



Overseas Development
Institute

Forestry in Papua New Guinea: issues and opportunities



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1. Forestry and the national economy

The national benefits of forestry

Forestry is an important sector in the PNG economy, contributing on average 5.1% of GDP in the 1990s.

Forestry is the third largest source of foreign exchange .

To PNG society the benefits derived from the forest sector fall in three components:

- i) government revenue
- ii) rural jobs and payments
- iii) the provision of infrastructure and services

These benefits create a variety of multiplier effects in the PNG economy as a whole.

The future of forestry?

In the debate on the economic future of forestry in PNG most attention focuses on the conclusions from the independent forestry reviews that:

- Logging was found to have little long-term beneficial impact on the country
- The logging industry itself was not profitable and therefore unable to make long-term investments

More recently, the PNGFA has warned of a looming resource shortage: The draft *National Reforestation Policy* reads: ‘An overview of the timber resources of PNG indicates that most of the provinces have almost depleted their resources while New Ireland has over cut its available timber resource.’

2. Available information on forest resources

Estimates of forest area

PNG is a large and geographically complex country with highly diverse forests. The availability of data on the status of its forest resources remains very limited. In the absence of a certified national inventory there is considerable uncertainty over the extent of the forest resource.

Since the late 1980s PNG has seen a debate on the nature of sustainable forest management, focusing on the size of the forest area suitable for commercial harvesting and the appropriate sustainable harvest levels.

2. Available information on forest resources

The production forest area

- In 1996, the *National Forest Plan* defined a production forest area of 11.9 million hectares
- In 2006, the PNGFA stated the production forest area as 15.2 million hectares

By expanding the production area well beyond the 11.9 million hectares of production forest defined in 1996, areas deemed unsuitable for harvesting due to the fragility of the landscape may now be opened for logging.

Reforestation and plantation policies

- The development of the plantation sector has been slow due to the fact that the economics of such investments are not favourable.
- Recent figures estimate a plantation estate of only 62,000 hectares

Of key importance to further plantation development are: i) the stability and conduciveness of the overall business and investment climate; ii) the availability of land and the security of land tenure arrangements; iii) the availability of a skilled workforce and iv) supporting research and development.

The Reforestation Levy

Since 1990 the PNGFA has collected a reforestation levy from operators, to be used for reforestation and regeneration activities.

Most companies seem to regard paying the levy as less costly than the implementation of a plantation programme. This suggests that the levy is not achieving its objective and that it may have to be increased to a level that induces the necessary action on the part of operators.

The levies are paid into a trust fund to be used for reforestation activities. Some of these funds may have been used for payments to the provinces. Whether that has led to any reforestation is unknown.

An increase in downstream processing?

Downstream processing, like plantation development, has been hampered by the high cost structure of the PNG economy.

Recently, the processing of logs has rapidly grown in importance. Key factors have been:

- the depreciation of the Kina
- lower discount rates that have reduced the costs of capital investment
- the exemption from export taxes on processed exports
- downstream processing is increasingly becoming a requirement for the granting of forestry projects

Financial and economic viability

Several studies have been carried out to look at the financial and economic viability of different processing options. The studies have all come to similar conclusions, namely that:

- i) MDF and plywood are the least viable processing operations
- ii) that the viability of sawmilling operations increases with scale
- iii) that a combination of sawmilling and mouldings/joinery provides the highest returns.

These findings suggest that downstream processing policy has to be targeted in a strategic manner, as larger and more capital intensive operations are not necessarily the most attractive.

An alternative model?

Community-based forestry programmes have gained considerable attention since halfway through the 1990s. Donors and NGOs have looked upon eco-forestry as an alternative to large-scale commercial logging and have pursued innovative models to get these operations certified.

However, key operational obstacles are i) the transport of timber; ii) mechanisms that enable communities to make the initial capital investment and iii) the international marketing of low volumes of generally low quality rough sawn timber of a highly diverse species mix.

Financial and economic viability

The 2002 Forest Revenue Review Team concluded that a walkabout sawmill operation with equipment replacement after 5 years generates an FIRR of 18%. This is just profitable, yet is particularly vulnerable to any drop in revenue.

The general consensus appears to be that without donor support, such operations become negative in financial terms. As a result, this type of project needs to be subsidized for extended periods of time.

In remote areas where the opportunity cost of labour is low and where there are few other opportunities community-based forestry may have a role to play in providing employment and in using an otherwise inaccessible resource.

Is large-scale logging profitable?

An analysis of income tax paid by logging companies by the Government-commissioned Bogan taxation review in 2002 showed that of the 27 companies responsible for almost all PNG log production, 14 had not paid company taxes for several years and that tax arrears over the last couple of years exceeded taxes paid by almost two to one

The lack of transparency in the fiscal system with respect to logging operations make it difficult to draw conclusions on the profitability of the log export sector, the distribution of costs and benefits from logging between operators, government and landowners, thus preventing a transparent debate about what a 'fair' and economically efficient tax level might constitute.

The export tax on logs

As of 1st January 2007 the export tax on logs will be revised. The most important changes will be i) that the current progressive tax will be replaced by a flat percentage rate of 28.5% and ii) that an additional 8 Kina per cubic metre, a so-called 'log export development levy', will be paid out to the landowners in addition to existing royalty payments.

The decision to put in place a flat tax at a percentage of FOB prices runs counter to the advantages of the more suitable progressive export tax which optimises the efficiency of resource use and the collection of government revenue.

Transfer pricing

The current price endorsement mechanism for log exports appears to lack institutional checks and balances in two ways.

- In the first place the Marketing Branch of the PNGFA does not have a set of procedures and an objectively verifiable source of information to determine whether the FOB price provided by the exporter for his shipment is indeed in line with prevailing market circumstances.
- The price endorsement procedure is located within the PNGFA, without a role for the Government bodies tasked with the collection of revenue. The key objective of the PNGFA is to regulate the industry, which generates a different set of considerations than those at play in the Internal Revenue Commission or the Treasury.

What future for forestry?

The key question therefore appears to be whether the government and industry are able to simultaneously:

- i) reduce output by bringing its existing and new forest operations in line with sustainable yield principles at the level of the project
- ii) increase future access to raw material through plantation development and reforestation policies
- iii) increase the value of exports through downstream processing
- iv) ensure compliance with all relevant laws and regulations to safeguard the interests of its citizens and meet the legality requirements of increasingly demanding international markets.