

# **DESIGNING A NATIONAL REDD STRATEGY:**

## **Detecting and Responding to drivers of deforestation and forest degradation**

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# Overview

1. Implementation of REDD in Vietnam:  
The government point of view and first actions
2. Designing the National REDD Program
3. Forests dynamics and detecting drivers
4. Responding to drivers of deforestation and forest degradation

# **I. Implementation of REDD in Vietnam**

# 1.1 Points of View

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- **Vietnam is identified as one of 5 most severe affected by CC;**
- **Not only adaptation but also appropriate mitigation actions will be taken;**
- **National Target Program to Respond to Climate Change (NTP RCC) in Dec 2008. Estimated costs for the period from 2009-2015: \$1,2 bil and half from International Dev. Partners**
- **MARD's AP to respond to CC;**

# **1. Point of view**

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- REDD is one of the activities in the NTP RCC and MARD's AP to respond to CC;**
- REDD is one of key sub-programs of the Sustainable Forest Management Program of the NFDS**
- REDD implementation contributes to achievement of the objectives of current environment and socio-economic development strategies, policies;**
- Therefore, NRS should be designed to be consistent with and to support to archive the Goals of the NTP, AP, NFDS and other ongoing progs;**

# 1. Point of view

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- **Country-led, national-based (programmatic) approach to avoid in-country leakage BUT also accepts project-based option (learning by doing);**
- **Takes long time and requires substantial support from the GoV and donor community and with the active participation of various stakeholders;**
- **Mobilization of all potential resources: Gov, donors, private sector and local communities with the integration into existing socio-economic development progs;**
- **Maximal utilization of the comparative advantages of the International Development Agencies and experts;**

# **1. Point of view**

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- A combination of market-based and traditional mechanisms;**
- REDD implementation should be well-organized in collaborative, coordinated, transparent and effective fashion;**
- Promote a close cooperation with countries in the LMB and ASEAN.**

## **1.2 First actions**

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- Submitted the country view on REDD methodology and implementation process to the UNFCCC Secs;**
- The NJP was approved by the UN-REDD Policy Board Meeting in March 2009; the DPO will be approved by PM within few weeks;**
- The R-PIN was approved by the FCPF in July 2008, the discussion with the WB is under process;**
- Organized various stakeholder meetings;**



## **1.2 First actions**

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- Donor's coordination: Institutional matrix, Donor coordination meetings, cooperation with ongoing projects;**
- National Steering Committee (MONRE, MARD, other line ministries) to respond to CC chaired by Prime Minister;**
- MARD's SC committee for AP chaired by Minister;**
- Ad-hoc REDD Technical Working Group;**
- CC Network among Gov and NGOs chaired by CARE;**
- Organized numerous national and regional technical training workshops;**
- CC- Public and private partnership (Ford Foundation);**

## **II. Designing the National REDD Program**

## **2.1 Why ?**

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- **REDD is new and complex, its implementation requires substantial investment from GoV and donors;**
- **Requires closed sectoral and multi-lateral cooperation;**
- **NRS is a basic legal framework to ensure the REDD implementation REDD projects and activities in collaborative, coordinated, transparent and effective manner; and**
- **Be designed to be consistent with and supplemented to the on-going environmental protection and socio-economic development strategies and policies in the participating country**

## Proposed Components of the National REDD Strategy

**R**eference scenario formulation (N &R levels)

**E**ngagement with stakeholders at a various levels  
(stakeholder dialogues)

**A**ssessment of benefits and impacts

**D**evelopment of participatory C-stock monitoring,  
assessment, reporting and verification system

**D**esign of payment system

**D**esign roadmap, institutional arrangement and mgt.  
system (Report, review and evaluate the performance)

**C**apacity building for relevant stakeholders

# **III. Forests dynamics and major driving forces in Vietnam**

## **3.1 Why identification of drivers is important?**

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- LUCC, in general, and deforestation and forest degradation, in particular, is the consequence of complex interactions between humans and the environment over space and time;**
- Identification of the driving forces will provide convincing and feasible policy measures and priorities to minimize and halt the deforestation and forest degradation;**
- Enable to estimate reliable costs & benefits – to develop a feasible and practical investment planning**

