The State of Play for
Tropical Hardwoods
Forces determining the pattern of production and trade and prospects for small scale timber producers in Papua New Guinea

During the previous 30 years, the trends in the production, consumption and pricing of native tropical hardwoods have become distinct relative to wood products sourced from plantation resources. The markets for these product groups have clearly bifurcated.

- Tropical logs that have been easy to access have long since been sourced. Commercial harvesting from primary forests is moving to more remote and difficult areas where the marginal cost of log extraction will continue to rise and be passed on to users in the form of higher prices. Scarcity is also being driven by bans on tropical log exports by some large producers (e.g. Indonesia) and export quotas by select countries (e.g. Peru’s mahogany export quota).

- On the demand side, the interest in ‘select grade’ tropical hardwoods by architects and builders in industrial economies such as the United States and Australia, sees this product class increasingly earmarked for high priced niches such as boat building, mouldings and furniture. In Europe, species such as mahogany and walnut can be viewed as being ‘noble’, thereby commanding a higher price.

- Government policies in many tropical countries are supporting the value added production of tropical logs into higher priced processed wood products. For the West African state of Ghana, its major species of teak and mahogany are fast declining. The government of Ghana has instituted policies designed to promote value add through downstream processing and the marketing of lesser known species. Guatemala, Guyana and Peru are some of the other countries that are focusing on the harvesting and processing of lesser known species. It is only a few select African states, Papua New Guinea and Myanmar that continue to export a significant volume of their tropical logs that are not processed into higher priced wood products.

- Plantation resources are being increasingly used as substitutes for tropical logs for the manufacture of wood products such as plywood and decking that were once the domain of native tropical hardwoods. Plantation timbers enjoy substantive advantages relative to tropical hardwoods as they are a low cost homogenous product, offer reliability of supply and generally incur lower certification costs. The majority of South America’s commercially harvested timber is now sourced from plantations. The Russian Federation, with the largest forest resource of any nation in the world (809 million hectares represents 50% of the world’s forests) is now emerging as a major low cost producer and exporter of coniferous wood products.
Climate change may produce a structural increase in the demand for wood, potentially placing upward pressure on the price of this material. Major new sources of demand for wood could soon emerge — wood fired electricity power stations are being proposed in the United Kingdom and significant technological efforts are underway in Canada to convert wood into bio-ethanol.

The days when tropical timber was imported because it represented the cheapest mass raw material available are over. Established tropical timbers on the world market are in short supply and the processing of lesser known species is now underway.
Sustainable Forest Management for Tropical Countries

Sustainable Forest Management ("SFM") is in the early stages of adoption in most tropical countries, where its technical and financial viability at a commercial scale is being assessed.

An International Tropical Timber Organization review of SFM in 2006 found that only six tropical countries have the resources to manage their forests sustainable. Many countries do not have enough information on which to formulate SFM policies, nor do they have sufficient trained people, technical support and funding. In most cases, it is local and international environmental non government agencies (NGOs) that are driving the establishment of SFM practices.

In the case of PNG, there is a low level of support for SFM from government and logging companies. The few examples of forest certification that exist are due to committed individuals, NGOs and international donors.

It is the large importers in the United States and particularly Europe that are leading the drive to promote SFM and eliminate illegal logging. They are using non tariff barriers such as the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES) to restrict imports of tropical hardwoods from particular countries. In Germany, a federal government mandate requires government bodies to purchase wood products only from sustainable managed forests.

Although forest certification is gaining adherents among some of the larger distributors and retailers in the United States and particularly Europe, these groups are frustrated by the lack of available supply, and the unwillingness of customers to pay a premium for SFM certified timber products. They believe that only when SFM timbers become a significant product category will prices adjust upwards to reflect the real cost of certification.
Prospects for small scale timber producers and community managed forests in PNG

Papua New Guinea has a very small area of forest plantations and even less forests managed according to SFM principles and practices.

Commercial forest plantations began in the early 1950’s and currently there is 62,277 hectares of plantations. The PNG Forest Authority aims to have developed 240,000 hectares of sustainable commercial forest plantations by 2030. To achieve this target, the Authority will require a significant increase in funding and staff numbers. As at January 2006, there was 27,000 hectares of Forest Stewardship Council certified forest. Promotion of lesser known species is limited.

PNG is one of the few countries remaining that is exporting logs and not moving to sawn products. Processed wood products are negligible, and there are few export orientated manufacturing facilities. Log production in 2006 was 2.8 million $m^3$, of which 93% was exported, with China being the single largest customer.

The main export destinations for PNG’s negligible production of sawnwood, veneer and plywood is Australia, New Zealand, Fiji and other Pacific island nations. Australian and New Zealand importers have indicated that the demand for sawnwood and veneer had been strong up to mid 2008, after which the decline in building activity has seen a decline in the demand for these products.

The Woodage is Australia’s largest customer for PNG certified timber. The demand for PNG certified timbers remains strong, yet there is insufficient supply to meet this demand. Architects are the major customers. Moreover, architects, interior designers and specifiers know little about tropical hardwoods and tend to request ‘select’ grade timbers. To expand the market potential for PNG tropical hardwoods, these customer groups need to be informed and ‘converted’ to the different types of timber grades and species that can be made available.

The best markets for green sawn timber from community managed forests based in PNG are those that offer the highest price and are sympathetic to small volumes and variable quality. Traders, be they local timber merchants or overseas importers that are prepared to aggressively market and educate customers about lesser known species and the utility of non select grade timbers should be targeted.

High prices are critical to the success of community managed forest enterprises as significant resources are needed to manage, process and transport timber products. High profit margins can be achieved by making a product unique and convincing buyers that the value they receive extends beyond its functional utility.
Certification and fair trade are two approaches that are used to differentiate wood products. Australian customers buy PNG certified wood products because of ethical considerations, or have been requested by their customers (e.g. architects). In only some cases is a price premium achieved.

Forest Stewardship Council (FSC) certification was initially designed for larger plantation enterprises where economies of scale and established access to markets could justify the expensive transaction costs and time required in achieving certification.

The commercial viability of the community managed forest should first be proven by identifying the most valuable markets that can be accessed. Sales and cash flow should be the first priority so as to give the communities the resources they need to help them to overcome the inherent structural problems they face – small volumes, variable quality, delivery problems, deficient business and technical know how and high cost structures. The earlier that a steady income stream can be achieved, the more likelihood that the community will stay engaged with the enterprise and build local capacity to sustainable manage their resource.

Certification should only be pursued once the community can justify the investment required to gain certification, and / or local marketing units, NGOs or overseas importers are adamant certification is needed to grow sales and are prepared to commit resources to achieve certification and scale up the production and processing of native tropical hardwoods.

The limiting factors that inhibit the evolution of community managed forests are expertise and resources during the start up phase and sympathetic and committed traders, either local timber merchants or overseas importers who are committed to both working with the communities, promoting their timbers and transferring high prices to the communities. These buyers will face higher transaction costs in dealing with community based forest enterprises compared to ‘normal’ commercial sources.