Shearman to be degraded or cleared at a faster rate of 2.6 percent (362,400 ha/annum) hence if the trend continues, it is estimated that by 2021, 83% of the accessible forest areas will be degraded. Due to these differences, there is a need for PNG's forest area to be verified possibly using remote sensing technology in order for appropriate actions to be taken.

As of November 1998 there were approximately 10.622 million hectares of forest under some form of concession as; Timber Rights Purchase (TRP) area, Local Forest Area (LFA) and Forest Management Agreement (FMA). By November 2007, the concession area increased to 11.336 million hectares. Currently as some concessions under FMA were cancelled, the total area has now being reduced to 10.954 million hectares. Note too that many of the older TRPs have expired and the rights over the forest resources have reverted back to the land owners.

While the country on the whole seems to have a lot of forest, much of these forests are in remote and inaccessible/inoperable areas including water catchment, swamp forests and rugged terrains such as the central ranges and the number of mountain chains that emanate from the central divide. This will make them unattractive to timber development but will have an important role in protecting areas of water catchment, wildlife habitats and so forth.

It is therefore important that sound planning be undertaken for the remaining forest resources to ensure Forest Policy objectives are fulfilled. It is also important that a comprehensive survey is undertaken to determine the changes and the size of the overall forest area to allow for future planning.

The Forest Cover Change is shown in **Appendix 1**.

8.0 TIMBER CONCESSIONS IN PNG

Most forest areas in PNG are owned by the customary land groups and in order for any form of forest development to take place, there has to be an agreement in place between the government and the landowners. In the past these agreements were executed under the old Forestry Act Chapter 216 resulting in a "Timber Rights Purchase" or under the Private Dealings Act resulting in a "Local Forest Area". Many of the expired concessions were the result of the acquisition or authorization through either one of these legal mechanisms.

Upon coming into effect of the Forestry Act 1991 (as amended), the system through which land owners consent are obtained is through the Forest Management Agreement (FMA) pursuant to Division 4, Section 57 and 58 of the Forestry Act 1991 (as amended). FMA is a contract between the forest owners and PNGFA through incorporated land group (ILG) process in which the forest owners willing transfer their rights over timber resources to the state for development. This agreement is for a period of 50 years.

There are also other legal means to harvest timber from customary land and that is through the allocation of a "Timber Authority" (TA) as provided for under the Forestry Act 1991 (as

² Global Forest Resource Assessment 2005,FAO

amended). This is mostly for short term period (annually) and restricts the harvestable volume to 5,000m³ mainly for domestic processing. The other form of log harvest is through a “Forest Clearance Authority” (FCA) purposely created for agriculture and road line clearance where the logs are allowed to be exported.

As of November 2007, a total of 11.336 million hectares of land were under some form of timber concessions including those that have expired. By November 2011, the total area was reduced to 10.954 million hectares. Of this total, 2.434 million hectares is of expired TRPs and LFA's while 5.001 million hectares is under Forest Management Agreement and this shall form the core of timber concessions that would be developed on a sustainable basis (**See Table 2 below**).

Other areas operating under Timber Authority cannot be verified due to the type and nature of the operations however areas acquired for major agriculture projects under FCA is estimated at 0.950 million hectares (**See Appendix 7**).

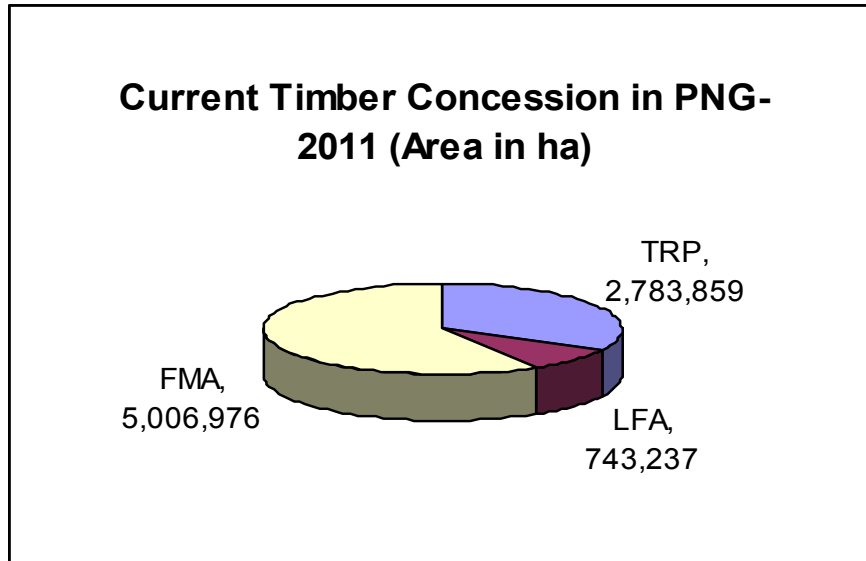
Considering that there is technically no area designated as Permanent Forest Estate (PFE) besides the plantations being grown on state land, FMAs shall continue to serve such a role upon which the Annual Allowable Cut (AAC) shall be determine.

TABLE 2: SUMMARY OF TIMBER CONCESSIONS IN PNG-2011

PROVINCE	TRP (ha)		LFA (ha)		FMA (ha)	TOTAL(ha)
	Current	Expired	Current	Expired		
Western	722,795	24,289	0	0	498,205	1,245,289
Gulf	373,303	142,192	0	0	1,769,834	2,285,329
Central	200,705	121,388	45,000	0	173,190	540,283
Milne Bay	31,340	200,809	0	0	82,380	314,529
Oro	29,620	96,233	39,930	0	221,000	386,783
S.Highlands	0	39,241	0	0	98,750	137,991
Eastern Highlands	0	4,589	0	0	0	4,589
Chimbu	0	0	0	0	0	Nil
W.Highlands	0	84,438	0	0	0	84,438
Jiwaka	-	-	-	-	-	-
Enga	0	43,568	0	0	0	43,568
Hela	-	-	-	-	-	-
West Sepik	0	150,103	48,500	0	901,974	1,100,577
East Sepik	0	29,470	79,978	0	521,500	630,948
Madang	131,480	159,392	0	0	253,500	544,372
Morobe	67,239	242,952	0	0	131,760	441,951
West New Britain	669,355	285,867	491,898	0	354,883	1,802,003
East New Britain	189,520	391,830	0	0	0	581,350
New Ireland	289,115	98,411	0	243,145	0	630,701
ARB	46,720	78,246	0	0	0	124,966
Manus	32,667	2,496	19,067	0	0	54,230
TOTAL	2,783,859	2,195,544	743,237	243,145	5,006,976	10,953,897

Source: Forest Resource Acquisition General Information, December, 2011

Note: Jiwaka and Hela are new provinces.

Figure 3: Current Timber Concessions in PNG-2011

Detail information on the concession areas and their status can be obtained from the **Forest Resource Acquisition General Information Update, December 2011**, available at the Policy and Planning Directorate. Additional information is given in **Table 2** and **Appendix 4**.

9.0 STATEMENT OF ANNUAL ALLOWABLE CUT

The preparation of a Statement of Annual Allowable Cut (AAC) as a component of the NFP is a requirement under Section 47 (2)(iii) of the Forestry Act 1991 (as amended) and reads as follows “A *statement, prepared annually by the Board, of allowable cut volumes, being the amount of allowable cut for each province for the next succeeding year which will ensure that the areas of forest resource set out in the Provincial Forest Plan, for present or future production, are harvested on a sustainable yield basis*”

Under the National Forest Policy 1991, it is also clearly stipulated that;

The National Forest Board shall determine the annual allowable cut for each province at a level which will ensure that the areas of forests earmarked in the Provincial Forest Plan for the present or future production are harvested on a sustainable basis. The allowable cut volumes will be revised as necessary to take account of refinements in the National Forestry Inventory's database.

Where existing or proposed harvest volumes in a province exceed the AAC volume, the permitted harvest volumes for the production areas in the province will be reduced accordingly. The new permitted volumes per area will be set by the National Forest Board acting on the advice of the Provincial Forest Management Committees (PFMC).

Current operations and resource areas may be consolidated where this is practical in order to achieve economies of scale in single reforestation, harvesting or processing operations under revised harvest volumes.

The AAC shall be revised annually based on new information coming to hand and the final outcome of the growth and yield model that is been developed. Any AAC projections that are above the default yield value will result in an over exploitation of the forest resource thereby making it extremely difficult for the forest to recuperate.

Over the period of this plan it is anticipated that a growth and yield model will be developed exclusively for PNG and that a National Forest Inventory (NFI) will be updated so that the information from these will be used to predict AAC based on scientific information.

It is important to note that the AAC is calculated based on the estimated volume of timber resource obtained from PNGFA forest inventory surveys and is based on natural forest only. Separate AAC will be calculated for tree plantations in future.

From Appendix 5a, total AAC calculated for the country is estimated to be 10.5 million m³. Actual annual cut calculated based on the timber resources for each project for 2012 is 8.9 million m³. The same appendix also indicates that Gulf, Manus, East New Britain, West New Britain and New Ireland provinces are over cutting and may soon exhaust their resources if the same level of cut is maintain over the next five years.

The projected AAC for the provinces for a period of five years from 2013 to 2017 is shown in **Appendix 5a**. Additional information is provided in **Appendix 5b**. Estimated AAC for the Future Potential Forest Development Areas are not included in the projection but is shown in **Appendix 5c**.

10.0 FOREST RESOURCE DEVELOPMENT PROGRAMME

10.1 NATIONAL FOREST DEVELOPMENT PROGRAMME

The Forest Development Programme (FDP) is based on the 19 Provincial Forest Plans. It deals only with the areas that have been identified in the plans as areas having potential for forest development. It is based on these areas that a National Forest Development Programme (NFDP) is prepared. The rationale is that no activities leading to a FMA and ultimately forestry project development shall be entertained unless it is listed in the Provincial and the National Forest Plan.

All areas referred to as Potential Forest Development Areas (PFDA) are those forest areas that have been identified by the provinces and listed in their respective PFPs for future development.

PFDA will not automatically be developed as forestry projects as a lot more work would have to be done initially to ascertain the forest resource to justify a sustainable forest operation and also if there are environmental constraints that may prohibit logging operations including resource owners consent. it is these PFDA that form the basis for this National Forest Development Programme 2013-2017.

The Potential Forest Development Areas are listed in **Appendix 5C** and also under the National Forest development Programme in **Appendix 6**. Detail information on these areas can be obtained from the respective PFPs.

The National Forest Development Programme comprises the following activities;

10.11 Forest Inventory

A programme for inventory over potential forest areas including its associated budget estimates as identified in the PFPs are listed in **appendix 6**. The implementation of these programme shall be dependent on funding that is made available to the PNGFA in either recurrent or Public Investment Program (PIP) budget or through donor funding. It can also be funded by the respective provincial governments and or through elected members of parliament.

The overall costing for the National Forest Inventory is estimated at **5.7 million kina**.

10.12 Forest Resource Acquisition

Forest Acquisition shall continue to be in the form of a Forest Management Agreement (FMA) in compliance with the Forestry Act 1991 (as amended). It shall be undertaken over areas that have been identified and listed in the PFP's and subsequently the NFP. The ability of the PNGFA to implement this programme shall also depend on its annual budgets.

Landowner awareness is an important and integral part of forest acquisition programme as no FMA can be executed unless there is consent by the landowners. Following awareness in the proposed PFDA's, land groups are formed in accordance with the Land Group Incorporation Act (Amendment) 2009 after which an FMA can be executed

Recognizing the fact that there is limited accessible forest areas remaining, the acquisition programme shall concentrate on priority areas. Many of the PFDA's listed in the programme are small in terms of their estimated AACs therefore are given lower priority however resource owners may apply for Timber Authority (TA) for harvesting and downstream processing.

The cost of conducting the ILGs and finalizing the FMAs is estimated at **5.8 million kina**.

10.13 Forest Allocations

The activities leading up to the allocation of forestry projects incurs huge costs to the PNGFA and shall be implemented according to the National Forest Development Programme and guided by the National Forest Development Guidelines. The PNGFA shall concentrate its resources in ensuring that potential forest areas are inventoried, acquired and allocated, subject of course to land owner consents.

Appendix 5 indicates the estimated costs for conducting Development Options Studies (DOS) including the costs involved in the allocation process for each of the potential projects.

10.2 FOREST RESOURCE REPLACEMENT

The 1991 National Forest Policy encourages the PNGFA, Private Investors and landowner groups to actively participate in the reforestation and plantation activities.

The following references are made to Forest Resource Replacement and Reforestation in the 1991 National Forest Policy

10.21 Forest Resource Replacement

- (a) Private investment in forest plantation programmes and processing plantation material will be actively promoted and be negotiated as part of major timber agreements or as commercial enterprises in their own right. In either case, plantation decisions as to the scale of individual programmes and type of material to be produced will be guided by options for profitable processing within the country.
- (b) Reforestation to be undertaken by the timber companies will be determined on a case by case basis, and the appropriate provisions will be included in timber development agreements or timber permits.
- (c) Plantation establishment by landowner groups shall be actively promoted and supported.
- (d) The PNGFA will take primary responsibility for supervising long term investment in reforestation and to undertake reforestation programmes where social and environmental factors are prime considerations. Where possible, locally available labour, including youth groups under technical supervision, will be utilized in reforestation programmes.
- (e) The PNGFA will initiate studies to assess the commercial feasibility of wood chipping, wood pulp, sawn timber and veneer production based on plantation grown forest resources. Such studies would provide a basis for decision making and planning industrial forest plantation programmes.
- (f) It will be a priority of the PNGFA to ensure that existing plantations are capable of maintaining a sustainable output.
- (g) The overall forest plantation programme will form part of the National Forest Development Programme.

10.22 Reforestation

- (a) Reforestation will be promoted as a means to maintain Permanent Forest Estate to supply wood to existing and new forest industries. Programmes for plantation development will be guided by economic criteria and feasibility studies to assess the commercial viability of processing plantation material for a variety of end uses.

- (b) A programme of non-forested and degraded land shall be pursued and developed.
- (c) Woodlot establishment, agro-forestry and tree planting programmes shall be contracted to youth groups in both rural and urban areas and shall be promoted and supported by active forestry activities.

Any reforestation/afforestation programme shall also compliment the Medium Term Development Plan (2011-2015), Papua New Guinea Development Strategic Plan (2010-2030) and the PNG Vision 2050 by establishing forest plantations in addressing 100% down stream processing, climate change issues and poverty in the country.

In order to achieve the above policy and Governments development objectives, PNGFA shall develop strategies and programmes, continue to acquire land and develop existing and potential forest plantations to be commercially viable and sustainable plantations. Provinces are also encouraged to plan and establish provincial nurseries and planting programs with the objective of establishing 10,000 hectares of forest plantations per annum.

PNGFA shall also be reviving activities in all the provinces by providing extension services and improving and upgrading extension nurseries.

Currently PNGFA is pursuing a program of improving growing stock in logged over forest under the programme of reforestation naturally. This includes the treatment of logged over forest in major timber project areas to enable timber stand improvement. Land owners will be encouraged to participate and take full ownership in sustainably managing their forest.

Appendix 8a shows the status of the current plantations in PNG while **Appendices 8b & 8c** shows the Provincial Planting Programmes and its Nurseries. The Resource Replacement Programme through the Reforestation Naturally is shown in **Appendix 8d**

10.3 COMMUNITY FORESTRY

In accordance with the National Forest Policy, PNGFA will develop and maintain community forestry with the view of empowering rural and urban communities in forest related activities such as small-scale sawmilling, eco-tourism, woodlot farming, harvesting and selling of non-timber products to enhance livelihoods and alleviate poverty.

In order to promote landowner participation in the management and utilization of their resources and projects, PNGFA shall:

- Identify opportunities for landowner participation in each project areas.
- Liaise with Provincial Governments (PFMC) and other stakeholders in identifying their provincial needs.
- Identify and conduct appropriate training to enhance capacity building.
- Create a database for all community projects in the country.

- Create a network of extension services with other government agencies, universities/colleges, NGO's and relevant experts to provide guidance and support.

10.4 DOWN STREAM PROCESSING

Domestic processing of forest products is encouraged by the National Government through the PNG Development Strategic Plan (2010-2030) and Medium Term Development Plan (2011-2015) as well as the National Forest Development Guidelines to promote domestic processing with the view of phasing out round log exports over a period of time. The objective of the Government is to increase the level of domestic processing of timber and non timber forest products to about 80% by year 2030.

In order to achieve this PNGFA shall;

- Commercialize existing forest plantations and increase volume for domestic wood processing.
- Conduct feasibility study into the possibility of establishing a Central Wood Processing Facility.
- Review all existing timber permits and project agreements to promote down stream processing of timber.
- Create trade alliances and promote PNG forest resources and wood products both locally and internationally.
- Encourage forest Industries to increase trade volumes of forest produce for domestic and international markets.
- Research, compile and document wood properties of all timber species including lesser known species and upload onto website.
- Promote the marketing and value of lesser known species and non-timber forest products.
- Develop a system to monitor and control the trade of forest products.
- Develop and strengthen the state Marketing Agency (SMA) of PNGFA.
- Enhance standards and quality control for timber treatment, seasoning and grading of sawn timber and other forest produce.
- Regulate all types of domestic processing facilities by setting standards.
- Enhance and strengthen networks with other line agencies.

10.5 CLIMATE CHANGE AND REDD

Forest Accounts for about 17-18% of global carbon dioxide (CO²) output (UNFCCC). Deforestation has been responsible for almost 90% of the estimated emissions due to land-use change since 1850, with a 20% decrease of the global forest area³. It has been estimated also that PNG contributed between 2-7% of the global emissions in 2001 from deforestation and forest degradation⁴.

In PNG, the main drivers of CO² emissions have been identified to be associated timber harvesting, subsistence agriculture, commercial agriculture, mining, infrastructure development, urban expansion and fire (Shearman, P., et al., 2008).

Various means to mitigate climate change would include afforestation, reduced deforestation and reforestation and others as identified in the Forestry and Climate Change Framework for Action (2009-2015).

PNGFA has established a branch of REDD and Climate Change and with collaboration with the FRI (Natural Forest Management Branch) shall oversee and address the issue of climate change. As part of policy initiatives, PNGFA has in place a revised National Forest Development Guide lines (NFDG) and Forestry and Climate Change Framework for Actions 2009-2015 (FCCFA) which will provide a path way to mitigate climate change and green house gasses and adapt to the issues of climate change in the forestry sector in PNG.