## **3.2 Brief introduction on forest in Vietnam**

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- Hilly and mountainous regions account for  $\frac{3}{4}$  of Vietnam's total natural land;**
- Vietnam has coastal lines more than 3,000 km long;**
- Most of the mountainous and coastal wetland areas were formerly covered by a wide range of natural forests: tropical rain forest in most region, sub-tropical forest in the north and at high altitudes, mangrove forest along coastline, forests in peatland in the deltas;**
- Forests are home to over 25 million people, most of them belong to ethnic minority groups and they are the poorest of the poor.**

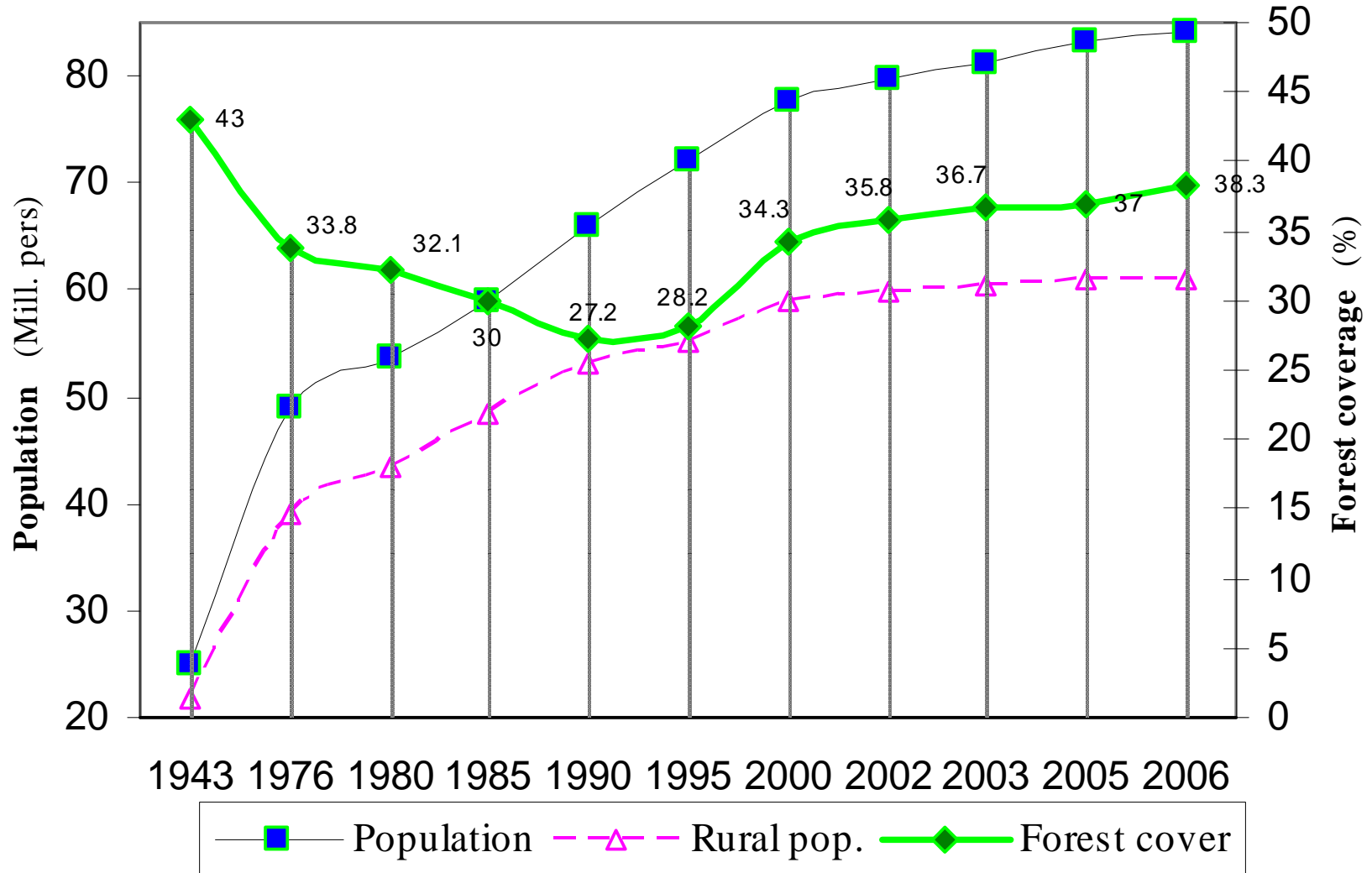
## 3.3 Have deforestation & forest degradation occurred in Vietnam?

