

Managed forests offer PNG communities new market opportunities

Sustainable harvesting strategies are helping local communities in Papua New Guinea generate income from the forest resources big logging companies leave behind



(Far left) community house constructed from locally milled kwila in the Sogi, PNG, project area.

(Left) the Sogi forest measurement team—Dr Julian Fox and friends—September 2008.

BY CATHERINE NORWOOD

It has been 20 years since the tropical forest near the village of Yalu, in Papua New Guinea's Morobe Province, was logged of its most popular and profitable timber species—kwila, rosewood, walnut, blackbean and red cedar.

Since then the village's 1,500 inhabitants have continued using what remained of the forest for subsistence living: hunting, agriculture, medicines and local building materials.

As is the case with much of the logged, or 'cut-over', forest in PNG, there has been little thought given to the commercial value of the remaining forest and the income it might provide to the community.

Given the rapid increase in the area of cut-over forest in PNG as logging companies move across the country, this is an issue an ACIAR pilot project is addressing, with the PNG government and a number of local communities in the Mamose Region, including the Yalu villagers.

In the past 30 years more than 3.5 million hectares of PNG's 7.5 million ha of accessible forest has been logged, most of it by Malaysian timber companies. The condition of this cut-over forest varies depending on how much

timber was extracted and the quality of the logging.

The ACIAR project is based in the Mamose Region where there are about 550,000 ha of cut-over forest. Australian researchers are working with local communities, the PNG Forest Research Institute and the Village Development Trust to identify forest management strategies and income opportunities that can be marketed as certified sustainably harvested, Fairtrade timber. Communities that have agreed to take part are Sogi in Madang province (20,000 ha), and Yalu (5,000 ha) and Gabensis (2,000 ha) in the Morobe province.

The ACIAR project leader is Professor Rod Keenan from the University of Melbourne's Department of Forest and Ecosystem Science. He says that where forests have been selectively logged, actively managing the remaining cut-over forests has not been a priority for local communities or the government. However, Professor Keenan says, with the right management, many areas of secondary forest could provide an ongoing income through the small-scale harvesting of valuable timber species on 30–50-year cycles, as well as continuing to provide other local needs.

SUSTAINABLE HARVESTING

Professor Keenan says the first step in the pilot project is an inventory of the three selected sites to identify the make-up of the forests—one site is relatively intact forest and two have been heavily logged. He says conducting the inventory is proving to be a challenge in itself.

"The forests in PNG are among the most challenging in the world," Professor Keenan says. "They have a complex structure and species composition, the terrain is difficult and they have complicated systems of tribal or community ownership and management."

Satellite imagery, which is commonly used in forest assessment, is often not suitable for use in PNG because of the dense cloud that regularly blankets much of the country. These images also lack detail on forest composition—information that is needed to evaluate commercial opportunities and sustainable harvesting regimes.

So the researchers are working to correlate information from a number of different sources, including some satellite images combined with radar and physical measurements from more than 250,000 trees in permanent sample plots that have been



PHOTO: JULIAN FOX



Portable sawmilling at Gabensis in Morobe Province, Papua New Guinea.

Conducting an inventory of PNG's secondary forests and charting growth rates is proving challenging, but will help determine sustainable timber yields.

managed by the PNG Forest Research Institute for the past 15 years. The data from the sample plots in particular will help identify the growth rates of various species. This information will underpin sustainable harvesting strategies for both the primary and cut-over forest sites.

Professor Keenan says the emphasis in the pilot project is to evaluate the potential of cut-over forests because they will provide local communities with timber once the remaining accessible areas have been harvested by the logging companies. Many communities are keen to continue timber harvesting but want to receive a greater share of the economic benefits from their forests than they have from larger-scale forest operations.

The trees remaining in the cut-over forests include those too small to have been worth harvesting, as well as lesser-known species. The mix includes kwila, rosewood, walnut, blackbean, red cedar malas, taun, vitex, dillenia, kamerere, terminalia and callophylum. Australian businesses are already offering a 20–40% premium for sustainably harvested, Fairtrade-certified timber from PNG forests, including from lesser-known species. Professor Keenan says there is significant potential to tap into this market.

The success of any harvesting venture will depend on access to roads, which was part of the selection criteria in identifying forest sites for the pilot project. Road access is an ongoing problem in PNG, where some communities are a four-day walk from their closest neighbours. It is one of the reasons why many communities have sold logging rights—because the big timber companies build roads to take out the timber. If they are well constructed the infrastructure remains to the benefit of the whole community, but this has not often been the case.

“An important part of what we’re doing in assessing the tree growth rates, species mix and market opportunities is providing information that communities can use to help them create a business case for investment in better infrastructure,” Professor Keenan says. “It will show them that cut-over forests still have significant value, particularly if they are sustainably managed and harvested.”

Professor Keenan says information from the project will also be valuable for assessing carbon stocks in forests and supporting potential involvement of communities in reduction in greenhouse gas emissions from deforestation and forest degradation. ■

PARTNER COUNTRY Papua New Guinea

PROJECT DESCRIPTION: FST/2004/061: Assessment, management and marketing of goods and services from cut-over native forests in Papua New Guinea

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