In order to address the issue of climate change, PNGFA shall continue to undertake the following:

- Maintain and continue to be active participants in issues relating to climate change, especially Land use Change, Land Use Change and Forestry (LULUCF).
- Maintain and upgrade an information base on issues related to climate change.
- Conduct training and awareness on Climate Change and REDD+ including CDM initiatives to empower relevant stakeholders to manage their environment and forest resources.
- Identify areas within the country where possible to initiate REDD+, ARCDM, CDM and watershed management projects.
- Encourage landowners and the timber industries to undertake afforestation and reforestation activities on grassland and degraded sites.
- Continue with research and support other research initiatives into the science of climate change and mitigation.

³Houghton, R.A., 1999: The annual net flux of carbon to the atmosphere from changes in land use 1850-1990. *Tellus*, **51B**, 298-313.

⁴ Shearman, P., et al., 2008. *The State of Forests of Papua New Guinea*. Port Moresby: The University of Papua New Guinea.

- Help develop and implement a National Climate Change Policy.
- Help develop and implement a National REDD+ Strategy.
- In collaboration with the Office of Climate Change and Development (OCCD), implement the Climate Compatible Development Plan for PNG.
- Implement the five REDD+ pilot projects as identified by NEC and respective PFMCs to test policy issues.
- Maintain dialogue on the issues of REDD and climate change with all stakeholders at the local, national, regional and the international level.

10.6 RESEARCH

Forestry research is an integral part of the forestry sector. The mandate to control forestry research is set out in Part IV of the National Forest Policy (1990) and the Forestry Act 1991 (as amended) provides the legislative support for implementing this policy.

The PNG Forest Research Institute (FRI) is a directorate of the PNGFA with the broad mission of providing scientific data and information for the management of PNG's forest resources as well as to provide reputable forest research results and information to PNGFA and other government agencies, private sectors, other research and educational institutions, resource owners and users.

Research is being conducted in collaboration with a number of international agencies such as; JICA, CIFOR, ACIAR and others.

The primary objectives of the institution will be towards;

- i. Research into the sustainable management, utilization, conservation and rehabilitation of the nation's natural forest resources.
- ii. Screening and domestication of the important indigenous higher value timber species identify suitable species for various specific uses and provide a scientific knowledge base for the establishment and maintenance of plantations for industrial wood as well as conduct research into reforestation and afforestation of the country's large anthropogenic grasslands and degraded lands.
- iii. Expand, develop and manage the nationally and internationally important scientific collections as a permanent record of PNG's rich biodiversity and as a resource to enable the key elements of the forest biota to be recognized.
- iv. Conduct applied and experimental research into the utilization and marketing of wood and non- wood forest products.
- v. Conduct research into climate change, mitigation and adaptation issues.
- vi. Conduct research into forest protection (fires, insects and other pathogens).

- vii. Collaborate with other PNGFA directorates.

The institute's current structure consists of four (4) research programmes and one (1) support programme aimed at fulfilling the above objectives. The programmes and their specific functions are as follows:

i. **Natural Forest Management.**

To provide the essential growth data needed by forest managers to sustainably manage the nation's natural forest resources, develop and refine silvicultural practices and develop climate change mitigation and adaptation techniques to increase the value and ecosystem services of the forest resources.

ii. **Planted Forest**

To provide a scientific base for the establishment of forest plantations for industrial wood, forest genetic resources, rehabilitation and to improve the germplasm, management and protection of plantations as well as to enhance and maintain insect collections.

iii. **Forest Biology**

Enhance and maintain botanical collections of forest biota and provide mechanisms for identifying plants.

iv. **Forest Products**

To conduct applied and experimental research on wood and non wood properties and their uses as well as provide technical advice and assistance to industries for processing and utilization of their forest products.

v. **Finance and Administration**

To provide support and manage FRI's technical, casuals and professional staff in achieving their goals and objectives and manage the institutes assets, finances and day to day administration.

The research activities are detailed in **Appendix 9** however more information on individual programme can be obtained from the Forest Research Institute.

11.0 OTHER FORESTRY RELATED ISSUES

It is acknowledged that there are many other issues that will impact on the forestry sector and within the tenure of this plan or sooner, action will be taken to address issues such as;

11.1 Environment and conservation

The PNGFA is mindful of the need to ensure that any form of timber development activities (felling, road clearance, landing etc) does not endanger the environment. It has

in place a Logging Code of Practice (LCOP) and other enabling environmental regulations that are intended to minimize environmental damages.

During the period of this Plan, the PNGFA shall;

- Review the LCOP and PMCP to ensure compliance and enforce penalties.
- Liaise with relevant Government Agencies, NGO's, Civil Society, Forest Industries and land owners to facilitate environmental concerns in forest development plans.
- Improve the current mapping systems in order to identify and exclude areas exposed to environmental concerns from timber harvesting operations.
- Include all proposed conservation areas subject to landowner consent and appropriate legislation dealing with such.

11.2 Non Timber Forest Products

Non Timber Forest Products (NTFP) or sometimes referred to as Minor Forest Products (MFP) is an integral part of any forest ecosystem. Their potential has not been fully utilized over the years as the primary focus has been on commercial forest development.

With the understanding that non timber products can be an important means of providing income for the rural people, PNGFA shall;

- Conduct research and document all known NTFP including carbon.
- Undertake multipurpose NFI and include in the FIMS database.
- Liaise with NGOs and other stakeholders and develop strategies on how best NTFP can be developed to benefit resource owners.
- Explore markets and promote the sales of NTFP.
- Review and develop policies and legislation governing the harvesting and processing of NTFP.
- Conduct awareness programs in rural communities on issues dealing with NTFP and carbon.

11.3 Eco-Forestry

While the primary role of the PNGFA is the sustainable management of the nation's forest resource, it is also appreciative of the other functions of the total ecosystem such as Eco-Forestry. Eco-Forestry (EF) has a number of definitions however can be simplified as "*The sustainable derivation of other benefits from the forest besides traditional timber harvesting*"

EF activities are primarily aimed at generating cash incomes to the local populace through small scale sawmilling activities and harvesting of other forest produce such as

medicinal plants, aromatic plants as well as utilizing wildlife like birds and butterflies. Other activities also include preservation of forest ecosystem for eco-tourism and environmental services.

The PNGFA appreciates the need for eco-forestry to be an integral part of forestry development in the country. A unit has been established in recognition of the importance of EF within the organization and shall plan to undertake the following;

- Research all activities that are categorized as EF activities and in consultation with other stakeholders, formulate policy guidelines on how best to utilize and benefit from the different activities associated with EF.
- Formulate strategies and programmes for the enhancement of EF activities.
- Identify and locate EF projects in the country
- Provide technical advice and assistance in formulating business plans.
- Explore markets for EF products and services.
- Collaborate with NGOs, Community Based Organizations (CBO) and other stakeholders and conduct awareness about EF to the landowners.

11.4 Forest Certification

With the global trend on forest certification, PNGFA shall consider developing PNG standards to measure and evaluate the sustainability of our forest. This will in turn enable timber legality, verification, traceability and sustainability to ensure that sustainable forest management practices are being implemented.

Recognizing the fact that forest certification is increasingly becoming a marketing tool and will gain momentum during the tenure of this plan, PNGFA shall;

- Ensure that the officers are well acquainted with the processes of timber certification.
- Develop and promote criteria and indicators as a means of achieving certification in all timber projects.
- Test out developed standards in forestry trial projects.
- Engage in international forums and debates regarding certification and timber trade.

12.0 REFERENCES

- i. Forest Act 1991 (as amended).
- ii. Forest Inventory Mapping Database Reports and Maps.
- iii. Forestry Regulations, 1991
- iv. Global Forest Resource Assessment, 2005 and 2010
- v. Hall, D.O.,J. House, and I.Scarse,2000:An overview of biomass energy

- vi. Hammer and J.C Saunders, 1995. Forest Resources and Vegetation Mapping of Papua New Guinea.
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- viii. Internal PNGFA Reports.
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- x. National Forest development Guidelines, 2009.
- xi. Papua New Guinea Forestry Outlook Study, 2009.
- xii. Provincial Forest Plans.
- xiii. Shearman, P.L., Bryan, J. E., Ash, J., Hunnam, P., Mackay, B. and Lokes, B., 2008. The State of the Forest of Papua New Guinea. Mapping the extent and condition of forest cover and measuring the drivers of forest change in the period 1972-2002. University of Papua New Guinea, 2008.

APPENDIX 1: FOREST RESOURCES OF PNG BY PROVINCES.

Province	Resource as of 1975					Current Resources (2009)		
	Gross Land Area (ha)	Gross Forest Area 1975 (ha)	Adjusted Area (ha)	Gross Volume (m ³)	Converted to Land Use (ha)	Gross Area (ha)	Adjusted Net Area (ha)	Gross Volume (m ³)
Western	9,845,211	6,675,886	5,636,321	173,793,000	1,000,236	5,493,085	4,512,175	143,831,895
Gulf	3,480,065	2,659,466	2,406,954	81,581,500	265,232	2,369,293	2,136,617	73,237,768
Central	2,987,176	2,015,499	1,882,106	87,998,000	290,598	1,665,672	1,570,850	74,654,515
Milne Bay	1,426,403	1,080,043	856,152	29,801,900	170,232	892,895	719,690	25,092,656
Oro	2,277,222	1,726,697	1,571,385	68,734,500	170,450	1,556,247	1,439,135	62,188,786
SHP	2,574,829	2,009,059	1,904,514	92,764,200	133,307	1,875,752	1,817,608	87,875,533
Enga	1,182,384	750,447	723,152	46,084,700	33,856	716,591	696,010	44,458,457
Western Highlands	914,120	509,212	453,805	26,502,500	95,192	414,020	393,403	23,326,118
Jiwaka	-	-	-	-	-	-	-	-
Hela	-	-	-	-	-	-	-	-
Simbu	613,361	393,925	368,183	20,010,400	42,456	351,469	342,253	18,653,153
Eastern Highlands	1,120,510	558,840	530,453	34,868,300	21,679	537,161	512,960	33,687,670
Morobe	3,393,295	2,210,027	2,030,230	109,407,500	246,404	1,947,021	1,809,010	97,202,458
Madang	2,909,527	2,115,612	1,634,487	71,693,900	214,542	1,874,764	1,473,916	65,304,601
East Sepik	381,318	2,103,292	1,886,741	74,839,600	66,098	1,975,616	1,782,228	72,209,530
West Sepik	3,605,390	3,236,371	3,037,119	116,037,800	423,062	2,740,248	2,591,182	99,168,452
Manus	215,029	149,481	105,532	6,250,500	69,395	64,481	47,650	2,985,450
New Ireland	961,034	792,057	728,191	22,466,200	370,588	411,535	381,554	11,638,796
East New Britain	1,534,365	1,312,579	1,223,483	44,465,700	325,221	827,148	779,339	27,887,354
West New Britain	2,045,590	1,814,977	1,696,112	51,848,800	861,501	713,951	684,767	20,206,834
ARB	943,273	708,297	566,349	22,287,600	0	708,297	566,349	22,287,655
Total	46,410,102	32,821,767	29,241,269	1,181,436,900	4,799,849	27,136,246	24,256,696	1,005,897,681

Source: FIMS Database

Note: Boundaries for Jiwaka and Hela provinces yet to be demarcated in order for FIMS to be updated

APPENDIX 2: FOREST CLASSIFICATION IN PNG-2009

Provinces	Gross Area (000 ha)	Forest Production (000ha)		Future Prod Forest (000 ha)		Reserve Forest (000 ha)		Protection Forest (000ha)	Afforest & Salvage Area (000ha)	Other Areas (000ha)
		Acquired Operable	Acquired Inoperable	Net Forest Area	Non Forest & Inoperable	Potential Forest	Mountain Forest & Inundated			
Western	9,845.211	1,193.800	67.219	1,731.488	913.481	2,375.237	143.963	854.17	1,215,967	1,349.885
Gulf	3,480.065	926.974	499.617	230.386	234.228	211.110	222.705	130.66	409.024	579.361
Central	2,987.176	197.121	11.036	434.763	87.158	784,040	314.096	45.760	565.043	548.159
Milne Bay	1,426.403	131.393	9.413	125.351	44.475	264.337	100.714	25.90	476.602	248.211
Oro	2,277.222	104.983	51.304	503.191	476.351	294.237	236.000	19.883	315.937	275.336
S.H.P	2,574.830	91.966	11.388	334.444	261.787	231.469	693.514	35.702	409.276	505.284
Enga	1,182.660	30.972	0	82.856	82.913	13.507	244.556	0	361.482	366.374
W.H.P	914.120	55.178	4.430	54.708	34.884	21.655	136.294	24.06	300.138	282.769
Jiwaka	-	-	-	-	-	-	-	-	-	-
Hela	-	-	-	-	-	-	-	-	-	-
Simbu	613.361	0	0	59.474	87.526	59.003	126.276	92.12	118.677	70.285
E.H.P	1,120.510	0	0	40.000	40.000	102.931	238.758	55.28	343.291	300.248
Morobe	3,393.295	65.009	30.054	347.891	106.794	600.924	275.472	49.14	689.165	1,246.889
Madang	2,909.527	169.896	2.720	129.343	90.264	525.262	266.353	102.70	648.699	974.285
E.S.P	4,381.318	167.649	51.047	116.529	306.82	609.914	183.246	253.52	641.095	2,051.487
Sandaun	3,605.390	687.292	85.96	993.650	210.676	164.130	215.629	0	610.868	646.185
Manus	215.029	4.556	0	42.035	90.567	7.009	30.477	1.55	20.400	18.430
N.I.P	961.034	108.005	34.212	155.767	78.599	26.759	91.782	20.20	371.223	74.479
E.N.P	1,534.365	123.095	125.041	210.314	111.601	89.673	247.169	10.15	461.177	156.142
W.N.P	2,045.590	318.212	74.836	221.423	44.097	106.048	103.074	1 9.79	1,004.689	153.418
ARB	943.273	61.111	7.193	0	0	200.565	107.097	55.39	260.849	251.067
Total	46,410.39	4,473.212	1,065.470	5,813.613	3,293.223	6,687,810	3,959.130	1,796,025	9,223,602	10,098.294

Source: FIMS Database

Note: No information available for Jiwaka and Hela provinces.

APPENDIX 3: CONSTRAINT CATEGORIES IN PNG

Constraints to Logging-Summary by Province (2009)										
Province	Land Area (ha)	Forest Area (ha)	Extreme Constraints to logging (ha)					Serious constraints to logging (ha)		Nil constraint (ha)
			>30 deg slope	>2400m Altitude	Tower Karst	80% Inundate	Mangroves	20-30 deg slope & high relief	>50% Inundatad	
Western	9,845,211	5,493,085	69,791	12,569	174,250	1,587,339	87,571	190,207	687,072	7,036,385
Gulf	3,480,065	2,369,293	378,841	-	391,887	545,231	251,121	385,102	48,122	1,479,761
Central	2,987,176	1,665,672	428,516	107,178	-	32,695	66,296	1,022,155	51,612	1,278,724
Milne Bay	1,426,403	892,895	139,612	3,766	-	3,464	41,867	566,196	-	671,498
Oro	2,277,222	1,556,247	512,733	68,702	-	139,408	17,122	525,962	21,259	992,036
SHP	2,574,829	1,875,752	677,456	149,607	544,589	6,056	-	431,298	29,859	735,965
Enga	1,182,384	716,591	277,308	430,723	4,054	-	-	346,284	18,395	105,620
WHP	914,120	414,020	252,792	49,153	-	-	-	306,411	-	305,734
Jiwaka	-	-	-	-	-	-	-	-	-	-
Hela	-	-	-	-	-	-	-	-	-	-
Simbu	613,361	351,469	241,252	15,487	-	-	-	154,579	-	202,043
EHP	1,120,510	537,161	313,702	31,007	-	-	-	492,098	-	283,703
Morobe	3,393,295	1,947,021	829,979	148,426	-	22,047	3,185	1,481,219	28,459	879,980
Madang	2,909,527	1,874,764	733,748	10,630	-	151,095	847	661,908	40,529	1,310,770
East Sepik	4,381,318	1,975,616	567,925	-	-	1,302,908	32,024	764,734	303,014	1,411,713
West Sepik	3,605,390	2,740,248	469,675	55,063	93,163	134,794	659	916,223	12,032	1,923,781
Manus	215,029	64,481	-	-	7,923	-	7,814	-	5,856	193,536
New Ireland	961,034	411,535	46,982	-	114,796	-	19,849	288,889	-	490,518
ENB	1,534,365	827,148	21,687	-	479,814	-	2,226	586,651	14,323	429,664
WNP	2,045,590	713,951	150,171	-	73,685	52,021	15,836	798,889	30,344	924,644
ARB	943,273	708,297	29,455	-	-	23,737	4,524	365,558	53,990	466,009
Total	46,410,102	27,136,246	6,141,625	1,082,338	1,884,161	4,000,795	550,941	10,284,393	1,343,865	21,121,984

Source: FIMS Database

Note: No information available for Jiwaka and Hela provinces.