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- Forest cover has changed dramatically and dynamically **over the time and space**, especially from the country reunification in 1975 up to date;
- Forest cover increased from 28% (1995) to 38.7% (2008) BUT the changes are **not always** in progressive and the same in all regions;
- Forest expansion due to afforestation with fast growing species, short rotation, one canopy layer and low carbon stock;
- Forest quality is continuously degraded: Area of primary forest reduced from 3.84 (1990) – 0.84 mill ha (2005) or 29 900ha/year;



# Forest cover changes



## 3.4 How to measure?

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- **Definitional issue: forest degradation (timber vs C-stock);**

- **Measurement:**

***Deforestation: straightforward***

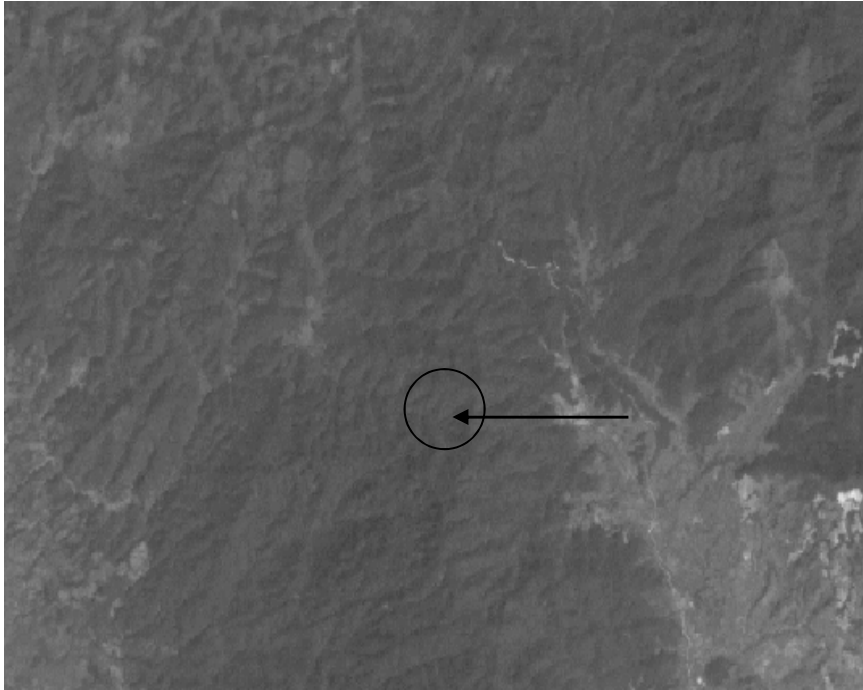
***BUT forest degradation: complex***

- **RS is useful tools but not all – a combination of RS (*various sensors*) and field survey;**
- **A combination of centralized and participatory approaches;**

# How VN did?

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- **National Forest Inventory, Monitoring and Assessment Prog (NFIMA): every 5 year and started since 1991;**
- **Measurement: a combination of RS (*various sensors*) and field survey (2100 PSPs)**
- **Regular reporting system from forest ranger at commune level to provincial and National levels**



