

Forest Monitoring Unit (FMU) in Papua New Guinea Forest Cover Map

Capacity Development Project for Operationalization of PNG Forest Resource Information Management System (PNG-FRIMS) for Addressing Climate Change

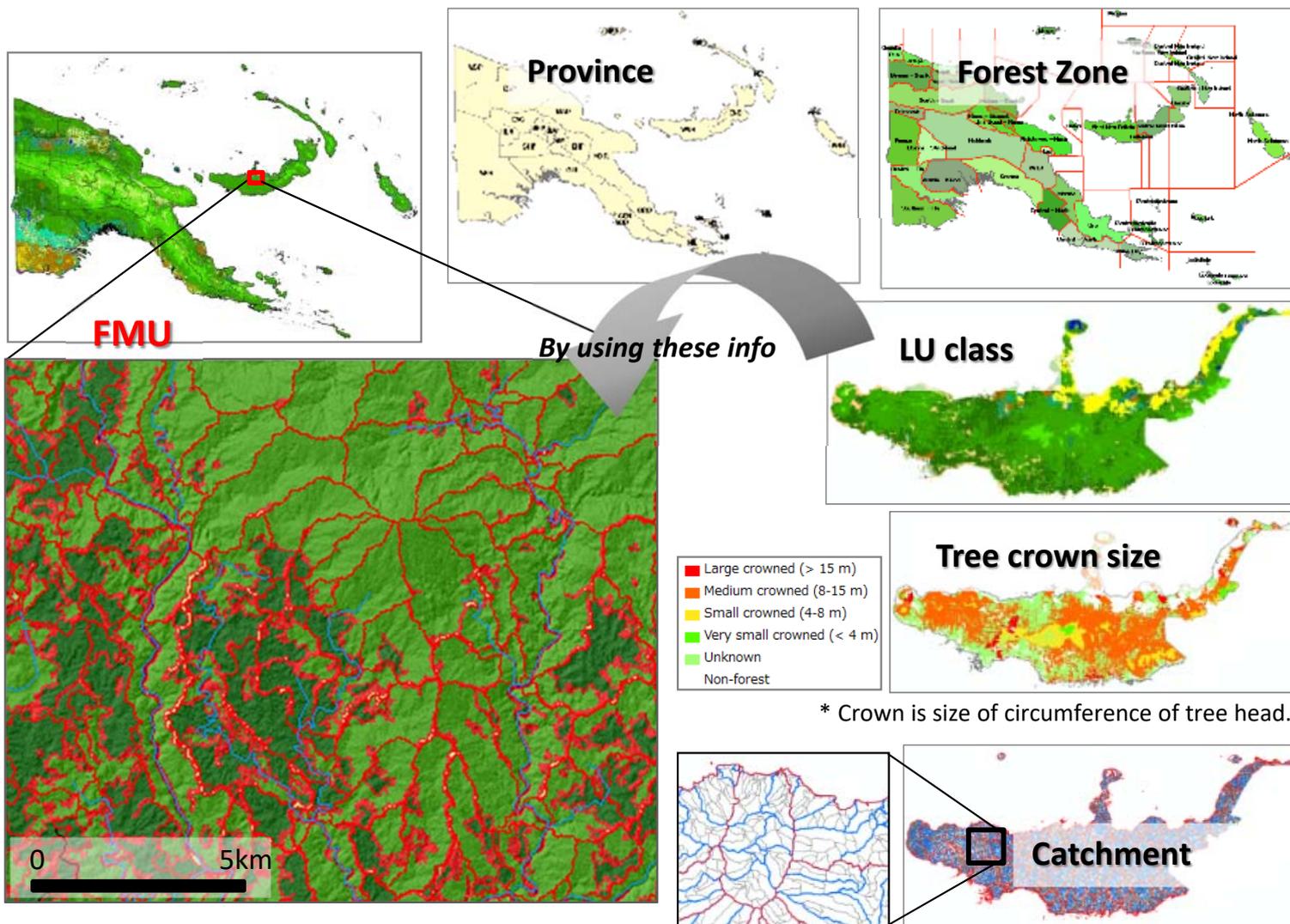
1. Background

National level vegetation map, which was created as at 1975 and updated in 1996, has been used in PNG Forest Authority (PNGFA). A unit of the vegetation map was called 'Forest Mapping Unit (FMU)' on PNG Resource Information System (PNGRIS) and Forest Inventory Mapping System (FIMS). This map caused various practical problems to PNGFA because it was out-dated and the units (FMU) were too large to capture forest conditions including timber volume. Responding to this situation, the PNG Forest Base Map 2012 was developed as a main layer of the PNG Forest Resource Information Management System (PNG-FRIMS) in 2014. A new unit of the Forest Base Map 2012 called 'Forest Monitoring Unit (FMU)' was redefined. This is because this unit is a base unit, which has and could have various information, so that it could be used for calculation of Annual Allowable Cut (AAC) volume and carbon stock, etc. by monitoring forest condition in the units.

2. FMU Definition and Selection Criteria

New 'FMU' was conceived as minimum unit of forest at 'not too small' scale for replacing legacy 'FMU (Forest Mapping Unit)'. The former FMU was 'too large' in relation to current available technology. The new FMU is to be used for monitoring and recording changes of forests on new PNG-FRIMS.

- The following name was decided: **Forest Monitoring Unit** on the Forest Base Map 2012 in the FRIMS
- Criteria used to delineate FMUs:
 - Province,
 - Forest Zone,
 - Catchment,
 - Landuse (LU) class, and
 - Forest type including crown size (see to next page)
- Minimum mapping unit (polygon) size: 1 hectare, while the mapping scale is between 1/25,000 and 1/50,000 for the data development.
- FMU has unique id (FMU_id) attribute, which would be used as a key attribute to link relational database.
- Subsequent forest cover maps to be developed will take over FMUs from the Forest Base Map.



Forest Base Map is divided into FMUs, which is composed of information above and could be added various attribute to monitor forest.

3. References

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