Improving Indonesia's National Forest Inventory

MRV for REDD+ requires more data than is collected in the existing forest monitoring systems. To adapt the existing forest monitoring systems to REDD+, UN-REDD and the Ministry of Forestry are working on improving the National Forest Inventory to allow collection of carbon specific data. The work focuses on two components:
(1) Sampling design and stratification,
(2) Field data collection for 5 forest carbon pools.

REDD+ Implementation

Presidential Regulation 71/2011 Implementation

MR(V) System

Land Use Matrix

NFI

Carbon Accounting System

REDD+ Activity

Deforestation

Degradation

SFM

Conservation

Enhance C stock

Biomass Factor
- Alometry/BEF
- Wood density
- R/S ratio
- Carbon Fraction

Emissions Factors

GHG Inventory

Dead Organic Materials & Soil Factor

Non-Carbon GHG

The Role of NFI in the MRV System

Stratification

The result of the stratification is an inventory mozaic. Each mozaic should be represented at least by three sample plots. This increases the precision of the inventory.

Forest cover /Forest dynamics Phase

Inventory Mozaic

Management type

Forest type

Reporting unit

Stratum

Group of islands forest area

All forest area

Distribution of sample plots in part of **Central Sulawesi**

Field Data Collection

13	14	15	16
9	10	11	12
5	6	7	8
1	2	3	4

25 m

25 m

Remarks:
- necromass measurement sub-plot (5 m x 100 m)
- undergrowth land & litter measurement sub-plot (0.5 m x 0.5 m)
- soil measurement sub-plot (0.2 m x 0.2 m)
- biomass and timber stock sub-plot (25 m x 25 m)

The 5 Carbon Pools:
1. Above-ground biomass
2. Litter
3. Dead wood
4. Below-ground biomass
5. Soil organic matter

UN-REDD PROGRAMME INDONESIA