



### **PNG National Forest Monitoring System**



# Hitofumi Abe Chief Technical Advisor, EU/FAO NFI Project 24<sup>th</sup> February 2016 Asia Pacific Forestry Week



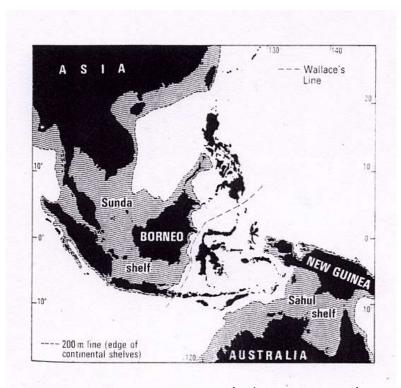






#### Papua New Guinea

- The second largest island after Greenland
- The third largest tropical rainforest after
   Amazon and Congo Basin
- Fauna is significantly different from Asia
- >15,000 plant species, >200 mammals,
  >700 birds species, PNG biota includes 510% of the world's plant and animal species
- World's smallest frog and parrot, and world's largest butterfly
- •97% land is customary own



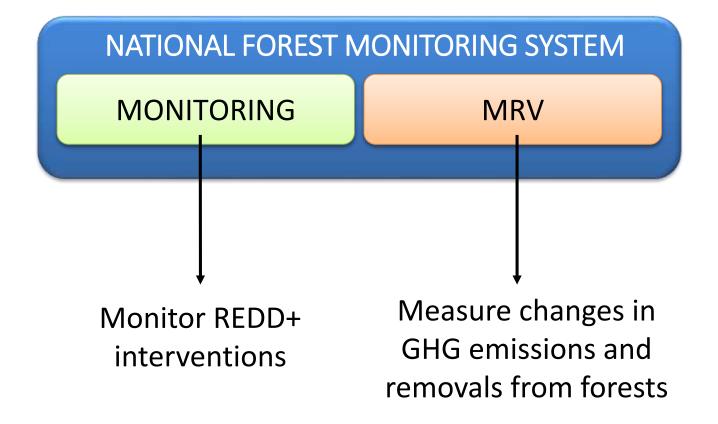
(Whitmore 1984)

# Four elements required for REDD+ results based payment by UNFCCC

**National Forest National** Strategy &/or **Monitoring Action Plan System** Safeguards **Forest Information** Reference **System** Level

#### What is NFMS?

**National Forest Monitoring Systems** 



### NFMS Methodological Guidance

Rules and Modalities

#### Decision 1/CP.16 Cancun

A robust and transparent national forest monitoring system ..... with, if appropriate, subnational monitoring and reporting as an interim measure, ..... national circumstances, ....

...according to national circumstances and capabilities, robust and transparent NFMS that:

- (i) Use a combination of remote sensing and ground-based forest carbon inventory approaches when estimating anthropogenic forest-related greenhouse gas emissions by sources and removals by sinks, forest carbon stocks and forest area changes (Measurement) and are based on the most recent IPCC guidance
- (ii) Provide estimates that are transparent, consistent, as far as possible accurate, and that reduce uncertainties (Reporting)
- (iii) Are transparent and their results are available and **suitable for review** as agreed by COP (**Verification**)

#### Decision 11/CP.19 Warsaw

Modalities for NFMS (sub-national NFMS as an interim measure)

National Forest Monitoring System

**Decision 4/CP.15 Copenhagen**General
methodological

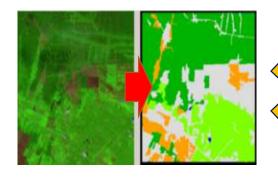
guidance

- Be guided by the most recent IPCC guidance and guidelines.
- Provide data and information that are transparent, consistent over time, and are suitable for measuring, reporting and verifying
- Consistent with guidance on MRV of NAMAs by developing country Parties agreed by the COP
- Build upon existing systems, as appropriate
- Enable the assessment of different types of forest in the country, including natural forest, as defined by the Party
- Be flexible and allow for improvement
- Reflect, as appropriate, the REDD+ phased approach

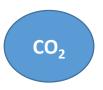
#### Decision 14/CP.19 Warsaw

- Requests developing country Parties seeking to obtain and receive payments for results-based actions, when submitting the data and information... through the biennial update reports, to supply a technical annex; [on a voluntary basis]
- Annex: Elements to be included in the technical annex
- Summary information for each corresponding assessed FREL/FRL
- Results in tCO2e/year, demonstrate that consistent with the assessed FREL/FRL
- A description of national forest monitoring systems and the institutional roles and responsibilities for measuring, reporting and verifying the results
- Necessary information that allows for the reconstruction of the results

#### MRV for REDD+









Area change data from satellite remote sensing

Forest carbon stock change data from a national forest inventory

Inventory of greenhouse gas **emissions** from the forest sector

**ACTIVITY DATA** 

EMISSION FACTOR

**EMISSIONS ESTIMATE** 



PNG MRV

# Collect Earth Terra PNG

(and also Hansen data)

#### **NFI**

(and also PSP data & IPCC guideline)

