

# MRV Progress

UN-REDD Policy Board #3, 30 October 2009

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M R<sub>v</sub>

# Outline

1. Some principles for the MRV work
2. Support to National MRV
3. Systematic review – Engaging with science
4. Remote sensing data – now for all

## UN-REDD delivers on MRV for REDD

- at **Country** level
- at International/**Global** level
- with **Partners**
- through **Normative** role
- through **Implementation** on the ground

# Some MRV outputs

UN-REDD  
PROGRAMME

## Role of satellite remote sensing in REDD

by Peter Holmgren  
UN-REDD PROGRAMME  
13 October 2008



Food and Agriculture Organization of the United Nations  
United Nations Development Programme  
United Nations Environment Programme

UN-REDD Programme  
MRV Working Paper 1  
2008



## Building Confidence in REDD

*Monitoring Beyond Carbon*  
Executive Summary

Global Witness October 2009

## Measuring and Monitoring Terrestrial Carbon

*The State of the Science  
and Implications for Policy Makers*

August 2009

Prepared by Tanja Havemann for

The Terrestrial Carbon Group

[www.terrestrialcarbon.org](http://www.terrestrialcarbon.org)

THE  
HEINZ  
CENTER

and

UN-REDD  
PROGRAMME

The United Nations Collaborative Programme  
on Reducing Emissions from Deforestation and  
Forest Degradation in Developing Countries



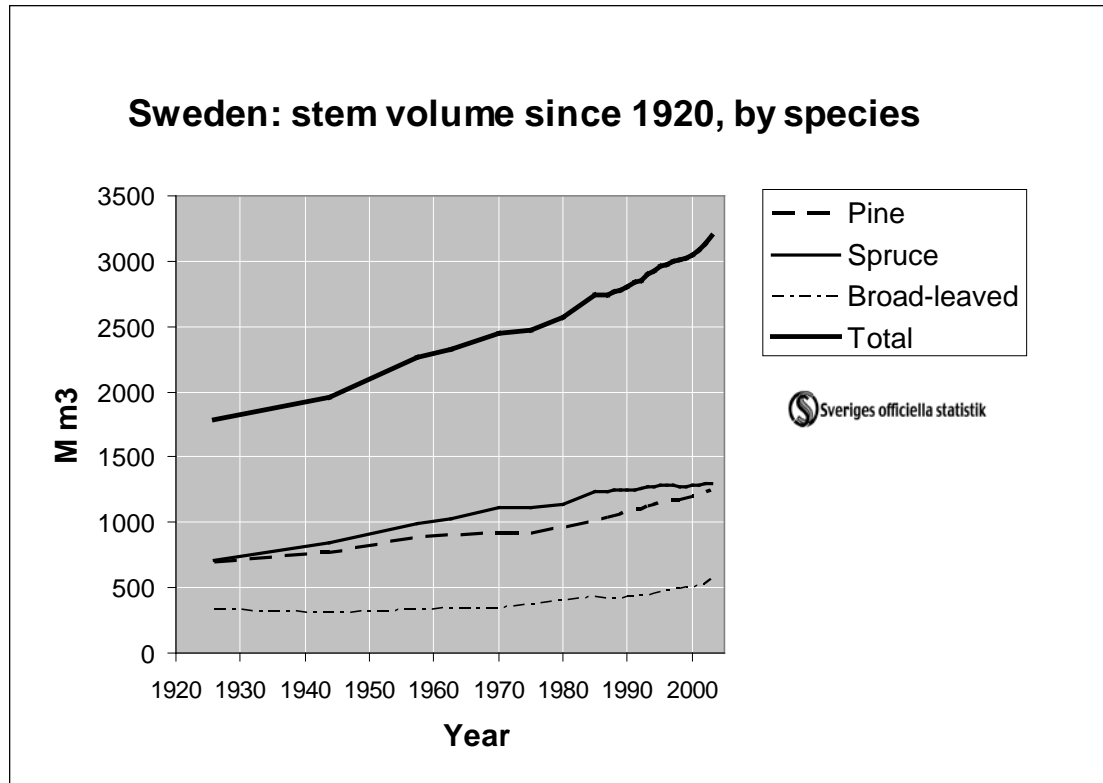
[www.un-redd.org](http://www.un-redd.org)