APPENDIX 4: TIMBER CONCESSION IN PNG

Project Name	Type	Purchase Date	Term	Expiry Date	Gross Area (ha)	Net Area (ha)	Remarks
Western							
Wimare (Oriomo)	TRP	06-Mar-1962	40	05-Mar-2002	24,289	16,605	Expired
Wawoi Guavi Blk 1	TRP	14-Aug-1981	40	14-Aug-2021	35,000	35,000	Current
Wawoi Guavi Blk 2	TRP	10-Dec-1985	40	09-Dec-2025	180,000	180,000	Current
Wawoi Guavi Blk 3	TRP	17-Aug-1989	40	16-Aug-2029	206,301	206,301	Current
Makapa	TRP	03-Dec-1991	40	02-Dec-2031	301,494	301,494	Current
Semabo	FMA	14-Feb-1996	50	14-Feb-2046	53,000	25,800	Current
East Awin	FMA	27-Sep-1996	50	26-Sep-2046	201,596	151,197	Court Battle
Tapila Wipin	FMA	20-Dec-1996	50	19-Dec-2046	243,609	158,553	Current
					1,245,289	1,074,950	
Gulf							
Kikori Area A	TRP	31-Oct-1952	40	30-Oct-1992	1,741	1,741	Expired
Kikori Area B	TRP	02-Dec-1953	40	01-Dec-1993	1,255	1,255	Expired
Sirebi	TRP	16-Dec-1953	40	15-Dec-1993	891	891	Expired
Eia Era	TRP	06-Apr-1955	40	05-Apr-1995	3,240	3,240	Expired
Pie Era	TRP	28-Nov-1964	40	27-Nov-2004	34,800	34,800	Expired
Iowa River	TRP	27-Mar-1965	40	26-Mar-2005	5,265	5,265	Expired
Taure Meporo	TRP	12-Sep-1990	20	11-Sep-2010	95,000	95,000	Expired
Vailala	TRP	01-Jun-2025	40	30-Jun-2025	13,140	13,140	Current
Turama	TRP	04-Mar-1998	40	03-Mar-2028	187,733	187,733	Current
Vailala Block 1	TRP	11-Apr-1989	40	10-Apr-2029	88,630	88,630	Current
East Kikori	TRP	12-Sep-1990	40	11-Sep-2030	83,800	83,800	Current
Turama Block 1	FMA	29-May-1995	50	28-May-2045	539,400	143,586	Current (Turama ext)
Kikori Block 2	FMA	29-May-1995	50	28-May-2045	486,634	211,024	Current (Turama ext)
Baimuru Block 3	FMA	29-May-1995	50	28-May-2045	438,300	320,383	Current (Turama ext)
Vailala Block 2	FMA	18-Dec-1995	50	17-Dec-2045	105,400	73,780	Current
Vailala Block 3	FMA	18-Dec-1995	50	17-Dec-2045	200,100	140,434	Current
					2,285,329	1,404,702	
Central							
Veburi	TRP	27-Aug-1989	20	27-Aug-1989	618	618	Expired
West Gadaisu	TRP	14-Dec-2009	40	14-Dec-2009	55,120	55,120	Expired
Anemasora	TRP	11-Apr-1989	10	10-Apr-1999	1,800	1,800	Expired
Ganai	TRP	02-Nov-1976	30	01-Nov-2006	12,000	12,000	Expired
Ome Ome	TRP	20-May-1991	15	19-May-2006	25,000	25,000	Expired
Edevu	TRP	03-Aug-1989	20	02-Aug-2009	26,850	26,850	Expired

Iva	TRP	01-Jan-1972	40	31-Dec-2011	4,612	4,612	Expired
Inika	TRP	01-Jan-1972	40	31-Dec-2011	8,851	8,851	Expired
North Vanapa	TRP	12-Aug-1982	40	11-Aug-2022	78,422	78,422	Current
Bonua Magarida	TRP	30-Jul-1987	40	29-Jul-2027	64,904	64,904	Current
Gorohu	TRP	02-Aug-1988	40	01-Aug-2028	23,641	23,641	Current
Ormand Lako	TRP	09-Nov-1988	40	08-Nov-2028	20,275	20,275	Current
Lako Imila	LFA	03-May-1989	N/A	N/A	45,000	45,000	Current
Marshall Lagoon	FMA	01-Apr-2008	10	31-Mar-2018	17,790	14,000	Current
Varagadi Plantation	FMA	14-Feb-1996	50	13-Feb-2046	6,500	1,280	Current
Cloudy Bay	FMA	06-Oct-1997	50	05-Oct-2047	148,900	94,013	Current
					540,283	476,386	
Milne Bay							
Woodlark Island	TRP				30,973	30,973	Expired
Good Enough Island	TRP	18-Aug-1954	10	17-Aug-1994	1,863	1,732	Expired
West Gurney	TRP	04-Feb-1988	10	03-Feb-1998	22,673	21,069	Expired
Modewa Gara	TRP	09-Nov-1988	40	08-Nov-1998	23,919	23,000	Expired
Sagarai Gadaisu	TRP	01-Jul-1966	40	30-Jun-2006	118,850	118,850	Expired
Awarai	TRP	21-May-1966	40	20-May-2006	118,850	2,342	Expired
East Fergurson	TRP	30-Jul-1987	40	29-Jul-2027	31,340	31,254	Expired
East Collingwood	FMA	06-Apr-1998	50	05-Apr-2048	80,700	52,289	Current
Ulabo Plantation					1,680	1,680	Current
					314,529	283,189	
Oro							
Girua Hajjo	TRP	27-Nov-1984	5	26-Nov-1984	1,920	1,920	Expired
Saiho	TRP	18-Mar-1976	20	17-Mar-1986	17,167	17,167	Expired
Girua Era	TRP	23-Jul-1986	10	22-Jul-1996	9,600	9,600	Expired
Kumusi Ext	TRP	13-Jun-1969	40	12-Jun-2009	44,780	44,780	Expired
Saiho Ext	TRP	20-Mar-1970	40	19-Mar-2010	3,726	3,726	Expired
Embi Hanau	TRP	02-Jul-1990	15	01-Jul-2005	19,040	19,040	Expired
Vema Gaepa	LFA	08-Dec-1989	N/A	N/A	39,930	39,930	Current
Ioma Block 4	TRP	26-Oct-71	40	30-Jan-2012	29,620	29,620	Current Ext
Ioma Block 5	FMA	25-Apr-1997	50	24-Apr-2047	221,000	46,000	Current
					386,783	211,783	
Southern Highlands							
Mt. Giluwe 1A	TRP	19-Jun-1969	40	18-Jun-2009	6,640	6,640	Expired
Mt. Giluwe 1E	TRP	19-Jun-1969	40	18-Jun-2009	13,270	13,270	Expired
Mt. Giluwe 1F	TRP	19-Jun-1969	40	18-Jun-2009	1,740	1,740	Expired
Kalgabunbu	TRP	27-Jun-1969	40	26-Jun-2009	360	360	Expired
Akalereba	TRP	27-Jun-1969	40	26-Jun-2009	570	570	Expired

Appendix 4 cont...

Mt.Giluwe 1B	TRP	16-Aug-1969	40	15-Aug-2009	4,330	4,330	Expired
Mt.Giluwe 1D	TRP	27-Sep-1969	40	26-Sep-2009	7,490	7,490	Expired
Mt.Giluwe 1C	TRP	22-Dec-1969	40	21-Dec-2009	3,600	3,600	Expired
Koia Wekomini	TRP	01-Sep-1988	20	01-Sep-2008	630	630	Expired
Rongo Mondana	TRP	16-Jun-1971	40	15-Jun-2011	611	611	Expired
East Pangia	FMA	04-Mar-2004	50	03-Mar-2054	98,750	74,062	Current
					137,991	113,303	
Eastern Highlands							
Barola	TRP	30-Dec-1953	-	-	5	5	Expired
Marafunga	TRP	08-May-1959	40	07-May-1999	369	369	Expired
Marafunga Mundo	TRP	02-May-1963	30	01-May-1993	867	867	Expired
Marafunga Korfena	TRP	02-May-1963	30	01-Apr-1993	194	194	Expired
Marafunga Nomba	TRP	02-May-1963	30	01-May-1993	413	413	Expired
Barapa Aforompa	TRP	21-Apr-1965	20	20-Dec-1985	313	313	Expired
Binamarien	TRP	11-Jun-1965	20	10-Jun-1985	119	119	Expired
Omauru	TRP	11-Jun-1965	20	11-Jun-1985	12	12	Expired
Frigano	TRP	02-Apr-1968	20	01-Jun-1988	1,402	1,402	Expired
Marafunga Ext 2	TRP	11-Aug-1970	20	10-Aug-1990	895	895	Expired
					4,589	4,589	
Chimbu							
No timber area has ever been acquired							
Western Highlands							
Toli-Jibang (Kimil)	TRP	18-Apr-1957	40	15-Apr-1997	446	446	Expired
Milaga	TRP	17-Oct-1951	40	16-Oct-1991	34	34	Expired
Kum No.2	TRP	15-Aug-1960	40	14-Aug-2000	502	502	Expired
Kigen	TRP	19-Aug-1983	40	18-Sep-1993	327	327	Expired
Kuna River	TRP	21-Nov-1963	40	20-Nov-2003	1,452	1,452	Expired
Nebilyer River (Tomba)	TRP	15-Oct-1964	40	14-Oct-2004	2,187	2,187	Expired
Moiwa	TRP	20-Oct-1967	40	19-Oct-2007	26,700	26,700	(Jimi River TRP) Expired
Kumun	TRP	21-Oct-1967	40	20-Oct-2007	4,850	4,850	✓ Expired
Mage	TRP	21-Oct-1967	40	20-Oct-2007	6,820	6,820	✓ Expired
Milma	TRP	23-Oct-1967	40	22-Oct-2007	2,750	2,750	✓ Expired
Ambusakui	TRP	23-Oct-1967	40	22-Oct-2007	1,080	1,080	✓ Expired
Tsendiap	TRP	24-Oct-1967	40	23-Oct-2007	3,550	3,550	✓ Expired
Ginji	TRP	24-Oct-1967	40	23-Oct-2007	6,610	6,610	✓ Expired
Palgei	TRP	25-Oct-1967	40	24-Oct-2007	7,230	7,230	✓ Expired

Appendix 4 cont...

Kitingnambuga	TRP	25-Oct-1967	40	24-Oct-2007	4,460	4,460	(Jimi River TRP) Expired
Mabugei	TRP	25-Oct-1967	40	24-Oct-2007	12,640	12,640	✓ Expired
Kinint	TRP	04-Nov-1967	40	03-Nov-2007	2,800	2,800	✓ Expired
					84,438	84,438	
Enga							
Kai Dolan	TRP	13-Jan-1965	20	12-Jan-1985	85	85	Expired
Meriamanda	TRP	14-Dec-1959	40	13-Dec-1999	716	716	Expired
Kiaimanda	TRP	21 Apr-1960	40	20-Apr-2000	218	218	Expired
Domisau	TRP	09-Nov-1967	40	08-Nov-2007	10,930	10,930	(Part of Jimi River Timber Area) Expired
Waripa	TRP	18-Dec-1967	20	17-Dec-2007	30,960	30,960	✓ Expired
Meriamanda Ext	TRP	27-Jun-1989	20	26-Jun-2009	320	320	Expired
Pogera	TRP	27-Jun-1989	20	26-Jun-2009	276	276	Expired
					43,568	43,568	
West Sepik							
Durantembil	TRP	14-Dec-1987	40	13-Dec-1997	448	448	Expired
Musu Saberjin	TRP	02-Mar-1964	40	01-Mar-2004	1,539	1,539	Expired
Warimo	TRP	29-Jun-1966	40	28-Jun-2006	11,178	11,178	Expired
Vanimo Block 6	TRP	08-Feb-1967	40	07-Feb-2007	53,743	53,743	Expired
Vanimo Block 1-5	TRP	26-Mar-1968	40	31-Oct-2011	83,500	82,018	Expired
Bewani	LFA	13-Dec-1988	N/A	N/A	38,500	38,500	Current
Pegi Pulan	LFA	12-Sep-1989	N/A	N/A	10,000	10,000	1 year resource left
South West Wape	FMA	05-Mar-1997	50	04-Mar-2047	116,800	116,800	(Aitape Lumi Consolidated) Current
Aitape East Coast	FMA	06-Oct-1997	50	05-Oct-2047	96,890	73,644	✓ Current
Wes Romei Tadj	FMA	09-Sep-2005	50	08-Dec-2055	197,100	148,075	✓ Current
Amanab Block 3&4	FMA	06-Oct-1997	50	05-Oct-2047	118,920	101,082	Current
Amanab Block 1&2	FMA	15-Feb-1999	50	14-Feb-2049	95,498	81,323	Current
Amanab Block 5&6	FMA	03-Dec-2003	50	02-Dec-2053	236,521	226,440	Current
Imonda	FMA	08-Dec-2010	50	07-Dec-2060	40,245	20,271	Current
					950,474	965,061	
East Sepik							
Saloinagao	TRP	15-Aug-1961	40	14-Aug-2001	587	587	Expired
Arin-Rainibo	TRP	01-Jul-1962	40	30-Jun-2002	3,570	3,570	Expired
Angoram (Marimberg Hills)	TRP	21-Aug-1952	40	-	25,313	25,313	Expired
Lower Sepik	LFA	01-Oct-1988	N/A	N/A	39,978	39,978	Current
Hawain	LFA	-	N/A	N/A	40,000	40,000	Current
April Salumei	FMA	20-Dec-2046	50	19-Dec-2046	521,500	150,620	REDD+ Pilot Project
					630,948	260,068	

Appendix 4 cont...

Madang							
Barum	TRP	17-Jul-1987	10	16-Jul-1997	1,687	1,687	Expired
Far Norh Coast Blk 3	TRP	03-Aug-1989	10	02-Aug-1999	3,800	3,800	Expired
Gum	TRP	05-May-1971	30	04-Aug-1999	4,960	4,960	Expired
Naru	TRP	15-Oct-1971	30	14-Oct-2001	15,800	15,800	Expired
North Coast	TRP	27-Oct-1971	30	26-Oct-2001	14,990	14,990	Expired
Gogol	TRP	21-May-1963	40	20-May-2003	52,256	52,256	Expired
Kumil	TRP	05-Jul-1984	20	04-Jul-2004	55,940	55,940	Expired
Far North Coast	TRP	12-Oct-1979	30	11-Oct-2009	9,950	9,950	Expired
Sogeram	TRP	30-Jul-1987	30	29-Dec-2017	56,480	56,480	Current
Rai Coast	TRP	24-Aug-1989	26	23-Aug-2029	75,000	75,000	Current
Josephstaal	FMA	14-Feb-1996	50	13-Feb-2046	95,500	66,885	Current
Ramu Blk 1	FMA	24-Jun-2004	50	23-Jun-2054	158,000	112,328	Under dispute
					544,372	470,076	
Morobe							
Bukaua	TRP	26-Aug-1968	20	25-Aug-1988	2,104	2,104	Expired
Buharu	TRP	18-Sep-1968	20	17-Aug-1988	3,614	3,614	Expired
Lukamor Wasalum	TRP	18-Nov-1968	20	17-Nov-1988	1,012	1,012	Expired
Sang	TRP	08-Sep-1968	15	07-Sep-1984	985	985	Expired
Gabensis Lengu	TRP	11-Sep-1969	20	10-Sep-1989	6,877	6,877	Expired
Buhem Bugeng	TRP	07-Nov-1973	20	06-Nov-1993	19,650	19,650	Expired
Bugeng Mongi	TRP	23-Nov-1973	20	22-Nov-1993	18,540	18,540	Expired
Trans Bulolo	TRP	28-Jun-1974	10	27-Nov-1984	5,080	5,080	Expired
Gumi	TRP	01-Jun-1974	10	30-Jun-1985	3,080	3,080	Expired
Cromwell	TRP	08-Sep-1979	10	07-Sep-1989	5,038	5,038	Expired
Oomis Block 10	TRP	11-Oct-1970	10	10-Oct-1989	2,764	2,764	Expired
Gnalangbungun	TRP	19-Dec-1980	15	18-Dec-1995	5,220	5,220	Expired
Labu Butu	TRP	27-Jan-1981	10	26-Jan-1991	10,000	10,000	Expired
Labu Miti	TRP	15-Feb-1985	10	14-Feb-1985	2,084	2,084	Expired
Sio Sigawa	TRP	27-Jun-1987	10	26-Jun-1997	1,900	1,900	Expired
Wau & Heads Hump	TRP	18-May-1990	5	17-May-1995	2,477	2,477	Expired
Kui Busi	TRP	19-Jan-1998	10	18-Jan-1998	12,425	12,425	Expired
Oomsis 11	TRP	25-Jun-1959	40	24-Jun-1999	182	182	Expired
Maiama A	TRP	02-Jul-1990	10	01-Jul-2000	5,140	5,140	Expired
Kui Ext	TRP	25-Jun-1991	10	24-Jun-2001	40,000	40,000	Expired
Maima B	TRP	13-Mar-1973	30	12-Apr-2003	9,980	9,980	Expired
Oomsis Block 10A	TRP	25-May-1991	15	24-May-2005	6,870	6,870	Expired

Appendix 4 cont...

Morobe Coast	TRP	02-Jul-1991	15	01-JUL-2005	44,493	44,490	Expired
Watut West	TRP	22-Jun-1992	15	21-Jun-2007	33,440	33,440	Expired
Were Were	TRP	01-Jan-1975	40	31-Dec-2014	3,054	3,054	Current
Wau Area 4 Blk A	TRP	01-Nov-1975	40	31-Oct-2015	15,400	15,400	Current
Bunsil Umboi Area 1	TRP	30-Dec-1976	40	29-Dec-2016	8,936	8,936	Current
Kowai Umboi Area 2	TRP	31-Dec-1997	40	30-Dec-2017	16,924	16,924	Current
Kaimanga Umboi Area 3	TRP	02-Jan-1978	40	01-Jan-2018	22,925	22,925	Current
Mongi Busiga	FMA	27-Sep-1996	50	26-Sep-2045	32,800	24,300	Current
Buhem Mongi	FMA	25-Apr-1997	50	24-Apr-2047	38,100	29,345	Current
Watut Ongawafa	FMA	23-Mar-2006	50	22-Mar-2056	60,860	45,645	Current
					441,951	251,329	
West New Britain							
Ivule Malaulau	TRP	14-May-1974	10	13-May-1984	4,350	4,350	Expired
Rottok Bay	TRP	06-Aug-1974	20	05-Aug-1994	20,640	20,640	Expired
Sulu Range	TRP	04-Mar-1977	10	03-Mar-1987	3,600	3,600	Expired
Mami 1	TRP	17-Jun-1959	40	16-Jun-1999	10,360	10,360	Expired
Witori 1	TRP	18-Jun-1959	40	17-Jun-1999	4,730	4,730	Expired
Kako 1	TRP	01-Oct-1959	40	30-Sep-1999	1,940	1,940	Expired
Uletevasa 1	TRP	12-Jan-1960	40	11-Jan-2000	2,040	2,040	Expired
Malalimi 1	TRP	15-Jan-1960	40	14-Jan-2000	4,780	4,780	Expired
Galae 1	TRP	20-Jan-1960	40	19-Jan-2000	32,780	32,780	Expired
Mu'u (Tarobi Pt)	TRP	05-Apr-1960	40	04-Apr-2000	3,420	3,420	Expired
Wangore	TRP	26-Sep-1960	40	25-Sep-2000	8,500	8,500	Expired
Ibana	TRP	10-Jun-1961	40	09-Jun-2001	4,735	4,735	Expired
North Ulamona	TRP	13-Nov-1963	40	12-Nov-2003	1,860	1,860	Expired
Mosa 2	TRP	11-Jun-1964	40	10-Jun-2004	2,750	2,750	Expired
Keveloho 2	TRP	16-Jun-1964	40	15-Jun-2004	4,370	4,370	Expired
Toa	TRP	16-Jun-1964	40	15-Jun-2004	1,700	1,700	Expired
Malum 2	TRP	16-Jun-1964	40	15-Jun-2004	2,910	2,910	Expired
Bunga 2	TRP	16-Jun-1964	40	15-Jun-2004	2,350	2,350	Expired
Hondelaulimi 2	TRP	16-Jun-1964	40	15-Jun-2004	2,530	2,530	Expired
Kisang 2	TRP	16-Jun-1964	40	15-Jun-2004	8,620	8,620	Expired
Bola 2	TRP	16-Jun-1964	40	15-Jun-2004	7,320	7,320	Expired
South Bagum	TRP	30-Jun-1965	40	29-Jun-2005	7,402	7,402	Expired
Fulleborn Ext	TRP	22-Mar-1967	40	21-Mar-2007	20,640	20,640	Expired
Bulu	TRP	22-May-1968	40	21-May-2008	19,830	19,830	Expired
Ulamona Ext 3	TRP	13-Nov-1968	40	12-Nov-2008	620	620	Expired

Appendix 4 cont...