**TRANSPARENCY** 

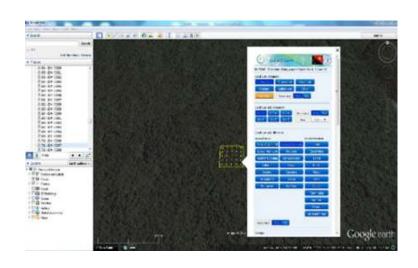
#### Web-portal

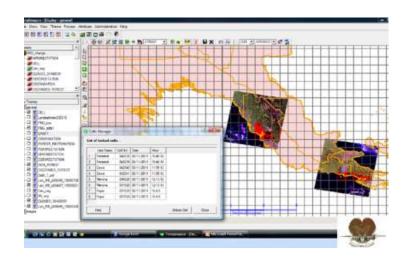
for disseminating information to ensure transparency



#### ACTIVITY DATA

Robust system with in-country verification mechanism consist of two different Remote Sensing monitoring operated by two different government agencies (CCDA & PNGFA).





#### **Collect Earth**

#### Point sampling

2013 assessment completed. Historical forest and land use assessment is planned in 2016.

#### Terra PNG

#### Wall to wall mapping

2014 assessment completed two days ago (1st Feb 2016)!!

Historical mapping (2000, 2005 & 2010) is planned in 2016.

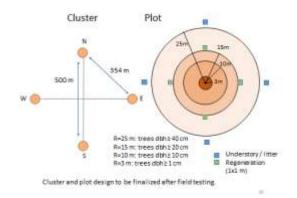






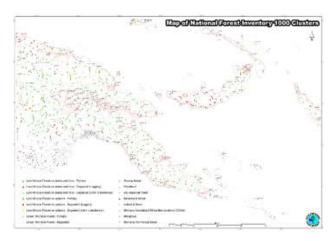
## EMISSION FACTOR

Trainings conducted. Methodologies established. Field measurement commenced in December 2015. Two clusters out of 1,000 have been assessed so far!













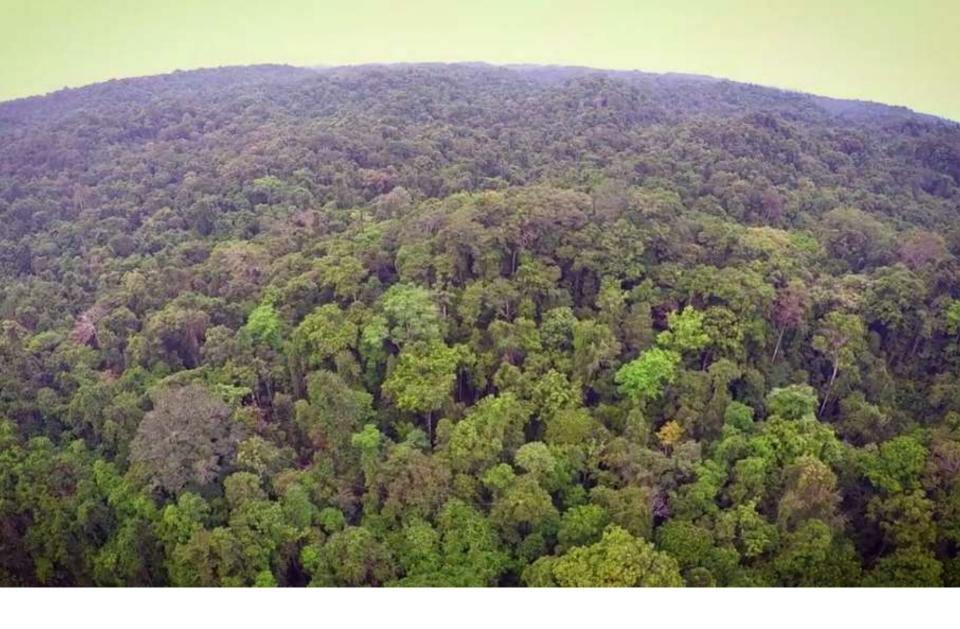
# PNG MRV

#### **TRANSPARENCY**

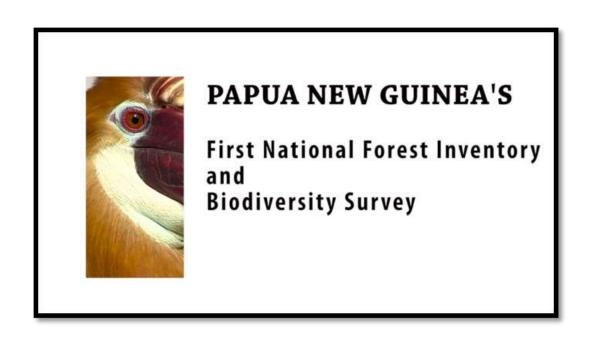
Web-portal was established for disseminating forest and land use information to public for ensuring the transparency of PNG REDD+ process. Web-portal will be launched by the Prime Minister on 9<sup>th</sup> March.

Link: <a href="http://178.33.8.126/portal/">http://178.33.8.126/portal/</a> Use name: png Password: pngportal





Thank you



http://www.youtube.com/watch?v=wKsb-4IjSM4