### **Landsat TM**

**Acquired date :** 17 - 10 - 2001

**Forest Type:** closed evergreen  
broadleaved forest

**Location:** Kon Ha Nung - Gia Lai

**Altitude :** 1,480m

**Description:** Dark brown color,  
homogenous structure, fine texture

**Distribution:** far away from residential  
areas and paved roads.



### **Field Photo**

**Forest type:** closed evergreen  
broadleaved forest (IIIA3)

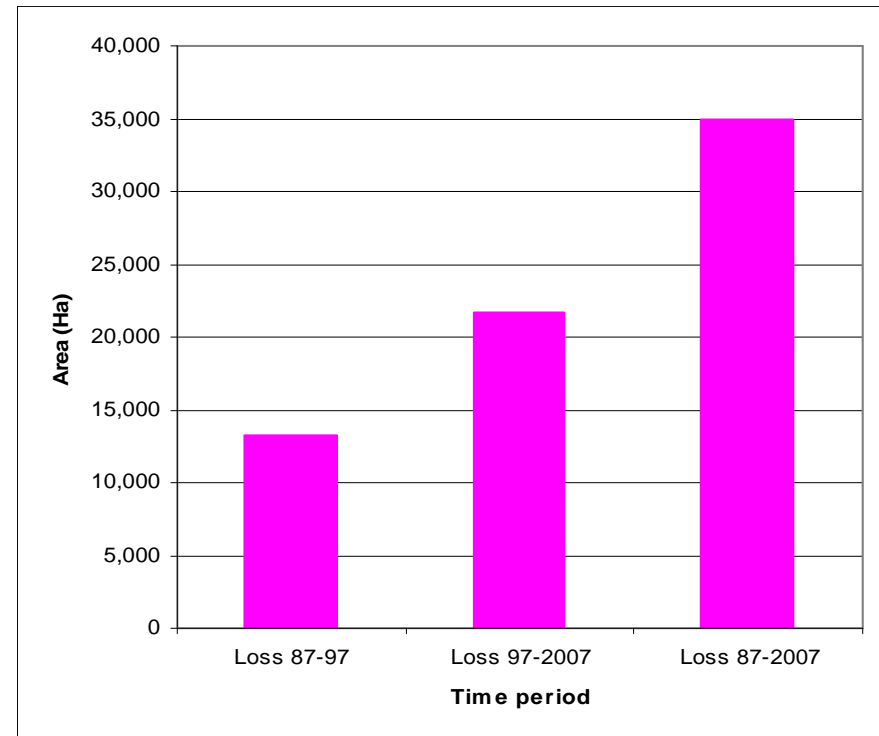
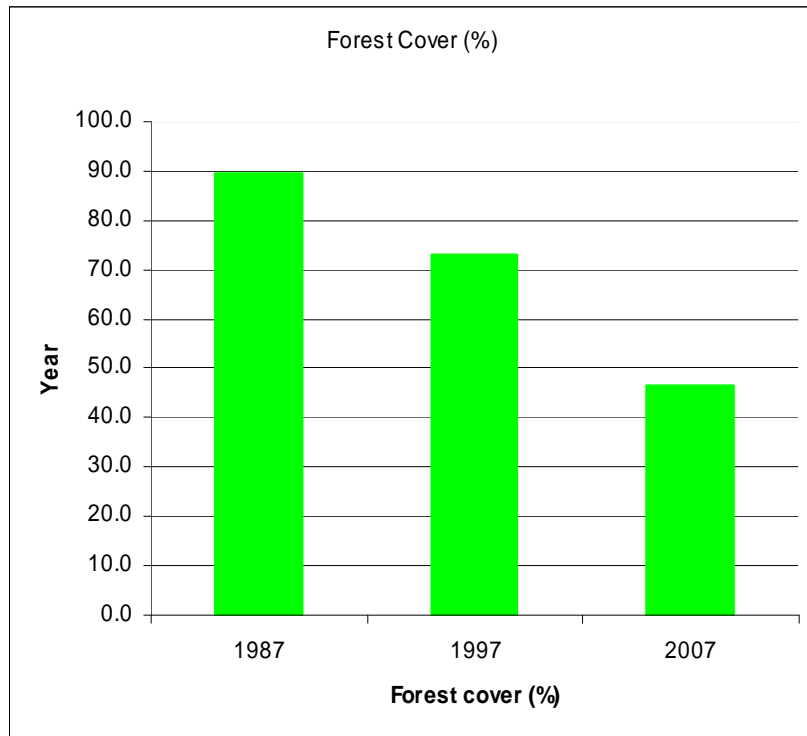
**Location:** Kon Ha Nung Forest Enterprise

**Crown cover:** 0,8

**Tree composition:** Sen, Hoang dan, Gioi,  
Re, Thong nang

**Forest parameters:** H = 19m, G = 19m<sup>2</sup>, D  
= 27 cm, M = 200 - 230 m<sup>3</sup>

# Natural deforestation in 1 District in the Central Highlands



Total area of district: 81.500 Ha

Forest loss 1987-1997: 13.200 Ha

Forest loss 1997-2007: **21.700** Ha

## 3.5 The drivers & its strength?

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- Key questions:
  1. WHAT kind of change ?
  2. WHERE did it change ?
  3. WHEN did it change?
  4. HOW did it change ?
- **What factors** drive deforestation and forest degradation?
- **Magnitude and the nature** of the processes leading to def. and forest degradation?

## 3.5 The drivers & its strength?

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- Deforestation and forest degradation are the consequence of complex interactions between humans and the environment over space and time;
- Numerous methods (**social vs natural, spatial vs non-spatial**) have been developed but each has its own merits and weaknesses;
- A need to examine deforestation and FD using a combination of several methods with support of multidisciplinary data in a spatially explicit fashion;
- Length of investigating period and intervals?