Ibana East 3	TRP	14-Nov-1968	40	13-Nov-2008	6,840	6,840	Expired
Madedu 3	TRP	16-Nov-1968	40	15-Nov-2008	13,560	13,560	Expired
Extended Mengen 3	TRP	20-Nov-1968	40	19-Nov-2008	33,180	33,180	Expired
Gula Gula 3	TRP	26-Nov-1968	40	25-Nov-2008	6,430	6,430	Expired
Aliai 3	TRP	02-Nov-1968	40	01-Dec-2008	5,260	5,260	Expired
Aloio	TRP	13-Oct-1969	40	12-Oct-2009	2,350	2,350	Expired
Kau'Ulu	TRP	13-Oct-1969	40	12-Oct-2009	2,390	2,390	Expired
Sisimi	TRP	13-Oct-1969	40	12-Oct-2009	1,620	1,620	Expired
Bango	TRP	17-Dec-1969	40	16-Dec-2009	13,680	13,680	Expired
Hagry (Maututu)	TRP	12-Aug-1969	40	11-Aug-2009	15,780	15,780	Expired
Ania Kapiura	TRP	24-Mar-1969	40	20-Oct-2014	260,210	188,072	Current
Kapuluk	TRP	20-Nov-1971	40	19-Nov-2011	106,238	54,250	Expired
Kapuluk Extension	TRP	21-May-1975	40	20-May-2015	115,692	115,692	Current
West Arawe (Blk1)	TRP	18-Jul-1990	25	30-Jan-2011	68,735	68,181	Current
Central Arawe (Blk 2)	TRP	20-May-1991	25	30-Jan-2012	36,500	36,500	Current
East Arawe	TRP	20-May-2015	25	19-May-2016	61,000	61,000	Current
Mosa Leim	TRP	06-Nov-1991	25	05-Nov-2031	20,980	20,980	Current
Atuvo (Akarip)	LFA	01-Sep-1983	N/A	N/A	4,548	4,548	Current
Pulie Anu	LFA	02-May-1989	N/A	N/A	40,000	40,000	Current
Lolo Blk 1	LFA	01-Nov-1988	N/A	N/A	39,500	39,500	Current
Lolo Blk 2	LFA	19-Dec-1989	N/A	N/A	40,000	40,000	Current
Passismanua Blk 1	LFA	26-Feb-1992	N/A	N/A	40,000	40,000	Current
Aria Vanu Blk 3	LFA		N/A	N/A	39,650	39,650	Current
Anu Alimbit	LFA	02-May-1989	N/A	N/A	32,800	32,800	Current
Alimbit Andru	LFA	10-Apr-1990	N/A	N/A	39,930	39,930	Current
Aria Vanu Blk 1	LFA	18-May-1989	N/A	N/A	39,650	39,650	Current
Pasismanua Inland Ext	LFA	26-Feb-1992	N/A	N/A	34,840	32,677	Current
Akarip Autuvo Ext	LFA	30-Oct-1991	N/A	N/A	40,000	40,000	Current
Awio Amgen	LFA	24-Oct-1991	N/A	N/A	37,980	37,980	Current
Lolo Blk 2 Ext	LFA	29-Jan-2010	N/A	N/A	23,000	23,000	Current
Andrew Johanna	LFA	26-Feb-1992	N/A	N/A	40,000	40,000	Current
Rottok Bay	FMA	04-Jan-1996	50	03-Jan-2046	32,739	32,739	(Rottok Bay Consolidated)Current
Agulu	FMA	08-Jun-1999	50	07-Jun-2049	56,643	48,147	✓
Asirim	FMA	09-Jun-1999	50	08-Jun-2049	46,673	39,671	✓
Asengseng	FMA	14-Feb-1996	50	13-Feb-2046	43,367	41,000	(Asengseng Consolidated) Current
Aria Vanu Blk 2	FMA	06-Apr-1998	50	05-Apr-2048	30,062	30,040	✓
Vanu Tamu	FMA	05-Apr-1998	50	05-Apr-2048	44,152	43,610	✓

Appendix 4 cont...

Inland Rauto Miu	FMA	26-Nov-2048	50	25-Nov-2048	101,256	86,126	✓
					1,802,003	1,641,610	
East New Britain							
Mandres Kalkal	TRP	07-Jan-1951	40	06-Jan-1991	11,330	11,330	Expired
Cape Jacqinot	TRP	21-Jan--1951	40	20-Jan-1991	720	720	Expired
Drima	TRP	06-Nov-1951	40	05-Nov-1991	4,000	4,000	Expired
Berg Berg Remuit	TRP	29-Jun-1952	40	28-Jun-1992	2,900	2,900	Expired
Warangoi	TRP	02-Jun-1952	40	01-Oct-1992	2,050	2,050	Expired
Gaulim	TRP	27-Mar-1974	15	26-Mar-1989	7,400	7,400	Expired
Matanakunai	TRP	13-Aug-1974	10	12-Aug-1984	800	800	Expired
Sum Sum	TRP	23-Mar-1041	50	30-Mar-1991	1,519	1,519	Expired
Seraji & Seraji Ext	TRP	Area Acquired	-	30- Oct-2010	18,700	18,700	Expired
Pondo	TRP	"	-	"	12,140	12,140	Expired
Kamdaru	TRP	"	-	"	1,010	1,010	Expired
Merai	TRP	21-Jan-1978	10	20-Jan-1988	3,730	3,730	Expired
Vudal	TRP	01-Oct- 1979	20	30-Sep-1999	9,770	9,770	Expired
Waterfall Bay	TRP	01-Sep-1980	20	31-Aug-2000	26,450	26,450	Expired
Taraiwara	TRP	18-Jul-1990	10	17-Jul-2000	11,700	11,700	Expired
Waterfall Bay Extension	TRP	06-May-1992	10	05-May-2002	15,860	15,860	Expired
Gaulim Ext	TRP	21-Apr-1988	15	20-Apr-2003	8,150	8,150	Expired
Gar	TRP	15-Nov-1989	15	14-Nov-2004	10,000	10,000	Expired
Aghaghat Ext	TRP	19-Jun-1990	15	18-Nov-2005	4,400	4,400	Expired
Mokolkol Ext	TRP	21-Feb-1977	30	20-Feb-2007	27,400	27,400	Expired
Kaboku	TRP	13-Aug-1967	40	12-Aug-2007	4,110	4,110	Expired
Makolkol	TRP	03-Sep-1967	40	02-Sep-2007	23,020	23,020	Expired
Simbali	TRP	06-Sep-1967	40	05-Sep-2007	78,058	72,910	Expired
Tamoip	TRP	14- Sep-1967	40	13-Sep-2007	8,891	8,891	Expired
Loi River	TRP	14- Sep-1967	40	13-Sep-2007	16,280	16,280	Expired
Aghaghat	TRP	15-Sep-1967	40	14-Sep-2007	4,872	4,872	Expired
Ramandu	TRP	21-Apr-1988	20	26-Nov-2005	23,800	13,800	Expired
Sanbam Ext	TRP	24-Aug-1989	10	15-Dec-1999	9,100	9,100	Expired
Dengnangi	TRP	04-Jun 1968	40	03-Jun-2008	32,370	32,370	Expired
Simbali Ext	TRP	23-Aug-1997	15	22-Aug-1989	11,300	11,300	Expired
Bergberg Ext	TRP	24-Jun-1997		11-Oct-2010	5,000	5,000	Expired
Inland Pomio	TRP	31-Dec-1989	40	30-Dec-2029	63,668	63,668	Current

Appendix 4 cont...

Cape Oford	TRP	22-Jun-1992	20	21-Jun-2012	45,901	33,760	Current
Tokai Matong	TRP	10-Feb-1989	40	09-Feb-2029	22,108	22,108	Current
Nutuve	TRP	02-Jul-1990	40	01-Jul-2030	52,843	52,600	Current
					581,350	553,818	
New Ireland							
Tsoi Umbigum	TRP	07-May-1953	40	06-May-1993	50	50	Expired
Tsoi Kawilikiau	TRP	14-May-1953	40	13-May-1993	30	30	Expired
Kamdaru Ext	TRP	10Nov-1973	20	09-Nov-1993	1,190	1,190	Expired
Watpi Rut Rut	TRP	12-Nov-1973	20	11-Nov-1993	1,600	1,600	Expired
Nasko Extension Bua	TRP	13-Nov-1973	20	12-Nov-1993	3,450	3,450	Expired
Kabaman Kokokalang	TRP	15-Dec-1973	20	04-Dec-1993	2,070	2,070	Expired
Siaman Danmas	TRP	06-Dec-1973	20	05-Dec-1993	620	620	Expired
Mamirum	TRP	13-Oct-1974	15	12-Oct-1989	12,270	12,270	Expired
Konos	TRP	05-Feb-1975	15	04-Feb-1990	8,890	8,890	Expired
Pue	TRP	11-Feb-1975	15	10-Feb-1990	1,080	1,080	Expired
Kabaman Ext	TRP	11-Mar-1975	20	10-Mar-1995	2,490	2,490	Expired
Semalu	TRP	01-Nov-1976	15	31-Oct-1991	2,160	2,160	Expired
King	TRP	09-Mar-1977	15	08-Mar-1992	4,770	4,770	Expired
Emirau Island	TRP	Area acquired	In	1970/s	830	830	Expired
Lenai	TRP	27-Mar-89	10	26-Mar-1999	2,290	2,290	Expired
Konogogo	TRP	06-May-1992	10	05-May-2002	1,315	1,315	Expired
Mussau Island	TRP	01-Mar-1974	30	29-Feb-2004	35,736	35,736	Expired
Kaut	TRP	03-Jun-1969	40	02-Jun-2009	17,600	17,600	Expired
Ugana	LFA	10-Jun-1976	N/A	23-Mar-1996	9,015	9,015	Expired
Anir	LFA	02-Mar-1987	N/A	N/A	41,000	41,000	Expired
Tabar	LFA	02-Jun-1987	N/A	N/A	24,000	24,000	Expired
Napanta Nabui	LFA	18-Jun-1987	N/A	N/A	13,000	13,000	Expired
Suraul Rasirik	LFA	-	N/A	N/A	34,000	34,000	Expired
Nakmai	LFA	17-Jan-1974	N/A	31-Dec-1996	110,000	110,000	Expired
Kait	LFA	29-Aug-1974	N/A	N/A	1,750	1,750	Expired
Kanamai	LFA	12-Jun-1975	20	N/A	10,380	10,380	Expired
Lak	TRP	10-Oct-1989	20	09-Oct-2009	80,000	80,000	Expired
Umbukul	TRP	24-Jun-1992	20	21-Jun-2012	26,050	26,050	Current
Central New Ireland	TRP	14-Jun-1977	40	14-Jun-2017	98,100	98,100	Current
Danfu	TRP	30-Aug-1979	40	29-Aug-2019	59,565	59,565	Current
Danfu Extension	TRP	30-Jul-1987	10	29-JUL-1997	25,400	25,400	Current
					630,701	630,701	

Appendix 4 cont...

ARB							
Kunua	TRP	04-Feb-1988	10	03-Feb-1998	23,845	23,845	Expired
Wakunai	TRP	31-Aug-1959	40	30-Aug-1999	4,460	4,460	Expired
Numa Numa	TRP	05-May-1961	40	04-May-2001	6,470	6,470	Expired
Tonolei Blk 1	TRP	08-May-1962	40	07-May-2002	8,530	8,530	Expired
Tonolei Blk 2	TRP	08-May-1962	40	07-May-2002	4,480	4,480	Expired
Tonolei Blk 3	TRP	08-May-1962	40	07-May-2002	6,710	6,710	Expired
Tonolei Blk 4	TRP	08-May-1962	40	07-May-2002	6,500	6,500	Expired
Tonolei Blk 5	TRP	08-May-1962	40	07-May-2002	4,140	4,140	Expired
Tonolei Blk 6	TRP	08-May-1962	40	07-May-2002	6,350	6,350	Expired
Tonolei Blk 7	TRP	05-Jun-1962	40	04-Jun-2002	6,760	6,760	Expired
Tinputz	TRP	11-Jan-1979	40	31-Oct-2019	22,650	22,650	Current
Manetai	TRP	04-Feb-1988	40	03-Feb-2038	24,070	24,070	Current
					124,966	124,966	
Manus							
Derimbat	TRP	09-Mar-1965	20	08-Mar-1885	996	996	Expired
Derimbat South	TRP	28-May-1974	20	27-May-1994	1,500	1,500	Expired
Manus West Coast	TRP	04-Feb-1988	40	03-Feb-2028	32,667	32,667	Current
West Coast	LFA	05-Dec-1993	N/A	N/A	19,067	19,067	Current
Jaha	LFA	12-Feb-1993	N/A	N/A	10,111	10,111	Current
Kali Bay	LFA	14-Mar-1991	N/A	N/A	8,753	8,753	Current
					73,094	73,094	
Jiwaka							New Province
Hela							✓
				TOTAL	10,953,897	8,667,631	

Source: Forest Resource Acquisition General Information Update, December, 2011.

Note: Total concessions acquired as of November 2011, including those that have expired is 10,972,761 ha.

APPENDIX 5a: ANNUAL ALLOWABLE CUT FOR PNG

Province	Net Area (ha)	Gross Vol (m ³)	AAC (m ³)	Available AAC Vol (40%)	Permitted Cut under Projects (2012) (m ³)	Balance (2013) (000m ³)	Projected ACC 2013-2017 (m ³)				
							2013	2014	2015	2016	2017
Western	4,512,175	143,831,895	4,109,483	1,643,793	825,652	818.141	873,000	873,000	873,000	873,000	873,000
Gulf	2,136,617	73,237,768	2,092,508	837,003	1,046,000	-208.997	1,186,000	1,186,000	1,186,000	1,186,000	1,186,000
Central	1,570,850	74,654,515	2,132,986	853,194	434,160	419.034	334,160	334,160	334,160	334,160	334,160
Milne Bay	719,690	25,092,656	716,933	286,773	57,875	228.898	58,000	58,000	58,000	58,000	58,000
Oro	1,439,135	62,188,786	1,776,822	710,728	228,010	482.718	228,000	228,000	228,000	228,000	228,000
Morobe	1,809,010	97,202,458	2,777,213	1,110,885	177,000	933.885	149,000	149,000	149,000	149,000	149,000
Madang	1,473,916	65,304,601	1,865,845	746,338	607,000	139.338	550,000	550,000	550,000	550,000	550,000
East Sepik	1,782,228	72,209,530	2,063,129	825,252	396,620	428.632	397,000	317,000	317,000	317,000	317,000
West Sepik	2,591,182	99,168,452	2,833,384	1,133,354	907,200	226.154	557,000	477,000	477,000	477,000	477,000
Manus	47,650	2,985,450	85,299	34,120	212,000	-177.880	212,000	212,000	212,000	212,000	212,000
New Ireland	381,554	11,638,796	332,537	133,015	290,000	-157.785	180,000	180,000	180,000	180,000	180,000
E. N. Britain	779,339	27,887,354	796,781	318,712	749,000	-430.288	352,000	352,000	352,000	352,000	352,000
W. N. Britain	684,767	20,206,834	577,338	230,935	2,903,940	-2,673.005	2,415,000	2,415,000	2,065,000	1,750,000	1,630,000
ARB	566,349	22,287,655	636,790	254,716	0	254.716	0	0	0	0	0
SHP	1,817,608	87,875,533	2,510,729	1,004,292	80,000	924.292	80,000	80,000	80,000	80,000	80,000
EHP	512,960	33,687,670	962,505	385,002	0	385.002	0	0	0	0	0
Simbu	342,253	18,653,153	532,947	213,179	0	213.179	0	0	0	0	0
WHP	393,403	23,326,118	666,460	266,584	0	266.584	0	0	0	0	0
Enga	696,010	44,458,457	1,270,242	508,097	0	508.097	0	0	0	0	0
Jiwaka											
Hela											
Total	24,256,696	1,005,897,681	28,739,931	10,45,922	8,915.257	9,876.625	7,571.160	7,411.160	7,061.160	6,746.160	6,626.160

Source: FIMS Database.

