

# MRV Country Presentation (Vietnam)

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

**UN REDD Programme**



# Country information

- Total country area: 330.000 sq. km (33 million Ha);
- Forest area in 2008: 13.1 mill. Ha (38.7%) of which
  - Natural forests: 10.3 mill. Ha
  - Forest plantation: 2.8 mill. Ha
- Forest land area: 16.2 mill. Ha (49% total land mass):
  - Production forest: 8.34 mill. ha
  - Protection forest: 5.68 mill. ha
  - Special-use forest: 2.16 mill. ha

# Country information

## **Forest ecosystems:**

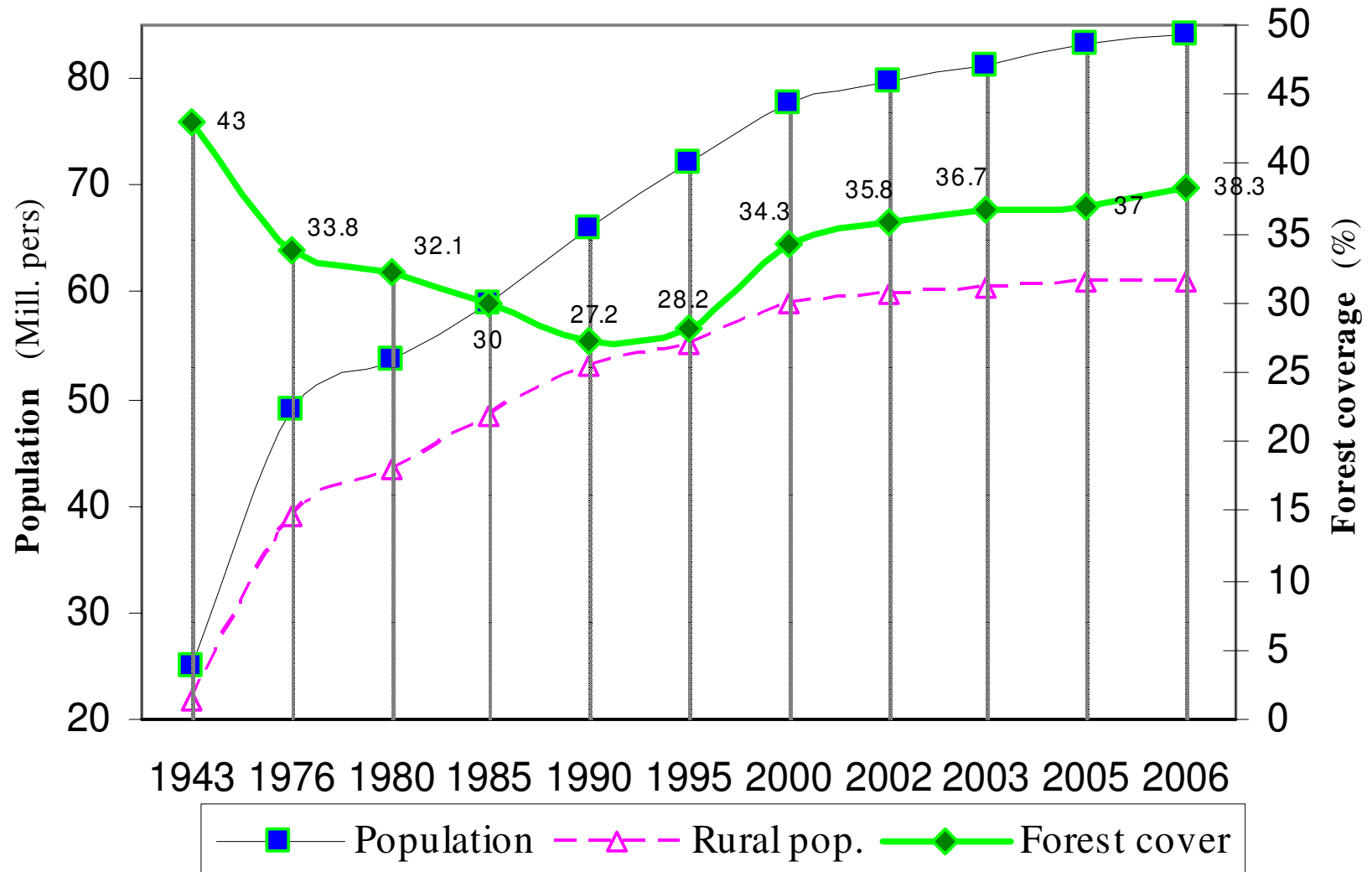
- A wide range of natural forests;
- Tropical rain forest in most regions,
- Sub-tropical forest in the North and at high altitudes,
- Mangrove forest along coastline (more than 3000 km long)
- Melaneuca forests in the deltas;

# Country information

## **Data sources:**

- NFA: every 5 year & since 1991
- General Forest Monitoring: 1983, 1987, 1993, 1997
- General Land use Monitoring: every 5 years since 1990
- Methods: a combination of RS & field surveys
- **Classification of forest vegetation:**
  - National classification system: German/Russian
  - Newly revised in 2009 to comply with existing international systems

# Forest cover changes



# NFIs and national assessment/monitoring programmes

- Year and coverage of first NFI: 1983/1986
- Years and coverage of later NFIs: 1991
- Year and coverage of last NFI: 2005 and on-going 4<sup>th</sup> Cycle (2006-2010)
- Average frequency: 5 years
- Sampling plots: 4200 vs 2100, systematically distributed over forestland (not in other lands)

## **Institutional arrangement:**

- Annual monitoring and reporting: 11,000 forest rangers

~~• NFA: FIPI and several other agencies~~

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# NFIs design

- National manual/Guideline on NFI have been developed since 1991 and improved over time;
- Statistical design in the last NFI: No, it was systematically distributed;
- It is changed:
  - First cycle: tested
  - Second & third cycles: increased to improve accuracy
  - Fourth cycle: Reduced as the high-res RS data is applied

# Remote sensing survey

- Application of RS survey:** Yes, it is widely applied;
- Latest use of RSS in NFI:** SPOT5, wall-to-wall forest cover mapping;
- **Year:** 91-95: Landsat TM; 96-00: SPOT; 2001-05: Landsat ETM; 2006-2010: SPOT5
- Purposes of RS application:**
  - Forest (cover) Area Estimates
  - Deforestation and degradation
  - Reforestation planning
  - Forest fire prevention: A MODIS Station



# Forest carbon estimates

Allometric equation: regional/forest type and forest species;

Do you have models to estimate carbon emission and carbon stock? No, we are testing now: JICA, Finland, GTZ, AusAID, USAID;

What actions to establish a MRV system?

- Political support/GoV policies & Part. of Int. Initiatives;
- Revising and strengthening the NFI: classification syst., sample plot design, methods – FAO supported project;
- Capacity building & Financial investment;

~~FOMIS: Data Mgt & Sharing (Finland)~~  
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# Conclusion

- NFI has been conducted quite long time on regular basis, wall-towall mapping;
- A combination of field measurement and RS survey;
- Good infrastructure and capacity;
- Usable historical forest data;

BUT

- Current NFI is not designed for REDD;
- Need to improve the NFI & capacity;
- Effective institutional arrangement in forest management and NFI
- MRV needs to be established ASAP