



Papua New Guinea Forest Authority

PAPUA NEW GUINEA FOREST AUTHORITY

**FOREST POLICY AND PLANNING
DIRECTORATE**

Final Technical Report

LOA/RAP/2010/O25

FAO Project Number: GCP/INT/988/JPN

**Project title: Strengthening Monitoring Assessment & Reporting on
Sustainable
Forest Management in Asia (MAR-SFM)**

Project Leader: Dr. Ruth C H Turia

**Organisation: Papua New Guinea Forest Authority
P. O. Box 500
Boroko, NCD
Papua New Guinea**

Background

The Papua New Guinea Forest Authority (PNGFA) had participated in a number of training workshops organized under the **Food and Agriculture Organization of the United Nations** (hereinafter referred to as "FAO") project entitled: **Strengthening Monitoring, Assessment and Reporting on Sustainable Forest Management in Asia (MAR-SFM) (GCP/INT/988/JPN)** (hereinafter referred to as the "project"). Furthermore, the PNGFA noted that countries who are part of the Project can request for financial assistance from the FAO to support its national programme on MAR-SFM. Accordingly, PNG submitted a request to the FAO for an amount of 30,000 Kina (**Thirty thousand kina, equivalent to US\$11,858**) assist with its work on upgrading some existing systems and updating the database. This led to the Letter of Agreement – LOA/RAP/201/025 for the same amount.

PNGFA currently has three key database systems used for assessment, planning, monitoring, and reporting on forest resources in PNG. These database systems are all more than 10 years old and use of these systems over the last few years ranges from no use at all, to very limited use.

The data and information provided in these systems is generally inadequate, not up to date and inaccurate. The reasons for the poor state of the database systems has been a lack of ongoing commitment within the organization to maintain business processes and work activities related to capture, processing and reporting of data and information. The systems have not been upgraded over the years and this too has made it more difficult to resurrect interest and use of the systems going forward.

The PNG Forest Authority has undergone a major structural re-organization in 2009, resulting in many of the staff that are conversant with the database systems leaving the organization. This has created some capacity shortfall to progress the use of the databases. As part of the upgrading, training as well as sustainability of the systems will be undertaken to ensure that the databases will be used and by a larger number of staff.

The PNG Forest Authority has already initiated some activities in-house to revive the existing Forest Authority Database System (FADS) by establishing a Committee to assess what data are needed and to develop the necessary protocols for capturing those data. It is anticipated that the review of the FADS and the upgrading of the three key systems (listed below) will enable PNG to capture a reliable degree of data for monitoring and reporting of sustainable forest management activities in the country. Three key systems and the status of each are listed in Table 1 below:

Table 1: Status of Existing Database System

#	System Description	Status
1	FIPS (Forest Inventory Planning System) – Provides information from strip surveys of species and forest type volumes	Virtually no meaningful data capture or use of the system over the last 6 years.
2	FIMS (Forest Inventory Management System) – Maps and calculates (area as well as volume of logged over areas, constraints and vegetation types)	Being used mainly for producing maps but the inventory data has not been consistently updated or relied on since 2002.
3	PINFORM – Projects growth in terms of volume or basal area over a specified period of time (+- 14 species)	Developed in 1998 but has never been properly tested for accuracy and has never been relied on for any use.

Project Purpose

PNG did not actively engage in the Project so to achieve the objectives, however, in early 2010, the PNGFA requested for funding assistance to undertake some improvements to its existing database systems so to add value to its research and operations and also to all other stakeholders that have an interest in Forest Inventory data and information. This was to assist and complement the main objectives of the Project (GCP/INT/988/JPN) - ‘develop a harmonized forest related national monitoring, assessment and reporting (MAR) system to contribute directly to the improvement of sustainable forest management (SFM) regimes in the Asia-Pacific region’ and ‘enhance the use of the MAR information in national decision-making, formulation of effective forest policies, and sustainable forest management and planning’.

Outputs

Under the LOA, all three of the database systems will be upgraded to the latest version of database software and will be able to run on current versions of operating systems. This also meant that:-

- A specifications document for all modifications required for each database system will be undertaken; and
- Necessary modifications to database systems as per the specifications as identified is documented.

So far, the FIPS and the FIMS upgrade have been completed and the PNGFA has commenced updating the relevant data into the system. The upgrades involved engaging the original designers of the database to review and upgrade the systems to be compatible

with existing software currently being used by the PNGFA, such as MS Excel 2007. A brief status on these are provided in Table 2 below:

Table 2: Status of Work Conducted

#	System Description	Status
1	FIPS (Forest Inventory Planning System) – Provides information from strip surveys of species and forest type volumes	System upgraded with a new PC and PNGFA staff now updating the information.
2	FIMS (Forest Inventory Management System) – Maps and calculates (area as well as volume of logged over areas, constraints and vegetation types)	System upgraded and PNGFA staff now capturing areas logged by digitizing.
3	PINFORM – Projects growth in terms of volume or basal area over a specified period of time (+- 14 species)	No work done yet. This will be the last component of the LOA.

Proposed Scope for the PINFORM:

The PNGFA intends to undertake a 1 day Workshop in early December, 2010 to basically create awareness and exposing the various potential users to the PINFORM system. The main objective of the workshop should be to get PNGFA to recognize the potential that the system has and the benefits that the system can bring, and hence to adopt the system and formulate a plan to get it improved, commissioned and used to serve the needs of the organization and the industry.

Proposed workshop program on the use of PINFORM model for staff

Day 1.		
9:00-9:15am	Welcome/ Introduction	Director - Forest Policy & Planning.
9:15-9:45	Basic growth theory and models	F. Oavika
9:45-10:00	Development of model parameters	“
10:00 -10:10 break		
10:10-10:30	Running the program	F. Oavika
10:30-11:30	Model menu options	“
11:30-12:30	Use of model – selection of menu options for input of required figures	“
12:00-1:00 break		
1:00-2:00	FIMs data to PINFORM	F. Oavika
2:00-2:30	Interpretation of outputs	“
2:30-3:00	General interactive questions and	All

	discussions relating to the model (including deficiencies, potential uses and also potential users, and suggestions for improvements and other requirements)	
3:00-3:10	Break	
3:10-3:30	General discussions cont'd...	All
3:30-4:00	Assessments and recommendations for further model activities.	Director - Forest Policy & Planning
4:00-4:15	Close	Director - Forest Research Institute

Conclusion

The PNGFA acknowledges that the FAO has funded and assisted many of the developing countries in implementing projects to enhance sustainable forest management and forestry generally. On that note, the PNGFA is grateful for the kind funding assistance towards improving and upgrading some of the existing database systems that it has and looks forward to further collaborative work in enhancing sustainable forest management in Papua New Guinea.