Note: No available information for Jiwaka Hela provinces. (New Provinces)

APPENDIX 5b: ANNUAL LEGALLY PERMITTED LOG HARVEST FOR OPERATIONAL PROJECTS

Project Name	Type	TP No	Yr 2013 (‘000’ m^3)	Yr 2014 (‘000’ m^3)	Yr 2015 (‘000’ m^3)	Yr 2016 (‘000’ m^3)	Yr 2017 (‘000’ m^3)
Western							
Wawoi Guavi Blk 1,2,3	TRP	TP 01-08	350	350	350	350	350
Makapa	TRP	TP 01-09	170	170	170	170	170
East Awini	FMA	TP 01-01	141	141	141	141	141
Wipim Tapila	FMA		165	165	165	165	165
Semabo	FMA		47	47	47	47	47
			873	873	873	873	873
Gulf							
Turama Blk 1	TRP	TP 02-12	216	216	216	216	216
Vailala Blk 1	TRP	TP 02-14	150	150	150	150	150
East Kikori	TRP	TP 02-15	180	180	180	180	180
Turama Extension	FMA	TP 02-12A	340	340	340	340	340
Vailala Blocks 2&3	FMA	TP 02-16	300	300	300	300	300
			1,186	1,186	1,186	1,186	1,186
Central							
Lako Imila	LFA	TP 03-01	25	25	25	25	25
Bonua Magarida	TRP	TP 03-28	108	108	108	108	108
Vanapa North	TRP	TP 03-33	100	100	100	100	100
Cloudy Bay	FMA	TP 03-01	61.16	61.16	61.16	61.16	61.16
Marshall Lagoon	FMA	TP 03-36	40	40	40	40	40
			334.16	334.16	334.16	334.16	334.16
Milne Bay							
East Ferguson	TRP	TP 04-04	29	29	29	29	29
East Collingwood	FMA		29	29	29	29	29
			58	58	58	58	58
Oro							
Yema Gaepa	LFA	TP 05-01	100	100	100	100	100
Ioma Block 4	TRP	TP 05-09	75	75	75	75	75
Ioma Block 5	FMA	TP 05-11	53	53	53	53	53
			228	228	228	228	228
Southern Highlands							
East Pangia	FMA	TP 06-01	80	80	80	80	80
			80	80	80	80	80
West Sepik							
Bewani	LFA	TP 10-01	80	80	80	80	80
Pegi Pulan	LFA	TP 10-02	80	-	-	-	-
Amanab Blks 1-4	FMA	TP 10-01	100	100	100	100	100
Amanab Blks 5&6	FMA	TP 10-02	108	108	108	108	108
Aitape Lumi Consolidated	FMA	TP 10-03	189	189	189	189	189
			557	477	477	477	477
East Sepik							
Hawain	LFA	TP 11-02	150	150	150	150	150
Lower Sepik	LFA	TP 11-01	80	-	-	-	-
April Salume	FMA		167	167	167	167	167
			397	317	317	317	317
Madang							
Sogeram	TRP	TP 12-20	150	150	150	150	150
Rai Coast	TRP	TP 12-18	130	130	130	130	130
Middle Ramu Blk 1	FMA	TP-12-01	138	138	138	138	138
Josephstaal	FMA	TP 12-02	132	132	132	132	132
			550	550	550	550	550
Morobe							
Umboi	TRP	TP 13-27	60	60	60	60	60

Appendix 5b cont...

Buhem Mongi Busiga	FMA	TP 13-38	61	61	61	61	61
Ongawafa	FMA	TP 13-32	28	28	28	28	28
			149	149	149	149	149
West New Britain							
Loko Blk 1	LFA	TP 14-01	80	80	80	80	80
Loko Blk 2	LFA	TP 14-03	80	80	80	80	80
Ania Kapiura Consolidated	TRP	TP 14-52	350	350	-	-	-
Mosa Leim	TRP	TP 14-57	120	120	120	120	-
Kapuluk & Kapuluk Ext	TRP	TP 14-50	160	160	160	-	-
West Arowe	TRP	TP 14-53	155	155	155	-	-
Central Arowe	TRP	TP 14-54	155	155	155	155	155
East Arowe	TRP	TP 14-55	155	155	155	155	155
Atuvo Extension	LFA	TP 14-07	150	150	150	150	150
Anu Alimbit	LFA	TP 14-05	80	80	80	80	80
Andru Johanna	LFA	TP 14-10	100	100	100	100	100
Alimbit Andru	LFA	TP 14-08	80	80	80	80	80
Aria Vanu Blk 3	LFA	TP 14-13	130	130	130	130	130
Aria Vanu Blk 1	LFA	TP 14-06	90	90	90	90	90
Avio Amgen	LFA	TP 14-09	150	150	150	150	150
Passismanua Inland	LFA	TP 14-11	41	41	41	41	41
Passismanua Ext	LFA	TP 14-14	150	150	150	150	150
Rotstock Bay Consolidated	FMA	TP 14-02	93	93	93	93	93
Asengseng Consolidated	FMA	TP 14-01	96	96	96	96	96
			2,415	2,415	2,065	1,750	1,630
East New Britain							
Open Bay	TRP	TP 15-33	139	139	139	139	139
Inland Pomio	TRP	TP 15-49	93	93	93	93	93
Nutuve	TRP	TP 15-59	120	120	120	120	120
			352	352	352	352	352
New Ireland							
Central New Ireland	TRP	TP 16-42	120	120	120	120	120
Danfu	TRP	TP 16-40	60	60	60	60	60
			180	180	180	180	180
Manus							
Manus West Coast	TRP	TP 18-08	72	72	72	72	72
Kali Bay	LFA	TP 18-02	60	60	60	60	60
Jaha	LFA	TP 18-01	80	80	80	80	80
			212	212	212	212	212
ARB							
	Nil						
PNG TOTAL							
			7,818.160	7,652.160	7,308.160	6993.160	6,873.160

APPENDIX 5c: ESTIMATED AAC FOR FUTURE POTENTIAL PRODUCTION FOREST AREAS

PROVINCE Project	AREA (000ha)		ESTIMATED NET VOLUME (000m ³)	AAC (000m ³)	REMARKS
	Gross	Net			
Western					
East Awin Extension	591.311	533.548	9,603.864	274.300	
Aiambak Kiunga	200.000	155.777	2,731.986	78.000	
Fly Blk 1	264.492	103.475	1,862.550	53.200	
Fly Blk 2	226.424	113.009	2,034.162	58.100	
Lake Murray Blk 1 (11F)	201.938	103.150	1,856.700	53.000	
Lake Murray Blk 2 (11G)	238.192	224.940	4,048.920	115.600	
Nomad Strickland	41.370	34.540	621.720	17.700	
Morehead Suki Blk 1	587.454	278.743	5,017.374	143.300	
Morehead Suki Blk 2	295.786	188.306	3,389.508	96.800	
	2,664.969	1,731.488	31,166.784	890.000	
Gulf					
Tauri Meporo	54.390	23.411	421.398	12.000	
Sori Meporo	86.422	48.945	881.010	25.100	
Karokaro	128.084	92.533	1,665.594	47.500	
Hekiko (Gulf)	195.715	65.497	1,178.946	33.600	
	464.614	230.386	4,146.948	118.200	
Central					
Uda Mekeo	299.405	238.963	4,301.334	122.800	
Barai	145.600	126.000	2,268.000	64.800	
Trans Angabanga	76.916	69.800	1,256.400	35.800	
	521.921	434.763	7,825.734	223.400	
Milne Bay					
Central Suau	56.562	46.047	828.846	23.600	REDD+ Pilot Project
Loani (East Suau)	55.454	45.905	826.290	23.600	
East Woodlark	57.810	33.399	601.182	17.100	
	169.826	125.351	2,256.318	64,300	
Oro					
Musa Pongani	214.913	139.336	2,508.048	71.600	
Goro Itokama	581.902	274.943	4,948.974	141.300	
West Collingwood Bay	182.727	88.912	1,600.416	45.700	
	979.542	503.191	9,057.438	258.600	
Southern Highlands					
Hekiko (Upper Kikori)	198.711	51.399	925.182	26.400	
Bosavi	130.809	100.774	1,813.932	51.800	
West Giluwe	28.429	12.798	230.364	6.500	
Nokoli	27.529	1.635	29.430	840	
Kutubu Poroma	54.753	11.838	213.084	6.000	
Palopa	156.000	156.000	2,808.000	80.200	
	596.231	334.444	6,019.992	171.740	
Enga					
Sau-Taru	165.799	82.856	1,491.408	42.600	
	165.799	82.856	1,491.408	42.600	
Western Highlands					
Jimi Consolidated	89.592	54.708	984.744	28.100	
	89.592	54.708	984.744	28.100	
Simbu					
Karimu Bomai	147.770	59.474	1,070.532	30.500	
	147.770	59.474	1,070.532	30.500	
Eastern Highlands					
Upper Purari Blk 1	80.000	40.000	720.000	20.500	
	80.000	40.000	720.000	20.500	
Morobe					
Morobe South Coast	169.851	137.871	3,033.162	86.600	
Timbe-Twama	110.948	52.329	1,151.238	32.800	
Kwama Masaweng	96.434	46.584	1,024.848	29.200	

Appendix 5c cont...

Mazie Dzia	48.608	38.243	841.346	24.000	
Lake Trist	37.292	32.296	710.512	20.300	
Umboi Blk 4	30.000	14.200	312.400	8.900	
Yagoma	38.191	13.614	299.508	8.500	
Salamaua	33.318	12.754	280.588	8.000	
	564.642	347.891	7,653.602	218.300	
Madang					
Ramu Blk 2	98.707	60.002	1,320.044	37.700	
Ramu Blk 3	30.899	13.728	302.016	8.600	
Josephstaal	50.000	34.619	761,618	21,700	
Bigei/Sogi	40.000	20.993	461.846	13.100	
	219.606	129.342	2,845.524	81.100	
East Sepik					
Aiboin Yuat	397.511	107.865	2,373.030	67,800	
Mariemberg	25.840	8.664	190.608	5.400	
	423.351	116.529	2,563,638	73,200	
West Sepik					
Idam Siawi	781.501	730.760	16,076.720	459.300	
Amanab Blk 7	186.715	138.372	3,044.184	86.900	
East West Palai	34.654	23.319	513.018	14.600	
Maimai-Wanwan	100.373	25.881	569.382	16.200	
Au-East	43.417	28.137	619.014	17.600	
Arko-Samai	32.983	31.500	693.000	19.800	
Make	10.950	10.948	240.856	6.800	
Tuwapo	4.733	4.733	104.126	2.900	
	1,195,326	993.650	21,860.300	624.100	
Manus					
Block 3	20.098	8.849	265.470	7,500	All suitable for TA
Block 4	16.490	1.634	49.020	1,400	operations only
Block 5	13.134	271	8.130	232	
Block 6	31.083	7.837	235.110	6.700	
Block 7	51.797	23.444	703.320	20.000	
	132.602	42.035	1,261.050	35.832	
New Ireland					
Lak Kandas	71.052	41.464	1,243.920	35.500	
Central New Hanover	37.023	32.114	963.420	27.500	
Lamassa	15.861	12.624	378.720	10.800	
Kamdaru-Huru	72.405	61.710	1,851.300	52.800	
Konos-Pue	10.566	990	29.700	848	
Tabar Island	27.459	6.865	205.950	5.800	
	234.366	155.767	4,673.010	133.248	
East New Britain					
Kolmal	57.163	49.781	1,493.430	42.600	
Wide Bay Milim	49.905	43.875	1,316.250	37.600	
Tariwara Ext	56.971	33.299	998.970	28.500	
Wunung Sigite	39,346	33,074	992,220	28,300	
Tala Bairaman Blk 3	22.716	3.976	119.280	3.400	
Bairaman Wunung Blk 1	35.078	5.994	179.820	5.100	
Cape Bogan	25.217	22.250	667.500	19.000	
Toriu Headwaters	35,519	18,065	541,950	15,400	
	321,915	210,314	6,309,420	179.900	
West New Britain	Nil				
ARB	Nil				
TOTAL	8,841.306	5,592.189	111,906.442	3,194.220	

APPENDIX 6: NATIONAL FOREST DEVELOPMENT PROGRAMME 2012-2017

Province	Area (ha)		National Forest Development Programme 2008-2012							
	Gross	Net	AAC (m3)	Budget by activity				Allocation	Operations	Total Cost (K)
Project				Inventory	ILG	FMA	DOS			
Western										
East Awin Extn	591,311	533,548	274,300	200,000	100,000	50,000	100,000	200,000	400,000	1,050,000
Aiambak Kiunga	200,000	151,777	78,000	200,000	100,000	50,000	100,000	200,000	400,000	1,050,000
Fly Blk 1	262,494	103,475	53,200	180,000	80,000	40,000	80,000	200,000	400,000	980,000
Fly Blk 2	226,424	113,009	58,100	180,000	80,000	40,000	80,000	200,000	400,000	980,000
Lake Murray Blk 1	201,938	103,150	53,000	180,000	80,000	40,000	80,000	200,000	400,000	980,000
Lake Murray Blk 2	238,192	224,940	115,600	180,000	80,000	40,000	80,000	200,000	400,000	980,000
Normad Strickland	41,370	34,540	17,700	180,000	80,000	40,000	20,000	200,000	400,000	980,000
Morehead Suki Blk 1	587,454	278,743	143,300	180,000	80,000	40,000	80,000	200,000	400,000	980,000
Morehead Suki Blk 2	295,786	188,306	96,800	180,000	80,000	40,000	80,000	200,000	400,000	980,000
	2,644,969	1,731,488	890,000	1,660,000	760,000	380,000	760,000	1,800,000	3,600,000	8,960,000
Gulf										
Tauri Meporo	54,390	23,411	12,000	150,000	50,000	40,000	25,000	150,000	400,000	815,000
Sori Meporo	86,422	48,945	25,100	150,000	50,000	40,000	50,000	150,000	400,000	815,000
Karoro	128,084	92,533	47,500	200,000	50,000	40,000	50,000	150,000	400,000	890,000
Hekiko	195,718	65,497	33,600	200,000	50,000	40,000	50,000	150,000	400,000	890,000
	464,614	230,386	118,200	700,000	200,000	160,000	175,000	600,000	160,000	3,410,000
Central										
Uda Mekeo	299,405	238,963	122,800	20,000	35,000	20,000	17,500	50,000	300,000	442,500
Barai	145,600	126,000	64,800	20,000	30,000	20,000	20,000	50,000	300,000	440,000
Trans Angabanga	76,916	69,800	35,800	20,000	30,000	20,000	17,500	50,000	300,000	437,500
	521,921	434,763	223,400	60,000	95,000	60,000	55,000	150,000	900,000	1,320,000
Milne Bay										
Central Suau	56,562	46,047	23,600		80,000	60,000	17,500	150,000	200,000	507,500
Loani (East Suau)	55,454	45,905	23,600	150,000	80,000	60,000	17,500	150,000	200,000	657,500
East Woodlark	57,810	33,399	17,100	150,000	80,000	60,000	20,000	150,000	200,000	660,000
	169,826	125,351	64,300	300,000	240,000	180,000	55,000	450,000	600,000	1,825,000
Oro										
Musa Pongani	214,913	139,336	71,600		63,000	32,000	32,000	150,000	200,000	477,000
Goro Itokama	581,902	274,943	141,300	150,000	70,000	40,000	40,000	150,000	200,000	650,000

Appendix 6 cont...

West Collingwood Bay	182,727	88,912	45,700	150,000	70,000	40,000	40,000	150,000	200,000	650,000
	979,542	503,191	258,600	300,000	203,000	112,000	112,000	450,000	600,000	1,777,000
SHP										
Hekiko Upper Kikori	198,711	51,399	26,400	150,000	100,000	50,000	50,000	150,000	200,000	700,000
Bosavi	130,809	100,774	51,800	200,000	100,000	50,000	50,000	150,000	200,000	750,000
West Giluwe	28,429	12,798	6,500	120,000	20,000	10,000	50,000	150,000	200,000	550,000
Nokoli	27,529	1,635	840	110,000	20,000	10,000	10,000	50,000	200,000	400,000
Kutubu-Poroma	54,753	11,838	6,000		50,000	25,000	25,000	150,000	200,000	450,000
Palopa (Erave)	156,000	156,000	80,200	100,000	100,000	50,000	25,000	150,000	200,000	625,000
	596,231	334,444	171,740	680,000	390,000	195,000	210,000	800,000	1,200,000	3,475,000
Enga										
Sau-Taru	165,769	82,856	42,600		25,000	20,000	13,000	150,000	200,000	488,000
	165,769	82,856	42,600	80,000	25,000	20,000	13,000	150,000	200,000	488,000
WHP										
Jimi Consolidated	89,592	54,708	28,100	50,000	25,000	20,000	20,000	100,000	300,000	515,000
	89,592	54,708	28,100	50,000	25,000	20,000	20,000	100,000	300,000	515,000
Simbu										
Karimui Bomai	147,770	59,474	30,500	100,000	50,000	25,000	25,000	150,000	200,000	550,000
	147,000	59,474	30,500	100,000	50,000	25,000	25,000	150,000	200,000	550,000
EHP										
Upper Purari Blks 1&2	80,000	40,000	20,500	100,000	40,000	30,000	50,000	100,000	300,000	620,000
	80,000	40,000	20,500	100,000	40,000	30,000	50,000	100,000	300,000	620,000
Morobe										
Morobe South Coast	169,851	137,871	86,600	50,000	30,000	20,000	20,000	150,000	200,000	470,000
Timbe-Kwama	110,948	52,329	32,800	50,000	40,000	20,000	20,000	150,000	200,000	480,000
Kwama Masaweng	96,434	46,584	29,200	50,000	40,000	20,000	20,000	150,000	200,000	480,000
Mazie Dzia	48,608	38,243	24,000		30,000	20,000	20,000	150,000	200,000	470,000
Lake Trist	37,292	32,296	20,300	40,000	30,000	20,000	15,000	150,000	200,000	455,000
Umboi Bkl 4	30,000	14,200	8,900	60,000	30,000	20,000	30,000	200,000	200,000	540,000
Yagoman	38,191	13,614	8,500	40,000	30,000	20,000	20,000	150,000	200,000	460,000
Salamaua	33,318	12,754	8,000	40,000	30,000	20,000	20,000	150,000	200,000	460,000
	454,685	347,891	218,300	380,000	260,000	160,000	165,000	1,250,000	1,600,000	3,815,000
Madang										
Ramu Blk 2	98,707	60,002	37,700		40,000	20,000	20,000	150,000	200,000	430,000

Appendix 6 cont...