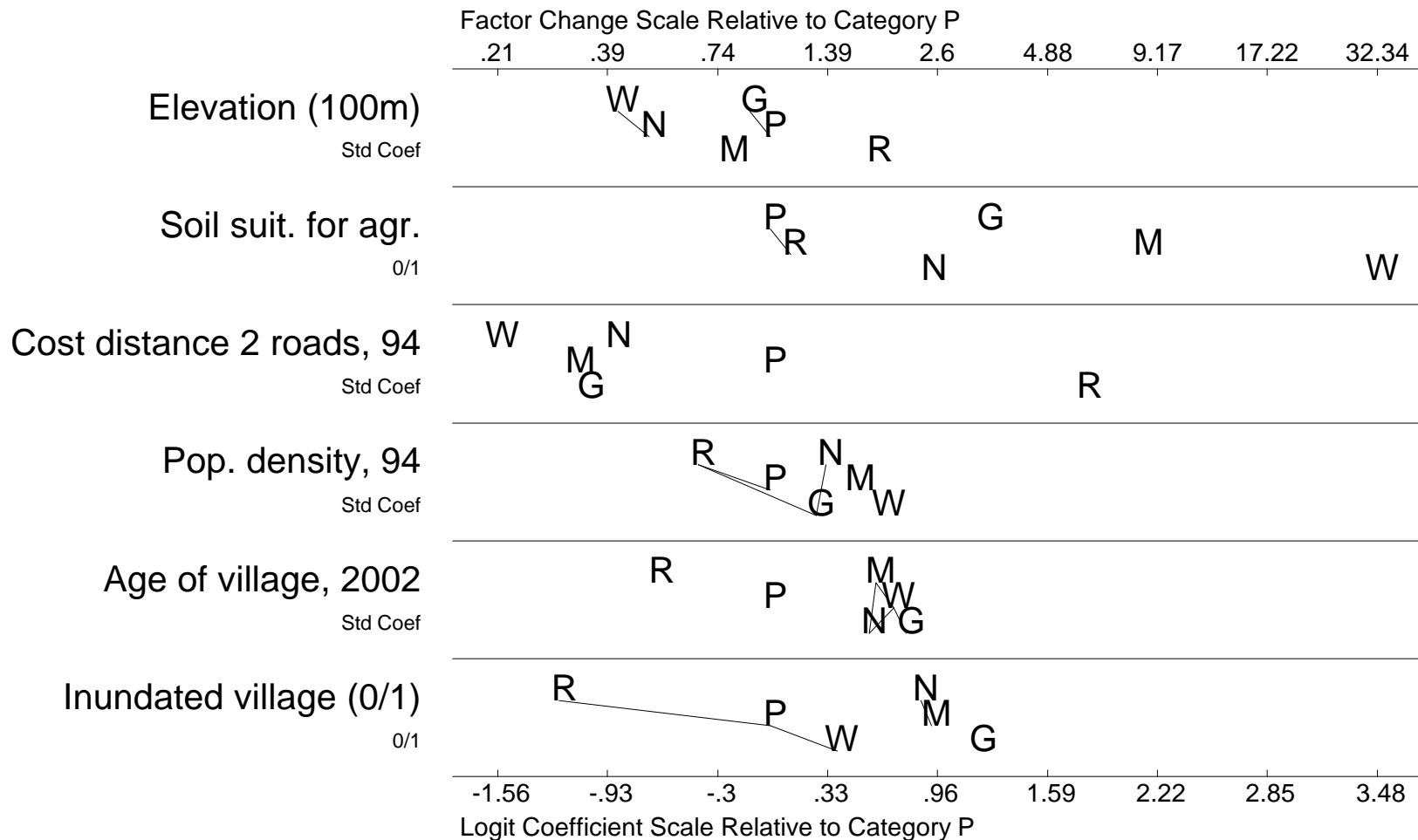
# Areal vs geo-referenced LU changes

		Land use 1989 (ha)							Total
		Rich forest	Poor forest	Young forest	Grass	Paddy fields	Mixed crops	Water-bodies	
LU 1994	Rich forest	20134	7						20141
	Poor forest	18875	25521	19	2				44417
	Young forest	431	6059	3997	2040		2339		14866
	Grass	2779	14460	4315	22838		20867		65259
	Paddy fields	14	116	28	104	2097	651		3010
	Mixed crops	4415	15112	5153	18000	18	31307	1	74006
	Water-bodies	54	317	210	129	136	361	5947	7154
<b>Total</b>		<b>46702</b>	<b>61592</b>	<b>13722</b>	<b>43113</b>	<b>2251</b>	<b>55525</b>	<b>5948</b>	<b>228853</b>
Change (ha)		26568	36071	9725	20275	154	24218	1	
Change (%)		56.9	58.6	70.9	47.0	6.8	43.6	0.0	



