

NATIONAL REDD+ IMPLEMENTATION: MRV

Elizabeth Philip

REQUIREMENTS FOR REDD+ IMPLEMENTATION

- National REDD+ Strategy/Action Plan
- Reference level and reference emissions level
- National Forest Monitoring System
- Information system on how REDD+ safeguards are respected and addressed.
 - Governance
 - Monitoring of conversion of natural forest to forest plantation
 - Free Prior and Informed Consent (FPIC)
 - Biodiversity
 - Risk and irreversible actions
 - Benefit distribution system
- Measurement, Reporting and Verification of result based actions.

REDD+ FOR MALAYSIA

- LULUCF determines the level and extent of national level mitigation actions to be taken.
 - Ensures at least 50% of national land mass is forested and intact. – implementation of NPP
 - Ensures water supply for both domestic and industrial use
 - Ensures soil fertility for crop production
 - Community adaptation to climate change
-

REDD+ IMPLEMENTATION

- ✓ Implemented at state level but accounted and reported at national level
 - ✓ Management : How is REDD+ implemented, reported and verified
 - ✓ Scope: What activities are considered
 - ✓ Reference: How is the emissions reduction calculated
 - ✓ Financing: Where does the money come from
 - ✓ Benefit: Where does the money go to?
 - ✓ Safeguards – How environment, governance and social integrity ensured?
-

PROGRESS AT NATIONAL LEVEL

- ✓ Baselines and reference levels
- ✓ MRV & National forest monitoring
- ✓ Institutional arrangement
- ✓ Law and policy
- ✓ Sustainable financing
- ✧ Results based payments
- ✧ REDD safeguards
- ✧ Verification of result based actions



**National
REDD+
Strategy**

BASELINE INFORMATION

- ✓ Changes in forest cover (1990-2010)
 - ✓ Definitions of forest, deforestation and forest degradation
 - ✓ Drivers of deforestation and forest degradation
-

DEFORESTATION

Human induced permanent conversion of forest land to non-forest. All of the forest is cut/removed and the land used for another purpose. Forest refers to Permanent Forest Reserve, Protected Area or State land/Multipurpose forest. Temporary change in land use, like one rotation tree crop (up to 25 years) within forest reserves are not considered as deforestation.

FOREST DEGRADATION

A direct long term (10 years), human-induced decline in forest canopy cover upto 30% , and/or at least 50% of existing forest carbon stocks and not qualifying as deforestation.

- **ITTO 2005:** *a direct human-induced loss of forest values (particularly carbon), likely to be characterized by a reduction of tree crown cover. Routine management from which crown cover will recover within the normal cycle of forest management operations is not included.*
- **IPCC 2003a:** *a direct human-induced loss of forest values (particularly carbon), likely to be characterized by a reduction of tree cover. Routine management from which crown cover will recover within the normal cycle of forest management operations is not included.*

DRIVERS OF DEFORESTATION

- Economic growth
 - Settlements
 - Infrastructure development including highway, gas pipeline, reservoir, power line.
 - Population growth
 - Oil palm expansion
 - Mining – *not a significant driver*
-

DRIVERS OF FOREST DEGRADATION

- Forest fragmentation
 - Encroachment
 - Agriculture
 - Settlement
 - Tree crops
 - Open area
-

DEGRADED FOREST WITH REDD+ POTENTIAL

Region	Degraded area within PRF/PA (ha)
Peninsular Malaysia	184,325.55
Sabah	383,414.72
Total	567,740.27

Source: JPSM, 2011 and JP Sabah, 2012

MRV – National Forest Monitoring System

- Monitoring
 - Short-term – geospatial images
 - Long-term
 - National Forest Inventory
 - Methodologies- standardised between the regions.
 - Flexibility in forest stratification
-

MRV – National Forest Monitoring System

Agencies involved:

- JPSM, FD Sabah, FD Sarawak, ARSM
- DOA, P.Malaysia
- DOA, Sabah
- Land and Survey Dept, Sarawak
- Margin: MPOB and LGM

MEASUREMENT

- Allometric equation
 - Local expansion and emission factors
 - Long term ecological plot assessments
 - Growth and yield plots
 - National Forest Inventory
 - IPCC 2006 Guidelines – source and sink assessment
-

REFERENCE LEVEL

- a. Assessment of forest change pattern
 - b. Assessment of significant drivers of forest change
 - c. Historic and forward scenarios - deforestation
 - d. Changes in carbon stocks in conservation areas
 - e. Changes in carbon stocks due to changes in harvesting rate
-

ACKNOWLEDGEMENT

- NRE
- BBP
- PASPI
- FRIM
- JPSM
- FD Sabah & Sarawak
- FD Johore
- CEBLAW, UM
- ARSM
- DOA P.Malaysia & Sabah
- UNDP
- EPU
- BHC