Ramu Blk 3	30,899	13,728	8,600	100,000	40,000	20,000	20,000	150,000	200,000	530,000
Josephstaal	50,000	34,619	21,700		40,000	20,000	20,000	150,000	400,000	730,000
Bigei/Sogi	40,000	20,993	13,100	50,000	40,000	20,000	15,000	150,000	300,000	575,000
	219,606	129,342	81,100	250,000	160,000	80,000	75,000	600,000	1,100,000	2,265,000
East Sepik										
Amboin Yuat	397,511	107,865	67,800	100,000	50,000	40,000	40,000	150,000	200,000	580,000
	423,351	116,529	73,200	200,000	100,000	80,000	80,000	300,000	400,000	1,160,000
West Sepik Province										
Idam Siawi	781,501	730,760	459,300	100,000	50,000	40,000	50,000	200,000	500,000	940,000
Amanab Blk 7	186,715	138,372	86,900		50,000	40,000	50,000	200,000	500,000	940,000
East West Palai	34,654	23,319	14,600		50,000	40,000	25,000	150,000	200,000	565,000
Maimai-Wanwan	100,373	25,881	16,200		50,000	40,000	25,000	150,000	200,000	565,000
Au- East	43,417	28,137	17,600		50,000	40,000	25,000	150,000	200,000	565,000
Arko-Samei	32,983	31,500	19,800	100,000	50,000	40,000	25,000	150,000	200,000	565,000
Make	10,950	10,948	6,800							
Tuwapo	4,733	4,733	2,900			10,000				10,000
	1,195,326	993,650	624,100	600,000	300,000	250,000	200,000	1,000,000	1,800,000	4,150,000
Manus										
Block 3	20,098	8,849	7,500	70,000	60,000	50,000	50,000	200,000	300,000	730,000
Block 4	16,490	1,634	1,400	70,000	60,000	50,000	50,000	200,000	300,000	730,000
Block 5	13,134	271	232	70,000	60,000	50,000	50,000	200,000	300,000	730,000
Block 6	31,083	7,837	6,700	70,000	60,000	50,000	50,000	200,000	300,000	730,000
Block 7	51,797	23,444	20,000	100,000	60,000	50,000	50,000	250,000	300,000	810,000
	132,602	42,035	35,832	380,000	300,000	250,000	250,000	1,050,000	1,500,000	3,730,000
New Ireland										
Lak Kandas	71,052	41,464	35,500		30,000	20,000	25,000	300,000	300,000	735,000
Central New Hanover	37,023	32,114	27,500		30,000	20,000	25,000	300,000	300,000	735,000
Lamassa	15,861	12,624	10,800		30,000	20,000	25,000	50,000	300,000	485,000
Kamdaru-Huru	72,405	61,710	52,800		30,000	20,000	25,000	300,000	300,000	735,000
Konos-Pue	10,566	990	848	60,000	30,000	20,000	25,000	50,000	100,000	285,000
Tabar Island	27,459	6,865	5,800	60,000	30,000	20,000	25,000	300,000	400,000	835,000
	234,366	155,767	133,248	360,000	180,000	120,000	150,000	1,300,000	1,700,000	3,810,000

Appendix 6 cont...

ENB											
Komal	57,163	49,781	42,600	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Wide Bay Milim	49,905	43,875	37,600	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Taraiwara & T/Extn	56,971	33,299	28,500	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Wunung Sigite	39,346	33,074	28,300	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Bairaman Talo Blk 2	22,716	3,976	3,400	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Bairaman Wunung Blk 1	35,078	5,994	5,100	60,000	30,000	20,000	25,000	200,000	400,000	735,000	
Cape Bogan	25,217	22,250	19,000		30,000	20,000	25,000	200,000	400,000	735,000	
Toriu Headwaters	35,519	18,065	15,400	60,000	30,000	20,000	25,000	200,000	400,000	735,500	
	321,915	210,314	179,900	480,000	240,000	160,000	200,000	1,600,000	3,200,000	5,880,000	
WNB	Nil										
ARB	Nil										
Jiwaka											
Hela											
PNG Total	8,841,306	5,592,189	3,194,220	5,750,000	3,568,000	2,272,000	2,595,000	11,850,000	20,800,000	47,765,000	

Note: 1. National Forest Development Programme based on all Provincial Forest Plans Potential Forest Development Areas.

2. No PFPs for two new provinces of Hela and Jiwaka.

APPENDIX 7: FCA PROJECTS

PROVINCE/PROJECT	AREA (ha)	FCA No	DATE ISSUED	CURRENT STATUS
Western				
Gre-Dringas Road Project	2,400 (600km)	FCA 01-01	29/11/10	Not operational
Central				
Mekeo Hinterland Integrated Agriculture Project	116,400	FCA 03-01	29/06/09	Not operational. Under dispute
Abeda Integrated Agriculture Project	11,700	FCA 03-02	22/04/10	Active but currently under dispute
Yumi Agro-Forestry Development	115,500	FCA 03-03	03/05/07	Operations suspended due to non compliance.
West Sepik				
Aitape East Integrated Agriculture Project	29,205	FCA 10-01	07/03/08	Operational
Aitape West Integrated Agriculture Project	47,626	FCA 10-02	21/04/08	Operational
Bewani Oil Palm Development Project	139,909	FCA 10-03	26/03/09	Operational
Scotchiao Cocoa Estate Development Project	6,114	FCA 10-04	26/03/09	Operational
East Sepik				
West Turubu Integrated Agriculture Project	121,000	FCA 11-01	26/03/09	Operational
Angoram (Mariemberg) Integrated Ag Project	25,600	FCA 11-02	29/06/09	Operational
East New Britain				
Illi Waswas Roadline	Undefined	FCA 15-01	05/03/07	No progressive report to date.
Illi Waswas Integrated Agriculture Project	38,500	FCA 15-02	05/03/07	Operations suspended.
Illi Standalone Agriculture Project	10,400	FCA 15-03	05/03/07	Expired. New application Lodged.
Inland Lassul Baining Integrated Agriculture proj	30,830	FCA 15-04	15/01/08	Operational
Suikol Makokol Integrated Agriculture	52,000	FCA 15-05	15/12/09	Operational
Mukus Mekoi Integrated Agriculture Proj	68,300	FCA 15-06	07/10/10	Non operational, pending inquiry
Sigta Mukus Integrated Rural Development Project	43,430	FCA 15-07	07/10/07	Operational
New Ireland				
Danfu Integrated Agriculture Project	24,850	FCA 16-01	11/09/09	Operational
TOTAL	878,764			

SOURCE: Internal Statistics

APPENDIX 8a: CURRENT PLANTATIONS IN PNG

PROVINCE	PLANTATION	YEAR STARTED	AREA (Ha)	SPECIES	OWNERSHIP
Central	Brown River	1955	1,258	Teak	Communities
	Kuriva	1995	1,440	Teak	State
Eastern Highlands	Lapegu	1963	2,723	Pinus patula, P. caribaea	✓
	Fyantina	1981	1,800	✓	State/Communities
	Kainantu	1976	1,350	✓	✓
East New Britain	kerevat	1950	2,385	Teak/Balsa	Already Harvested
	Open Bay	1972	14,000	E.deglupta/T.brasii	Company
Madang	Gogol/Naru	1975	12,375	Acacia Mangium	✓
	North Coast	1885	1,748	Eucalyptus deglupta	State/Communities
Milne Bay	Ulabo	1985	1,500	E.deglupta/T.brasii	✓
Morobe	Bulolo	1950	12,000	Hoop/Klinkii/Pinus	State
	Wau	1972	1,500	✓	State/Communities
	Umi	1990	764	Pinus	✓
	Leron	1983	130	Pinus	✓
	Oomsis	1985	120	Pinus	✓
New Ireland	Kaut	1985	570	E.deglupta	✓
West New Britain	SBLC	1972	12,000	E.deglupta/Teak	Company
Western Highlands	Waghi	1962	2,100	E.grandis/E.robusta	State
Southern Highlands	Ialibu	1972	320	Pinus patula	State/Communities
	Bui-yebi	1972	120	✓	✓
		TOTAL	67,818		

Note: Kerevat Plantation not included in the total area.

APPENDIX 8b: PROVINCIAL REFORESTATION PROGRAMMES

PLANTATION ESTABLISHMENT					
Province	Activity	Location	Species	Target (ha/ann)	Remarks
Western Gulf			Pometia	250	Medium scale industrial plantation
			✓	✓	✓
	New plantings	lokea	Sandalwood	50	Non timber forest plantation
Central	Reforestation	Kuriva	Teak/Mahogany	500	Large scale industrial plantation
	✓	Brown River	Teak	300	Brown River Forest Products
	New plantings	Iva Inika	Sandalwood	50	Non timber forest products
	✓	Kuriva	✓	✓	✓
Milne Bay	Reforestation	Ulabo	Eucalyptus/T.brassii	250	Medium scale industrial plantations
	✓	✓	✓	300	Milne Bay Industries
Southern Highlands	Afforestation	Ialibu	Pinus	100	Small scale industrial plantation
Eastern Highlands	✓	Goroka	Hoop/Klinkii	500	Large scale industrial plantation
	Afforestation	Kainnatu	Pinus	100	Small scale industrial plantation
Western Highlands	✓	Waghi	Eucalyptus	✓	✓
Morobe	✓	Wau/Bulolo	Hoop/Klinkii	250	Medium Scale plantation
	Afforestation	Umi	Hoop/Klinkii	✓	✓
	✓	Leron	Sandalwood	50	
	New plantings		Balsa	40	
Madang	Reforestation	North Coast	Teak/Eucalyptus	250	Medium scale industrial plantation
	✓	Gogol	Acacia/Eucalyptus	1,100	Jant
Madang	New plantings	✓	Balsa	✓	
				40	
East Sepik	Afforestation	Yambi	Teak/Eucalyptus	500	Large scale industrial plantation
	New plantings	Yambi	Eaglewood	50	Non timber forest plantations
	✓	Ambunti	✓	✓	✓
	✓				
West Sepik	Reforestation	Vanimo	Instia/Pometia	500	Large scale industrial plantation
	New plantings	Vanimo	Eaglewood	50	Non Timber Forest plantations
	✓	Bewani	✓	✓	✓
Manus	reforestation	West Coast	Calophyllum	250	Medium scale industrial plantation
New Ireland	✓	Kaut	Calophyllum	100	Small scale industrial plantation
East New Britain	✓	Moveo	Teak/Eucalyptus	500	Large scale industrial plantation
	Reforestation	Kerevat	Teak	100	Small scale industrial plantation
	New plantings	Pomio	Balsa	✓	
	✓	Kerevat	✓	40	
	✓			40	
West New Britain	Reforestaion	Kandrian	Homalium	250	Medium scale industrial platation
	✓	Buluma	Eucalyptus//Teak	750	Stettin Bay Lumber Co
Bougainville	✓	✓	✓		
	✓		✓	✓	
	✓		✓	✓	
	✓		✓	✓	

APPENDIX 8c: NURSERY PROGRAMMES

Province	Activity (Nursery)	Location	Species	Annual Target	Remarks
Western		Malam	Sandalwood	40,000	Non-Timber
Gulf		lokea	"	✓	✓
Central		Kuriva	Teak	320,000	
		✓	Mahagony	80,000	
		✓	Sandalwood	40,000	Non-Timber
		Hohola	Exotic/Mix spp	10,000	Extension
Milne Bay		Ulabo	Eucalyptus	16,000	
		✓	T.brassii	40,000	
		✓	Dracontomelon	✓	
		Kiriwina	Mix indigenous spp	10,000	Extension
Oro		Popondetta	Local spp	✓	✓
Southern Highlands		Ialibu	Pinus	✓	
			Nothafagus	40,000	
		Mendi	Casuarina	5,000	Extension
			Eucalyptus	✓	
Enga		Laiagam	Casuarina	20,000	
Western Highlands		Waghi	Eucalyptus	40,000	
		✓	Hoop/Klinkii	✓	
		Kagamuga	Casuarina	50,000	
Chimbu		Kundiawa	Mix species	30,000	
Eastern Highlands		Lapegu	Pinus spp	90,000	
		✓	Hoop/Klinkii	80,000	
		Fyantina	Pinus spp	90,000	
		Kainantu	Pinus spp	50,000	
		✓	Hoop	40,000	
Morobe		Umi (Lae)	E.pelita	120,000	
		✓	Pinus	18,000	
		Wau/Bulolo	Hoop	80,000	
		✓	Klinkii	✓	
		✓	Agathis	40,000	
		✓	Pinus spp	✓	
		Oomsis	Mix species	10,000	
		Leron	Sandalwood/Pinus	40,000	Non-Timber
Madang		North Coast	Eucalyptus	120,000	
		✓	Teak	✓	
		Baku (Gogol)	Acacia mangium	10,000	Extension
East Sepik		Yambi	Eucalyptus	80,000	
		✓	Teak	160,000	
		✓	Klinkii	80,000	
		✓	T.brassii	✓	
		✓	Eaglewood	✓	
		Ambunti	"	40,000	
		Wewak	Balsa	10,000	
West Sepik		Bewani	Instia	240,000	
		✓	Pometia	80,000	
		✓	Hopea	✓	
		✓	Eaglewood	✓	
Manus		West Coast	Calophyllum	40,000	
		✓	Dillenia	✓	
New Ireland		Kaut	Calophyllum	✓	
		✓	Eucalptus	✓	
East New Britain			Teak	240,000	
			Pometia	80,000	
			Calophyllum	✓	
			Balsa	50,000	

APPENDIX 8d: NATURAL FOREST MANAGEMENT PROGRAMME

YEAR AND BUDGET ESTIMATES (Kina)							
Province	Project name	Area (ha)	2013	2014	2015	2016	2017
			(K)	(K)	(K)	(K)	(K)
Central	Cloudy Bay	1,000	80,000	80,000	80,000	80,000	80,000
West Sepik	Amanab 1-4	1,000	80,000	80,000	80,000	80,000	80,000
	Amanab 5-6	300	24,000	24,000	24,000	24,000	24,000
	Aitape Lumi	1,000	80,000	80,000	80,000	80,000	80,000
Madang	Ramu Block 1	750	60,000	80,000	80,000	80,000	80,000
	Rai Coast	1,000	80,000	24,000	24,000	24,000	24,000
	Sogeram	1,000	80,000	80,000	80,000	80,000	80,000
Manus	West Coast	500	40,000	40,000	40,000	40,000	40,000
W.N. Britain	Asengseng	1,000	80,000	80,000	80,000	80,000	80,000
	Rottock Bay	500	40,000	40,000	40,000	40,000	40,000
	TOTAL	8,050	608,000	608,000	608,000	608,000	608,000

APPENDIX 9: RESEARCH PROGRAM

PROGRAM NAME/OBJECTIVES	ACTIVITY DESCRIPTION	EXPECTED TARGET		ESTIMATED COST(K)	
		2012	2015	2012	2015
1.0 Forest Biology					
Plant species for future benefits	Compile species checklist for Permanent Forest Estates	Field work to targeted projects completed	Technical report for each site available for review	50,000	50,000
	Develop key to timber trees of Morobe	Field work completed for targeted areas	50% of timber tree species covered	40,000	40,000
	Taxonomic revision of Syzgium, Diospyros, Dillenia, Polyosma	Botanical literature completed	Draft manual completed and available for review	10,000	10,000
	Determine the ecology of the natural low diversity forests for the management of planted forest	Field work completed for two sites	Report drafted and submitted	30,000	30,000
	Develop educational awareness on biodiversity and its conservation	Conduct awareness sessions to the communities & stakeholders	Awareness program in place	25,000	25,000
Ex-Situm Conservation	Maintenance of botanical infrastructures	Fencing of botanical gardens, maintenance of bridges, & sealing of internal roads.	Perimeter fence in place, bridges maintained & upgraded and improve image of the botanical gardens	40,000	40,000
	Orchid nursery redevelopment	Maintenance of shed houses, germination sheds, beds, water system & fence	Improve facilities in the nursery	20,000	20,000
	Plant collection propagation and development	Increase stockings of horticulture plants in the gardens	Increase sales of plants to the public	15,000	15,000
	Maintenance of capital and operational assets	Maintenance of capital assets	Equipment in operating conditions and materials in stock.	20,000	25,000
Maintain biological collections	Database herbarium and botanical gardens plant collection	New records entered into the database	Plant database available online	5,000	5,000
	Curate and manage herbarium collections	Curate incoming collections and update revise groups	Well maintained collected & updated records & information	10,000	10,000
	Educational display of horticultural, rare, endemic & threaten species	Documentation of horticultural, rare, endemic, threaten and invasive species.	Increase public awareness on flora.	20,000	20,000
	Orchid research and conservation	Documentation of new orchid records and species	Better understanding of orchids stocks in the botanical gardens	30,000	30,000
Promote in-situ Biodiversity conservation	Establishment of biodiversity plots in natural forest	2 PSP plots established in natural forest	Plots established and data analyzed	20,000	20,000
	Forest inventory of threaten forest habitats	Preliminary survey and assessment of threaten habitats	Updated list of threaten forest habits in PNG	25,000	25,000
	Species recovery and rehabilitation of degraded forest habitats	Determine and investigate threaten species	Strategies for recovery and rehabilitation prepared.	15,000	15,000

Appendix 9 cont...