UN-REDD  
PROGRAMME

# 1. Some principles for the MRV work

- Meet MRV needs for **Carbon...**
  - Not rocket science..
  - ..but requires methodological considerations and improvements
- .. and **beyond Carbon**
  - REDD implementation requires broader information on natural resources, their uses and users , drivers of deforestation and change, governance ... -> policy options
- **Capacity**
  - Long-term Institutional Effort
  - Stakeholder engagement
- **Other Success Factors**
  - Integration with existing monitoring systems
  - Consider monitoring needs beyond REDD
  - Robustness
  - Transparency

# Long-term institutional effort



## 2. Support to National MRV

- Priority for UN-REDD countries, as seen in developments of country programmes
- Agency teams engaged with countries
- Consultations
  - e.g. meeting between UN-REDD country experts  
10-11 Sep
- Development of practical options
  - building on IPCC GPG



# Proposal for C-MRV for REDD+

## Proposal for a National Carbon Monitoring System for REDD+

### MODULE 1:

#### Background issues & Lesson learned

- UNFCCC reporting requirements
- Legal requirements,
- Definitions system under UNFCCC
- etc.
  
- Review of National GHGs inventories (Annex I countries and EU)
  
- Summary tables for comparison and evaluation of the processes and their progress (i.e. are the countries moving forwards? Which are the main difficulties encountered in reporting? Which were or are the most difficult data to collect? Etc.)

### MODULE 2:

#### Systems for data input

- **Guidelines on NFI (National Forest Inventory)**
- **Guidelines on RS land monitoring system to assess activity data**

# 3. Engaging with science

- Right answer? Right question?
  - “People running tape measures around trees. This is what we’ve got to get away from.” (Nature, **October 2009**)
  - “The inventory includes 13.500 sample plots and 10.400 of these plots are inventoried in the field” (Swedish National Forest Inventory, **October 2009**)
- Answers for today or for a distant future?
  - Some remote sensing technologies are experimental
- How can we make best use of science in practical MRV work?

# Systematic review of evidence



## Review question

- How effective are systems that estimate carbon stock/changes for large geographic areas?

## Sub-questions

- Actual Measurements
- Estimation Models / Functions
- Sampling approaches
- Remote sensing extrapolations



