



Enhancing the implementation of community forestry approaches in Papua New Guinea

Overview

This project focuses on interaction between people and forests and the role that forest can play in sustainable livelihoods and improved food security.

In Papua New Guinea about 80% of the population live in rural areas and they depend heavily on their forests. Land and forests are mostly community-owned. Hence, community forestry offers villagers a way of managing or developing these assets. The key is for people to work towards a common goal, either sustainably managing native forest or growing trees for a variety of purposes. The focus of this project has been to research what people need to work cooperatively towards those goals.

For many communities between Lae and Madang, native rainforest is their main asset. Managing forest to maximise long-term benefits to the community while minimising soil erosion and maintaining water quality is challenging when community members' knowledge of sustainable harvesting and markets is limited. Research into sustainable forest management or 'Ecoforestry' as it is termed in PNG, may keep the benefits of these forests within communities.

In the grasslands of the Eastern highlands and the Ramu/Markham valley, remnant rainforest is now only found on mountain tops. Firewood and poles for houses are in short supply and reforesting the grasslands is challenging because local people lack the technology to collect seed, grow seedlings and establish woodlots. Researching what needs to be done to help people grow their own trees may reduce pressure on remaining native forest.

ACIAR project number	FST/2011/057
Start date and duration (years)	01/09/2013; 3.5 years
Location	Papua New Guinea
Budget	\$2,145,989

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Research

The key elements of research activities are:

- » Researching the arrangements, plans and agreements which will encourage people to cooperatively and sustainably manage native forests;
- » Investigating better technology transfer methods so villagers can grow seedlings and establish trees in the field;
- » Innovative farming systems which incorporate multi-species, multi-purpose, livelihood based trees and cash crops;
- » Recommending policy changes to government which will facilitate sustainable native forest management and plantation expansion, concomitant with livelihood development.

Achievements

- » Ongoing extensive consultation with villagers at Madang is discovering pathways for cooperative native forest management.
- » Extension staff have helped people to establish seedling nurseries in five communities and two schools. Three of these communities and one school are now self-sufficient with regard to collecting seed, growing seedlings and establishing woodlots.
- » For 25 farmers at Goroka who were trained to establish home-nurseries, follow-up extension assistance is discovering key impediments to self-directed tree growing. One of these impediments, (seed supply for a range of tree species) will be improved through a recently established species trial and seed orchard.
- » Two communities have experimented with new farming systems by integrating trees (*E. pellita*) as a cover crop for cocoa. Intercropping timber trees with cash crops will offer farmers short-term as well as long-term livelihood benefits.
- » One farmer has developed his home-nursery into a successful private business. Initially he sold trees in the local market place, but he is now accepting bulk orders for seedlings. Follow-up assistance from extension staff has helped him to improve seedling quality.
- » At Kainantu High School, teachers have incorporated tree seedling propagation into the school curriculum. The high school already has a thriving coffee seedling nursery and it is intended that trees will be used as a shade crop for coffee.

Impact stories

Waritzian community is a model of how tree growing might be up-scaled to the general community. The group of farmers who are interested in growing trees belong to the same sub-clan, so they agreed to cooperate to grow seedlings and establish a woodlot. They organised a roster to water seedlings and within six months, they had grown and out-planted 500 seedlings. Further tree planting is planned.

Mr Silas Akaku, had never grown tree seedlings before ACIAR project staff showed him how in early 2015. After raising his first batch of 20 seedlings, he realised how easily he could sell them in the Kainantu market. He has now raised 2000 seedlings and has orders for 3000 more. Most importantly, he produces high-quality seedlings which have thrived after out-planting. The quality of the seedling is high because the ACIAR project officer provided follow-up technical advice after initial training. By early 2016, his income from selling seedlings was K3500 or approximately AUD 1700.



Out-planting seedlings at Waritzian



Extension staff interviewing villagers at Ramu