2.0 Natural Forest Management.					
Growth, yield measurement and modeling	Work on PSP data entry and checks	Employed excel data base management	All data entered and secured	2,000	4,000
	Establishment of PSPs for SFM and REDD	New plots established	200 plots established	100,000	300,000
	Maintenance of plots in the provinces	Existing plots visited	Secured existing plots and maintained	100,000	300,000
	Development of species volume table	Undertake tree volume research from complementary work under ACP EU project	Completed 10- 20 abundant species from lowlands and highlands for volume estimation.	200,000	400,000
	Application of PINFORM growth model	Apply test run model in REDD and Silvicultural trials and predict annual allowable cut limits	Model test runs in six sites	30,000	50,000
	Annual increment and growth information	Database fully updated	Policy papers publish	2,000	4,000
	Training on PSP establishment and application of PINFORM growth model	Trainings provided to stakeholders	Selected communities/locals and institutions train	10,000	15,000
Rehabilitation of logged over areas.	Identify, assess and establish rehabilitation of degraded forest area	Studies in Morobe and Madang provinces publish	Recommend appropriate species, publish policy document	20,000	25,000
	Identify, tag and monitor phenology of selected species in selected sites	Progressive observation results from Madang publish	Additional monitoring of rainfall and more sites included for supporting climate change.	10,000	20,000
	Undertake ecological studies on productivity and suitability of rehabilitation sites	Conduct soils and vegetation studies	Gathered information publish	6,000	6,000
Improve Silviculture techniques	Development of Silviculture techniques for stand improvement	Secure demonstration sites in Vanimo	Establishment of 50 hectares and report baseline assessment and treatments	100,000	80,000
	Tree planting in Silvicultural demonstration trials in Madang and Vanimo	Gap planting with local high value commercial species	Improve stocking of preferred local species	100,000	25,000
	Production of Silvicultural prescriptions manuals	Undertake review and conduct seminars	Update manuals with new data from trial plots.	50,000	50,000
Studies on logging impacts, nutrient budgets and forest watershed and soils of PNG	Monitoring of forest changes through assessment in the ecological plots	Annual plot measurement, data entry and analysis.	Publish results of 15 years of monitoring of forest changes in Finchafen	20,000	26,000
	Undertake soil surveys in PSPs, plantation, research trials, and REDD pilot sites	Completed chemical analysis tests	Drafting of nutrient status reports.	100,000	300,000
	Forest biomass sampling in collaboration with ACP EU project	Destructive sampling of forests	Develop biomass algometric equations for 20 species	200,000	300,000
	Assessing logging impact on soil and water quality	Undertake field studies	Draft evaluation report for logging code of practice	50,000	4,000
	Undertake nutrient analysis from soil, water and plants.	Complete tests of all prepared samples	Compile report on Chemical analysis	10,000	10,000
	Undertake forest health assessment in plots from plantations, logged and unlogged forest	Compile forest health and Performance report	Document results of evaluations	5,000	5,000
	Survey of forest for consideration of water	Establish water quality and quality	Establishment report compile		

Appendix 9 cont...

	protection	measurement trials		40,000	40,000
	Evaluate land suitability classification for uses	Complete reports from soil and vegetation relationship analyses	Secure research sites, mapping of plots and publish papers.	5,000	5,000
Improve logging and harvesting techniques (RIL)	Test forest growth simulation model, PINFORM in impact areas	Application in REDD pilot projects	Propose changes to harvesting regimes and increases usage of the model	20,000	26,000
	Development of forest growth model	Data validation and modeling	Present model	10,000	20,000
	Assessment of reduced impact logging	Monitor harvesting in three sites	Compile report	20,000	30,000
Provide data on forest biomass and soils for carbon accounting for REDD and trade options (Climate Change)	Conduct inventory on forest carbon in collaboration with the Mapping and Inventory branch	Complete survey of five REDD pilot projects and three impact areas	Compile data on carbon stock for the REDD project and impact areas and information stored in the database	200,000	100,000
	Conduct awareness on climate change development of REDD projects	Secure sites for conservation and potential REDD+	Mitigation actions supporting low carbon economy	100,000	300,000
	Provide information to Climate Change Office	Complete GHG annual report and submit	Publish papers on GHG emission from forestry sector	100,000	100,000
Assessment of forest vulnerability and adaptation for climate change impacts	Conduct vulnerability and adaptation survey on forest sites threaten by climate change	Complete survey of four identified threaten sites	Compile data and provide report to decision & policy makers	80,000	60,000
	Establishment of permanent reference points for future monitoring	Establish reference [points for monitoring changes	Provide report on the impacts of climate change on the forest and peoples livelihood	100,000	300,000
	Provide information to climate change office	Sector's V&A report submitted	Papers published and information made available	50,000	30,000
	Mapping of forest areas under threat of climate change	Integrate information into PNGFA's mapping system	Documents are publish and maps are made available	50,000	40,000
	Documentation of resilience on threaten forest sites to affected by climate change	Documentation of affected areas	Reports publish on risks and disaster areas	40,000	40,000
Provide data and information on sector's GHG emissions	Mapping and computation of carbon stock changes from forestry and land use changes	Reports completed and documented	GHG data compile and reports made available on carbon pools of PNG	80,000	60,000
	CDM carbon stock assessments	Establish field trials	Compile establishment report and monitor enhance carbon stock	50,000	30,000
	Bio-energy fuel wood survey	Survey methods accepted and data collected	Report on carbon values of PNG species publish and make available	50,000	40,000
Development of community REDD and CDM (Environmental Services)	Computation of carbon stock changes from reforestation and Agro-forestry	Reports completed and documented	Data on PNG's carbon stock changes compile and reports made available	80,000	60,000
3.0 Planted Forest					
Identify potential	Conduct research to determine the possibility of	Develop project proposals for Eaglewood	Develop techniques for inoculation		

Appendix 9 cont...

valuable species for agro-forestry systems (Species selections)	Eaglewood farming by local communities in PNG		of Eaglewood to produce Agarwood & develop ex-situ conservation of the species in the Lae botanical gardens	10,00	10,000
	Conduct research into the possibility of Sandalwood farming by local communities in PNG	Develop project proposal for Sandalwood farming	Develop techniques for growing Sandalwood & develop ex-situ conservation of the species in the botanical gardens	10,000	30,000
	Develop mechanism to increase woodlot of E.pellita, Teak, A.mangium, Balsa and Rubber trees by local communities in respective areas in PNG	Develop project proposal and techniques to increase woodlot farming.	Establish net work of tree growers	10,000	30,000
	Develop techniques for farming multi-purpose tree species such as Canarium spp, Terminalia spp, Taun, Walnut by communities in PNG	Selection of appropriate species and identify communities to work with.	Establish network of tree growers	10,000	30,000
Enhanced commercial production of target tree species. (Tree improvement and breeding)	Develop appropriate Seedling Seed Orchards (SSO) for sustainability of quality seed supply to improve plantation productivity in PNG	Identify ,select and collect seeds from selected plantation species around the country and prepare sites for the establishment of the orchards	Develop and maintain SSO of Teak, Balsa, Pinus spp Eucalyptus spp, Hoop, Klinkii, Eaglewood & Sandalwood and A.mangium	12,000	48,000
	Develop techniques for mass propagation of disease free plantlets for improve plantation productivity in the Country	Scoping of tissue culture lab, cleaning up, purchase equipment and installation of equipment.	Develop fully equipped tissue culture lab, train staff and produce plantlet for trial plantings.	12,000	48,000
Provide genetically improve germplasm	Improve protect and maintain current Clonal Orchards, SSO and selected seed trees in Bulolo and Wau	Collect seeds, store and ready for distribution	Develop techniques to improve production of quality seeds and identify	18,000	72,000
	Develop Balsa SSO at Kerevat	Collect seeds and stored, ready for distribution	Develop techniques to improve production of quality seeds and identify sites for new seed orchards	8,000	32,000
	Identify and protect Teak seed trees and progeny trial in Kerevat and Kuriva plantation	Collect seeds and stored, ready for distribution.	Develop techniques to improve production of quality seeds and identify sites for new seed orchards	8,000	32,000
Acquire land for the establishment of new Seed Orchards	Formalize 200 ha land at Open Bay for establishment of seed production for Lowland plantation species	Dialogue with Forest Development Directorate (FDD) and Open Bay Project staff.	Seedling and clonal of Teak,Balsa, Kamarere, E.pellita & T.brassii with the target of increasing to 20 species in future	12,000	48,000
	Formalize land at Bulolo for the establishment of seed production for Pinus spp, Hoop and Klinkii	Dialogue with Bulolo Plantation Project and FDD	Establishment of SSO with the target of increasing to 10 higher altitude plantation species in future.	10,000	40,000
	Formulate agreement with landowners of Bumsi.Mereand Markham bridge for use of land	Dialogue with respective landowners	Formal agreement of 5 ha with intention of increasing to 20 ha in		

Appendix 9 cont...

	for the seed production of Teak, Walnut, Taun and Calophyllum		each sites in future	10,000	40,000
	Formalize agreement with FDD for land at use of land at Umi, Leron, Kuriva and Kevertat for establishment of Teak seed orchards	Dialogue with FDD for use of land	Establishment of 5 ha with intention of increasing to 10ha in future.	12,000	48,000
Provide a broad based genetic seed bank (National Tree Seed Centre)	Develop proper seed storage facilities at the National Seed Tree Centre in Bulolo	Upgrade and maintain all equipment and storage facilities	All equipments available for seed collection, extraction, storage & testing with intention of self funding in future	5,000,000 (PIP)	30,000
	Develop appropriate seed collection & testing techniques for all species	Collect seeds from seed production areas & selected plus trees and test viability of seeds	Develop appropriate seed collection and seed testing techniques and train staff	15,000	15,000
	Develop procedures for supply of quality seeds to customers	Create listings of all customers from both within and abroad	Develop standard procedures, pricing and registry of all customers	10,000	10,000
	Develop appropriate techniques for seed germination for each species.	Test for optical germination, viability & moisture content	Develop standard techniques for major plantation species and publish information	5,000	10,000
	Develop mechanisms for collecting large quantity of seeds from within and abroad	Purchase Acacia spp & Sandal wood seeds from Western Province	Collect 500 kg and produce a collection report	250,000	300,000
Plantation establishment (Matching species to site)	Develop pilot plantations of potential Lowland species of native species	Select sites in Vanimo & establish 10 ha of Kwila & 10 ha of Taun in Open Bay	Establish 10 ha of E.pellita at Open Bay, 10 ha of Mersawa at Lae with the intention of introducing 10 potential species	20,000	100,000
	Develop pilot plantations of indigenous species of the Highlands	Select sites and negotiate with landowners	Establishment of 10 ha trial plantation	15,000	50,000
	Develop nursery practices for indigenous species	Identify species and test Silvicultural techniques	Develop techniques for 100 species of commercial interest and publish report	5,000	15,000
	Develop appropriate silvicultural techniques for potential native species of PNG	Produce Silvicultural manual for Taun, Kwila, E.pellita & Calophyllum	Develop manuals for Malas, Wau Beech, Basswood & in future for 50 more species.	40,000	80,000
Improve management of existing plantation	Develop management plan for plantations in PNG	Draft plans for Ulabo and Fayantina projects	Review of Bulolo, Ulabo & Fayantina and FDD to produce plans for new projects	15,000	30,000
	Develop techniques to control termite in Bulolo Plantations	Assess progress of termite control trials	Control measures identified and results publish	10,000	30,000
	Research into improving the current silvicultural practices.	Identify problems in current practices.	Establish trials to address problem and produce reports.	10,000	10,000
	Development of Growth and Yield and volume tables for current plantation species	Collect data for Teak (Madang) and develop Teak volume table	Complete volume table tables for other plantation species	10,000	30,000
	Develop Silvicultural manual for major plantation species in PNG	Collect require data for development of Silvicultural manual for E.degulpta and Teak	Collect data and revise Silvicultural techniques for Hoop, Klinkii, P. caribaea and other plantation		

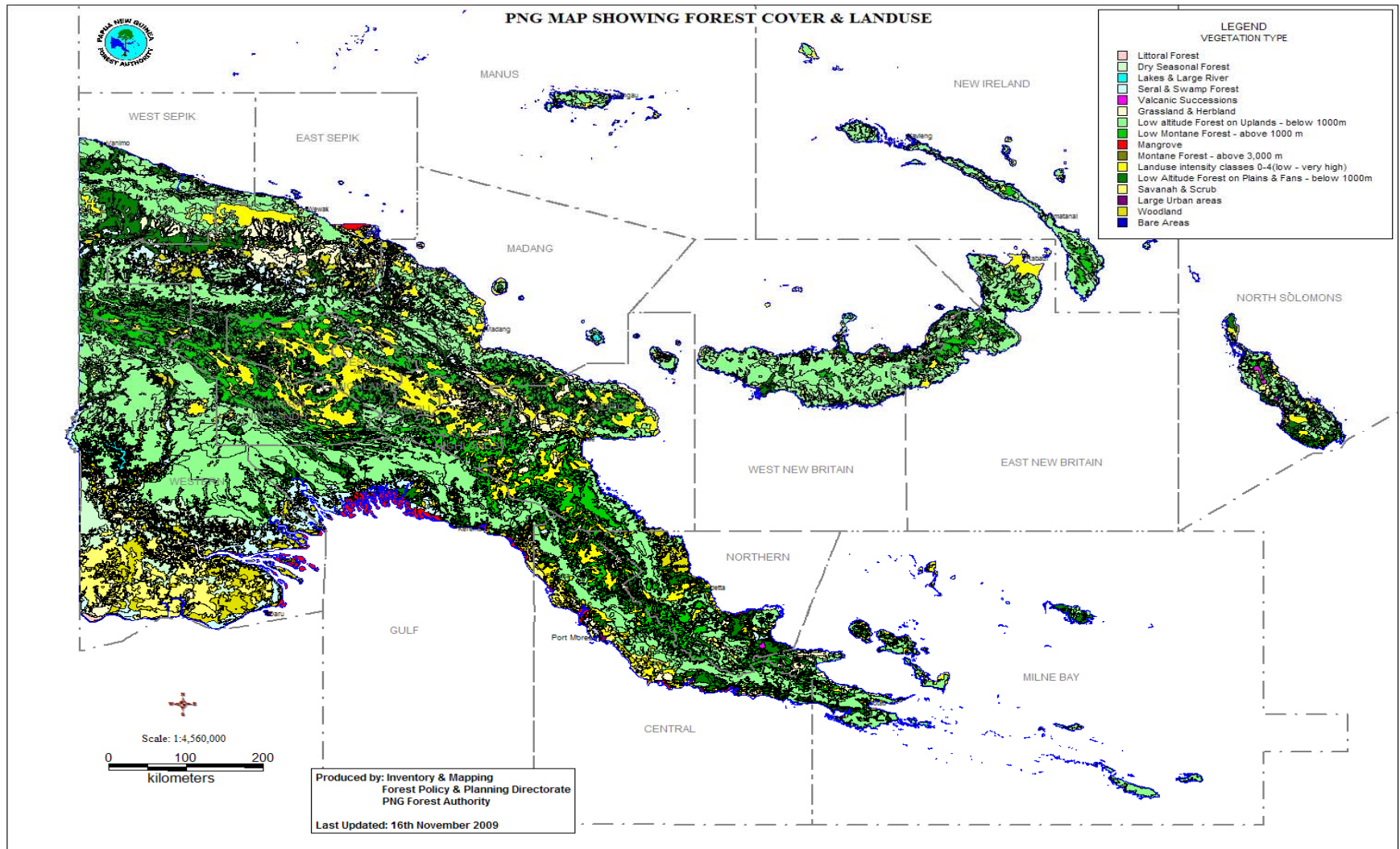
Appendix 9 cont...

			Species in PNG	10,00	30,000
	Develop appropriate techniques for growing hardwood species in the grassland areas of PNG	Assess growth of hardwoods under different shade or nurse crops in Umi and Leron	Identify technique for growing hardwoods in grassland for future large scale afforestation programmes	5,000	20,000
Forest protection (Pest, Disease and Fire)	Develop appropriate techniques to assess and control termite attacks in Bulolo, Umi, and Leron projects	Establish plots, and apply control measures	Identify control measures and include in Umi project management plan	6,000	18,000
	Develop appropriate control techniques to assess and control disease attack on <i>E.deglupta</i> in PNG	Establish plots in Ulabo	Identify diseases and control measures and include in management plan	10,000	30,000
	Develop appropriate techniques to assess and control termite attack on tree species in the Botanical Gardens	Survey and identify termite location points	Identify control measures and include in the Management plan	10,000	30,000
	Develop appropriate techniques for identification and collection of insects for storage in the insect lab at FRI	Collect, label all insects and enter details into insect data base.	Produce report.	5,000	15,000
	Develop appropriate insect database at FRI	List all collected insect species	Update database and produce report	1,000	5,000
	Review and assess forest fires in plantations and natural forests	Review past work on forest fires in PNG	Develop fire control measures for plantation and natural forest in PNG	15,000	45,000
Plantation for fuel wood and carbon trade options	Identify species for fuel wood and charcoal productions in PNG	Harvest trees from current fuel wood trials in Central and Western Highlands	Identify species, develop techniques and demonstrate carbon productions to local communities.	10,000	30,000
4.0 Forest Products					
Wood properties and identification	Investigate timber drying properties, and determine schedules for plantation and other species	Setup of lab and equipment , collections of samples, testing in kiln dryer	Determine drying schedules and report findings to industries	13,000	8,000
	Determine physical and mechanical properties of wood (Wood properties)	Sample preparation and testing of species in the Lab.	Number of properties determine for a particular species.	35,000	30,000
	Wood identification and study of anatomical properties	Samples identified, special features observed and entered into database	Database updated and uploaded onto FRI website.	25,000	20,000
Preservation	Undertake decay and termite studies(Durability studies)	Sample preparation and conduct studies	Number of plots establish under different environment for a given species	20,000	20,000
Promotion of timber marketing information	Disseminate information on wood drying and properties to Industries as well as to NFS	Data compiled and promoted by the marketing branch (MkIS)	Information is available in MkIS .	5,000	3,000 5,000
Assessment and	Create database of existing wood processing	Survey of static mills in the country and	Database system established and		

Appendix 9 cont...