# 4. Remote Sensing Data Supply



# Remote Sensing Data

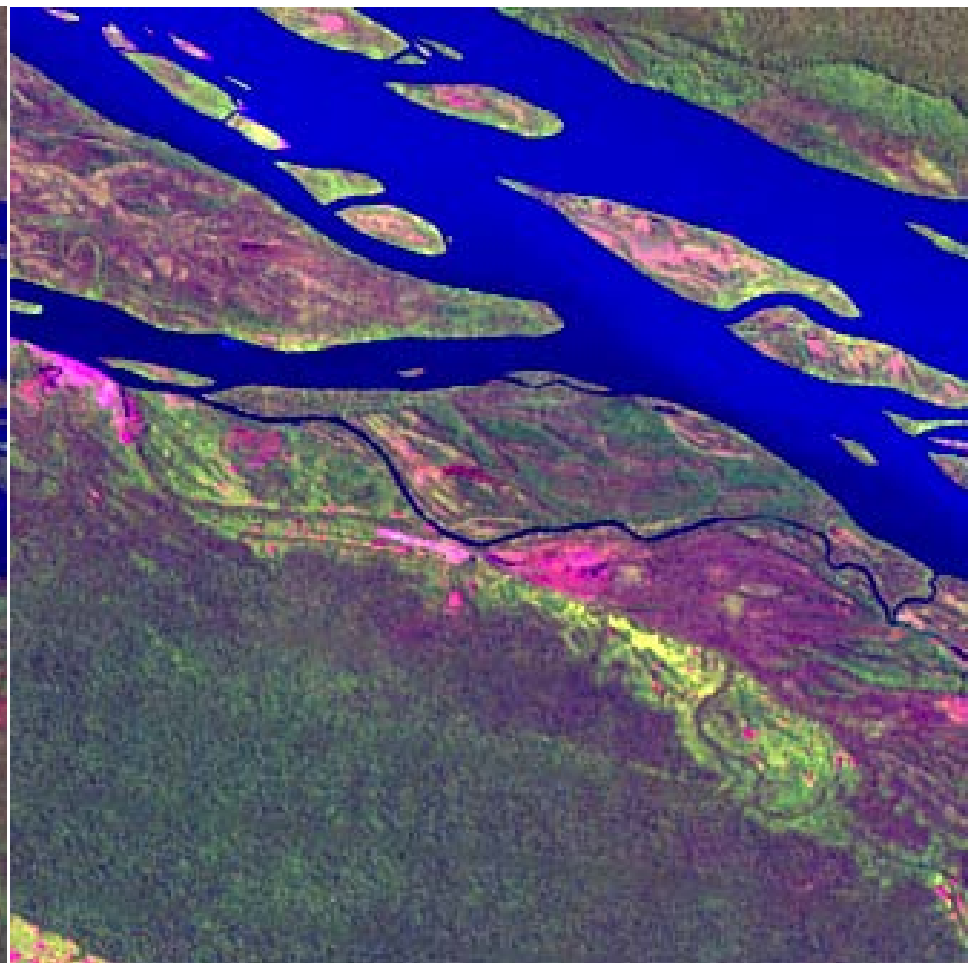
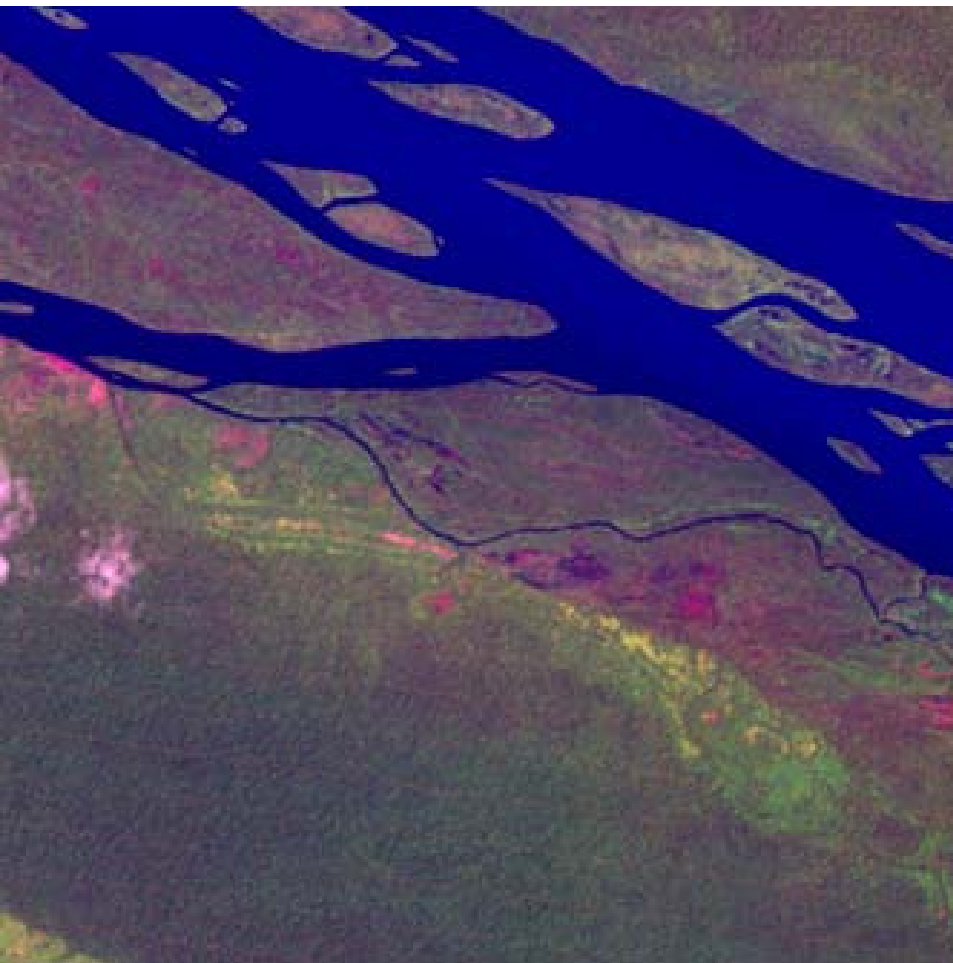
- Should be
  - Free (part of infrastructure, accessible to all)
  - Frequent (draw from available satellite systems)
  - Useful (standardized deliverables, ready-to-use)
- Framework for data now launched by FAO
  - Designed for Global FRA
  - Can serve national monitoring
  - Included in UN-REDD Country Programmes

# Global 1x1 degree grid (13 000 sites)



- [www.fao.org](http://www.fao.org)
- Google Earth

# DRC 1990 - 2005



1991 - 2002





# Conclusions

1. MRV scope is **broad**
2. Need for **guidance** on national MRV options
3. Draw **the right** conclusions from science
4. Lower the threshold for **data access** and analyses
5. **Robust and Transparent** are keywords for MRV