Improvement of sawmills (Wood Processing)	standards	Creation of a database system	reports produce for policy change in regard to down stream processing	10,000	5,000
Product Developments (Standards)	Review and promote wood processing standards	Collect information, disseminate and form working group.	Working group established and relevant institutions consulted.	15,000	15,000
Investigate solid wood manufacture (Product Development)	Contact and seek collaborating partners	Interest shown by stakeholders and collaborative work undertaken.		5,000	5,000
			TOTAL	8,327,000	5,187,000

FOREST COVER AND LANDUSE MAP



TIMBER CONCESSION MAP OF PNG

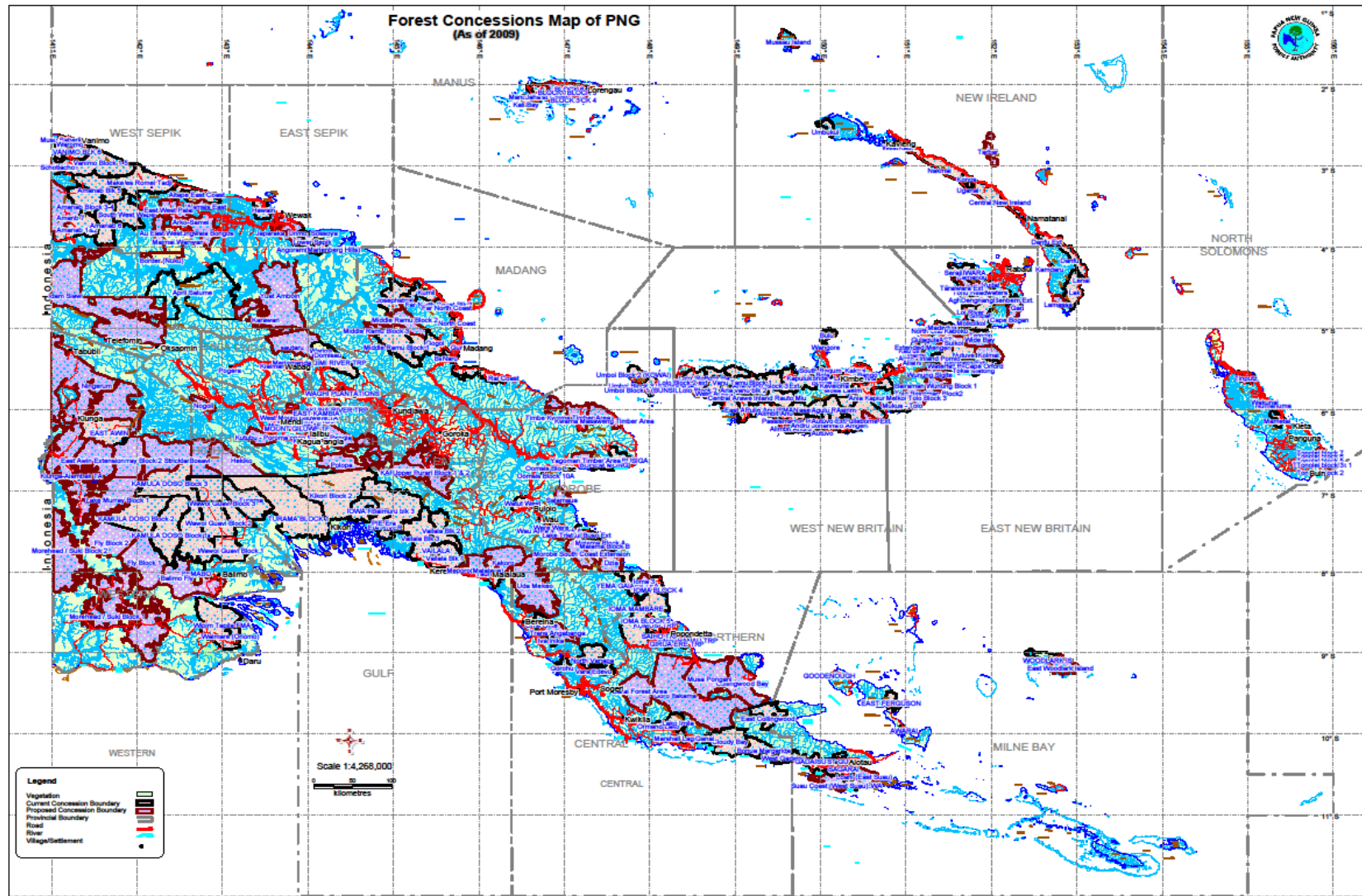


TABLE 3: CONCESSION TABLE

PLAN ID	CEN PROV	EXP CUR	CONSTYPE	STATUS	611	Collingwood Bay			Proposed
313	Ome Ome	Expired	TRP	Concession	612	Musa Pongani			Proposed
315	Marshall Lagon	Current	FMA	Concession	614	Ioma 3			Proposed
314	Varagadi	Current	FMA	Concession	613	Goro Itakama			Proposed
316	Cloudy Bay	Current	FMA	Concession	PLAN ID	GUL PROV	EXP CUR	CONSTYPE	STATUS
305	North Vanapa	Current	TRP	Concession	210	Vailala Block 2	Current	FMA	Concession
312	Edevu	Expired	TRP	Concession	208	East Kikori	Current	TRP	Concession
304	Ganai	Expired	TRP	Concession	209	Tauri Meporo	Current	TRP	Concession
303	Iva Inika	Current	TRP	Concession	206	Turama	Current	TRP	Concession
306	Bonua Margarida	Current	TRP	Concession	211	Turama Block 1	Current	FMA	Concession
309	West Gadaisu	Current	TRP	Concession	217	Vailala Block 3	Current	FMA	Concession
307	Gorohu	Current	TRP	Concession	207	Vailala	Current	TRP	Concession
308	Ormand Lako	Current	TRP	Concession	203	Eia River	Expired	TRP	Concession
311	Lako Imila	Current	LFA	Concession	204	Pie River	Expired	TRP	Concession
323	Uda Mekeo		PFD	Proposed	205	Iowa River	Expired	TRP	Concession
321	Trans Angabanga		PFD	Proposed	124	Kakoro			Proposed
325	Barai Forest Area			Proposed	215	Meporo (Malalaua)			Proposed
PLAN ID	MIL PROV	EXP CUR	CONSTYPE	STATUS	212	Kikori Block 2	Current	FMA	Concession
507	West Gurney	Expired	TRP	Concession	218	Vailala Block 1	Current	TRP	Concession
504	Gadaisu	Current	TRP	Concession	213	Baimuru Block 3	Current	FMA	Concession
503	Sagarai	Expired	TRP	Concession	PLAN ID	NIR PROV	EXP CUR	CONSTYPE	STATUS
506	Gara Modewa	Expired	TRP	Concession	1706	Mussau Island	Expired	TRP	Concession
508	Woodlark Is	Expired	TRP	Concession	1715	Lenai	Expired	TRP	Concession
502	Awarai	Expired	TRP	Concession	1713	Danfu	Current	TRP	Concession
505	East Ferguson	Current	TRP	Concession	1714	Danfu Ext	Expired	TRP	Concession
501	GoodEnough	Expired	TRP	Concession	1719	Uganai	Expired	TRP	Concession
511	East Collingwood	Current	FMA	Concession	1705	Nakmai	Current	LFA	Concession
516	West Suau		PFD	Proposed	1720	West Kaut	Expired	TRP	Concession
513	Loani (East Suau)		PFD	Proposed	1718	Umbukul	Current	TRP	Concession
512	East Woodlark Is		PFD	Proposed	1701	Kaut	Expired	TRP	Concession
PLAN ID	ORO PROV	EXP CUR	CONSTYPE	STATUS	1712	Central New Ireland	Current	TRP	Concession
609	Yema Gaiapa	Current	LFA	Concession	1716	Lak	Expired	TRP	Concession
608	Embie Hanau	Expired	TRP	Concession	1708	Konos	Expired	TRP	Concession
607	Girua Ere	Expired	TRP	Concession	1723	Lamassa		PFD	Proposed
603	Saiho	Current	TRP	Concession	1702	Kamdaru	Expired	TRP	Concession
604	Ioma Block 4	Current	TRP	Concession	1724	Tabar	Current	LFA	Concession
601	Ioma Mambare	Current	TRP	Concession	1934	Bango		TRP	Concession
602	Kumusi		TRP	Concession	1931	Alolo		TRP	Concession
610	Ioma Block 5	Current	FMA	Concession	1932	Kau'uli	Expired	TRP	Concession

PLAN ID	WNB PROV	EXP_CUR	CONSTYPE	STATUS	1909	Ibana	Expired	TRP	Concession
1912	Mosa Leim	Expired	TRP	Concession	1910	North Ulamona	Expired	TRP	Concession
1952	Pasismanua Inland	Current	LFA	Concession	1925	Madedua	Expired	TRP	Concession
1953	Passismanua Ext	Current	LFA	Concession	1924	Ibana East	Expired	TRP	Concession
1923	Ulamona Ext	Expired	TRP	Concession	1927	Gulagula	Expired	TRP	Concession
1930	Hargy	Expired	TRP	Concession	1926	Extended Mengen	Expired	TRP	Concession
1933	Sisimi	Expired	TRP	Concession	1928	Aliiai	Expired	TRP	Concession
1904	Uletevasa	Expired	TRP	Concession	1929	Ania Kapiura	Expired	LFA	Concession
1902	Witori	Expired	TRP	Concession	1954	Andru Johanna	Current	LFA	Concession
1901	Mami	Expired	TRP	Concession	1949	Autuvo	Current	LFA	Concession
1905	Malalimi	Expired	TRP	Concession	1958	Asengseng	Current	FMA	Concession
1920	South Bagum	Expired	TRP	Concession	1960	Vanu Tamu	Current	FMA	Concession
1962	Mosa	Expired	TRP	Concession	1964	Agulu Reserve	Current	FMA	Concession
1918	Kisang	Expired	TRP	Concession	1963	Asirim	Current	FMA	Concession
1915	Malum	Expired	TRP	Concession	1961	Aria Vanu Blk 2	Current	FMA	Concession
1916	Bunga	Expired	TRP	Concession	1935	Kapuluk	Current	TRP	Concession
1914	Toa	Expired	TRP	Concession	1999	Inland Rauto Miu	Current	FMA	
1913	Keveloha	Expired	TRP	Concession	PLAN ID	MAD PROV	EXP_CUR	CONSTYPE	STATUS
1944	Lolo Blk 1	Current	LFA	Concession	1309	Sogeram	Current	TRP	Concession
1957	Rottock Bay	Current	FMA	Concession	1312	Josephstaal	Current	FMA	Concession
1922	Bulu	Expired	TRP	Concession	1301	Gogol	Expired	TRP	Concession
1908	Wangore	Expired	TRP	Concession	1302	Gum	Expired	TRP	Concession
1955	Lolo Blk 2 Ext	Current	LFA	Concession	1308	Barum	Expired	TRP	Concession
1943	Lolo Blk 2	Current	LFA	Concession	1307	Kumil	Expired	TRP	Concession
1945	West Arawe	Current	TRP	Concession	1310	Far North Coast Blk 3	Expired	TRP	Concession
1947	Central Arawe	Current	TRP	Concession	1305	Far North Coast	Expired	TRP	Concession
1948	East Arawe	Current	TRP	Concession	1304	North Coast	Expired	TRP	Concession
1939	Pulie Anu	Current	LFA	Concession	1303	Naru	Expired	TRP	Concession
1941	Alimbit Anu	Current	LFA	Concession	1311	Rai Coast	Current	TRP	
1946	Alimbit Andru	Current	LFA	Concession	1315	Middle Ramu Blk 3		PFD	Proposed
1951	Awio Amgen	Current	LFA	Concession	1314	Middle Ramu Blk 2		PFD	Proposed
1921	Fulleborne Ext	Expired	TRP	Concession	1313	Middle Ramu Blk 1	Current	FMA	Concession
1911	Kapuluk Ext	Expired	TRP	Concession	PLAN ID	WHY PROV	EXP_CUR	CONSTYPE	STATUS
1956	Aria Vanu Blk 3	Current	LFA	Concession	901	Kum NO 2	Expired	TRP	Concession
1942	Aria Vanu Blk 1	Current	LFA	Concession	902	Kuna River	Expired	TRP	Concession
1919	Bola	Expired	TRP	Concession	916	Waghi Plantations	Expired	PFD	Proposed
1917	Honde-Laulimi	Expired	TRP	Concession	915	East Kambia	Expired		Proposed
1906	Galae	Expired	TRP	Concession	904	Jimi River	Expired	TRP	Concession
1903	Kako	Expired	TRP	Concession	PLAN ID	EHY PROV	EXP_CUR	CONSTYPE	STATUS
1934	Bango	Expired	TRP	Concession	1101	Upper Purari Blk 1&2			Proposed

PLAN ID	MOR PROV	EXP_CUR	CONSTYPE	STATUS	1508	Amanab Block 3-4	Current	FMA	Concession
1213	Watut West	Expired	TRP	Concession	1509	Aitape East Coast	Current	FMA	Concession
1204	Wau Area 4 Blk 4	Current	TRP	Concession	1507	South West Wapei	Current	FMA	Concession
1211	Oomsis Blk 10 A	Expired	TRP	Concession	1511	Au East Coast			Proposed
1201	Oomsis Blk 2	Expired	TRP	Concession	1512	East west Wapei			Proposed
1203	Were Were	Current	TRP	Concession	1517	Schotiacho			Proposed
1208	Kui Buso	Expired	TRP	Concession	1510	Arko-Samei			Proposed
1212	Kui Buso Ext	Expired	TRP	Concession	1514	Maimai Wanwan			Proposed
1210	Maiama Blk A	Expired	TRP	Concession	1513	Idam Siawi			Proposed
1202	Maiama Blk B	Expired	TRP	Concession	1524	Amanab 1&2	Current	FMA	Concession
1209	Morobe Coast	Expired	TRP	Concession	1525	Amanab 7			Proposed
1207	Umboi Blk 3(Kaimanga	Current	TRP	Concession	1522	Amanab 6	Current	FMA	Concession
1206	Umboi Blk 2 (Kowai)	Current	TRP	Concession	1521	Amnab Blk 5	Current	FMA	Concession
1205	Umboi Blk 1 (Bunsil)	Current	FMA	Concession	1516	Wes Romei Tadjji	Current	FMA	Concession
1214	Mongi Busiga	Current	FMA	Concession	1526	Make			Proposed
1215	Buhem Mongi	Current	FMA	Concession	PLAN ID	SHP PROV	EXP_CUR	CONSTYPE	STATUS
1217	Dzia		PFD	Proposed	707	Rongo Mondane	Current	TRP	Concession
1218	Lake Trist		PFD	Proposed	708	Koia Wekomini	Expired	TRP	Concession
1219	Salamaua		PFD	Proposed	702	Mount Giluwe 1B	Expired	TRP	Concession
1231	Timbe Kwama TA			Proposed	704	Mount Giluwe 1C	Current	TRP	Concession
1232	Kwama Masaweng TA			Proposed	705	Mount Giluwe 1D	Expired	TRP	Concession
1228	Yagoman Timber Area			Proposed	706	Mount Giliwe 1E	Expired	TRP	Concession
1230	Morobe South Coast Ext			Proposed	715	Mount Giluwe 1F	Expired	TRP	Concession
PLAN ID	ESK PROV	EXP_CUR	CONSTYPE	STATUS	703	Kalgabunbu	Expired	TRP	Concession
1403	Hawain	Current	LFA	Concession	701	Mount Giluwe 1A	Expired	TRP	Concession
1404	Lower Sepik	Current	LFA	Concession	714	West Mount Giluwe			Proposed
1405	April Salume	Current	FMA	Concession	713	Nogoli			Proposed
1401	Angoram (Mariemberg)	Expired	Expire	Concession	712	Kutubu Poroma			Proposed
1410	Yuat Amboin		TRP	Concession	710	East Pangia			Proposed
1407	Japaraka-Urimo-Sosoya			Proposed	711	Hekiko			Proposed
1406	Nungwaia Bongos		PFD	Proposed	709	Bosavi			Proposed
1413	Border (Nuku)		PFD	Proposed	715	Polopa			Proposed
1414	Karawari		PFD	Proposed	PLAN ID	SIM PROV	EXP_CUR	CONSTYPE	STATUS
1415	Wamsis East		PFD	Proposed	1004	Karamui Bomai			Proposed
PLAN ID	WSK PROV	EXP_CUR	CONSTYPE	STATUS	PLAN ID	ENG PROV	EXP_CUR	CONSTYPE	STATUS
1505	Bewani	Current	LFA	Concession	803	Waripa	Expired	TRP	Proposed
1506	Pegi Pulan	Current	LFA	Concession	802	Domisau	Expired	TRP	Proposed
1501	Musu Saberjin	Expired	TRP	Concession	899	Sautaru			Proposed
1502	Waromo	Expired	TRP	Concession	805	Pogera	Expired	TRP	Proposed
1504	Vanimo Block 1-5	Expired	TRP	Concession	801	Kiaimanda	Expired	TRP	Proposed

PLAN ID	NSL PROV	EXP_CUR	CONSTYPE	STATUS	PLAN ID	MAN PROV	EXP_CUR	CONSTYPE	STATUS
1503	Vanimo Block 6	Expired	TRP	Concession					
2003	Tonolei Block 1	Expired	TRP	Proposed	1602	Manus West Coast	Current	TRP	Concession
2008	Tonolei Block 6	Expired	TRP	Proposed	1603	Jaha	Current	LFA	Concession
2007	Tonolei Block 5	Expired	TRP	Proposed	1604	Kali Bay	Current	LFA	Concession
2006	Tonolei Block 4	Expired	TRP	Proposed	1609	Block 7			Proposed
2005	Tonolei Block 3	Expired	TRP	Proposed	1608	Block 6			Proposed
2004	Tonolei Block 2	Expired	TRP	Proposed	1607	Block 5			Proposed
1819	Senbern Ext	Expired	TRP	Concession	1606	Block 4			Proposed
1812	Ramandu	Expired	TRP	Concession	1605	Block 3			Proposed
PLAN ID	ENB PROV	EXP_CUR	CONSTYPE	STATUS	PLAN ID	WES PROV	EXP_CUR	CONSTYPE	STATUS
1822	Bergberg Ext	Expired	TRP	Concession	105	Makapa	Current	TRP	Concession
1817	Nutuve	Expired	TRP	Concession	101	Waimare (Oriomo)	Expired	TRP	Concession
1814	Gar	Expired	TRP	Concession	104	Wawoi Guavi Blk 3	Current	TRP	Concession
1820	Waterfall Bay Ext	Expired	TRP	Concession	102	Wawoi Guavi Blk 1	Current	TRP	Concession
1811	Gaulim Ext	Expired	TRP	Concession	103	Wawoi Guavi Blk 2	Current	TRP	Concession
1815	Inland Pomio	Expired	TRP	Concession	106	Semabo	Current	FMA	Concession
1813	Tokai Matong	Expired	TRP	Concession	108	Wipim Tapila	Current	FMA	Concession
1821	Cape Orford	Expired	TRP	Concession	107	East Awin	Current	FMA	Concession
1804	Tamoip	Expired	TRP	Concession	113	Kamula Doso Blk 2	Current	FMA	Concession
1803	Simbali	Expired	TRP	Concession	112	Kamula Doso Blk 1	Current	FMA	Concession
1806	Aghathat	Expired	TRP	Concession	114	Kamula Doso Blk 3	Current	FMA	Concession
1816	Aghathat Ext	Expired	TRP	Concession	116	Nomad Strickland		PFD	Proposed
1807	Dengnangi	Expired	TRP	Concession	111	Fly Block 2		PFD	Proposed
1801	Kaboku	Expired	TRP	Concession	115	Lake Murray Block 1		PFD	Proposed
1805	Loi River	Expired	TRP	Concession	117	Lake Murray Block 2		PFD	Proposed
1802	Molkolkol	Expired	TRP	Concession	110	Fly Block 1		PFD	Proposed
1809	Vudal	Expired	TRP	Concession	109	Balimo Fly		PFD	Proposed
1823	Mukus-Tolo	Current	FMA	Concession	120	Morehead/Suki Blk 1		PFD	Proposed
1818	Taraiwara	Expired	TRP	Concession	121	Morehead/Suki Blk 2		PFD	Proposed
1835	Wunung Sigite			Proposed	119	Ningerum		PFD	Proposed
1828	Bairaman Wunung Blk1			Proposed	122	East Awin Extension			Proposed
1829	Tolo Bairaman Blk 2			Proposed	118	Kiunga-Aiambak		TA	Proposed
1824	Cape Bogan			Proposed					
1826	Wide Bay			Proposed					
1830	Taraiwara Ext			Proposed					
1838	Suikol			Proposed					