# Example of a Land-rent model

Ratio of odds of selected explanatory variables, Model 2002



R rich forest, P poor forest, N newly regenerated forest, G grass, W wet rice, M mixed crop

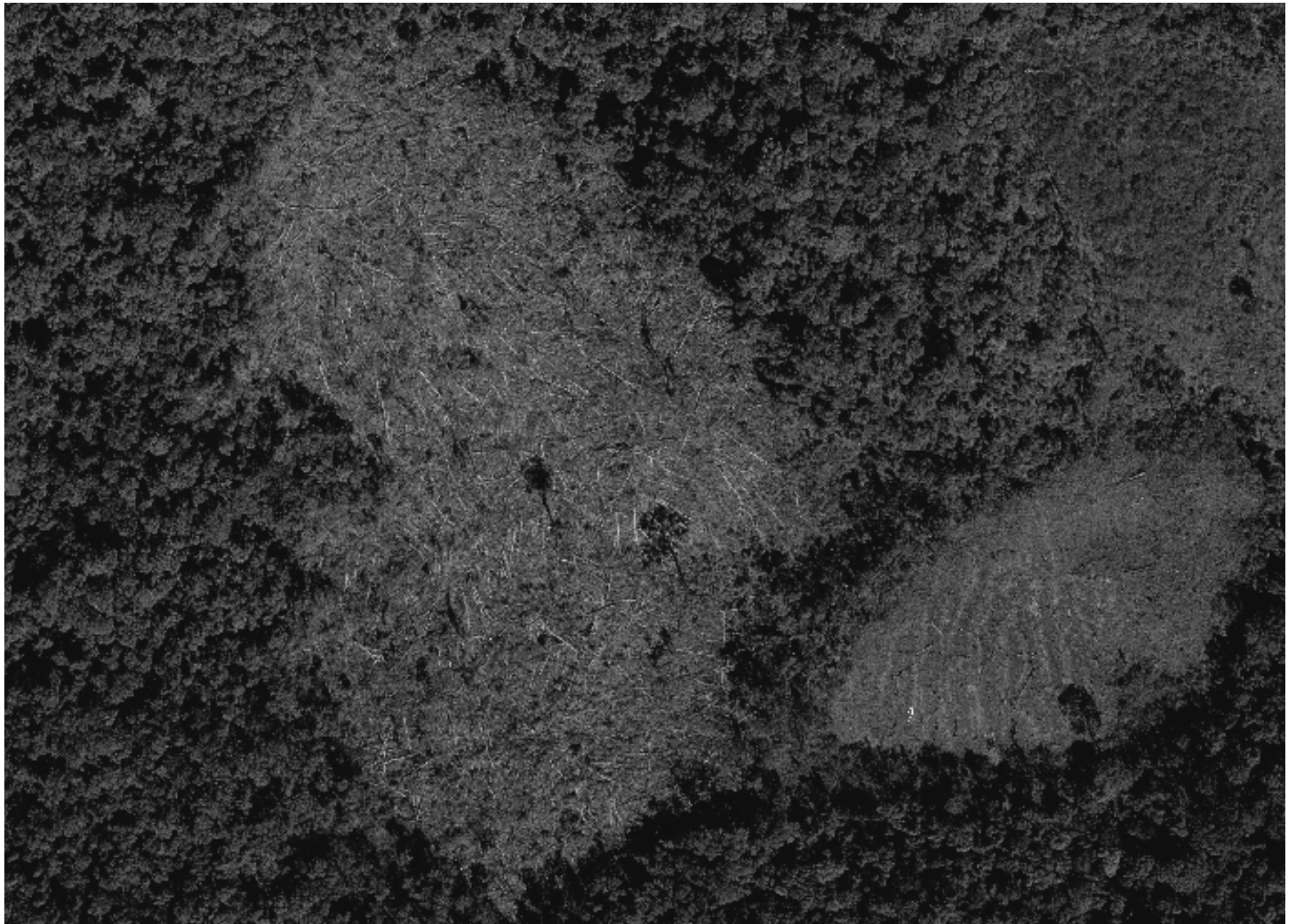
## 3.6 Major driving forces in VN

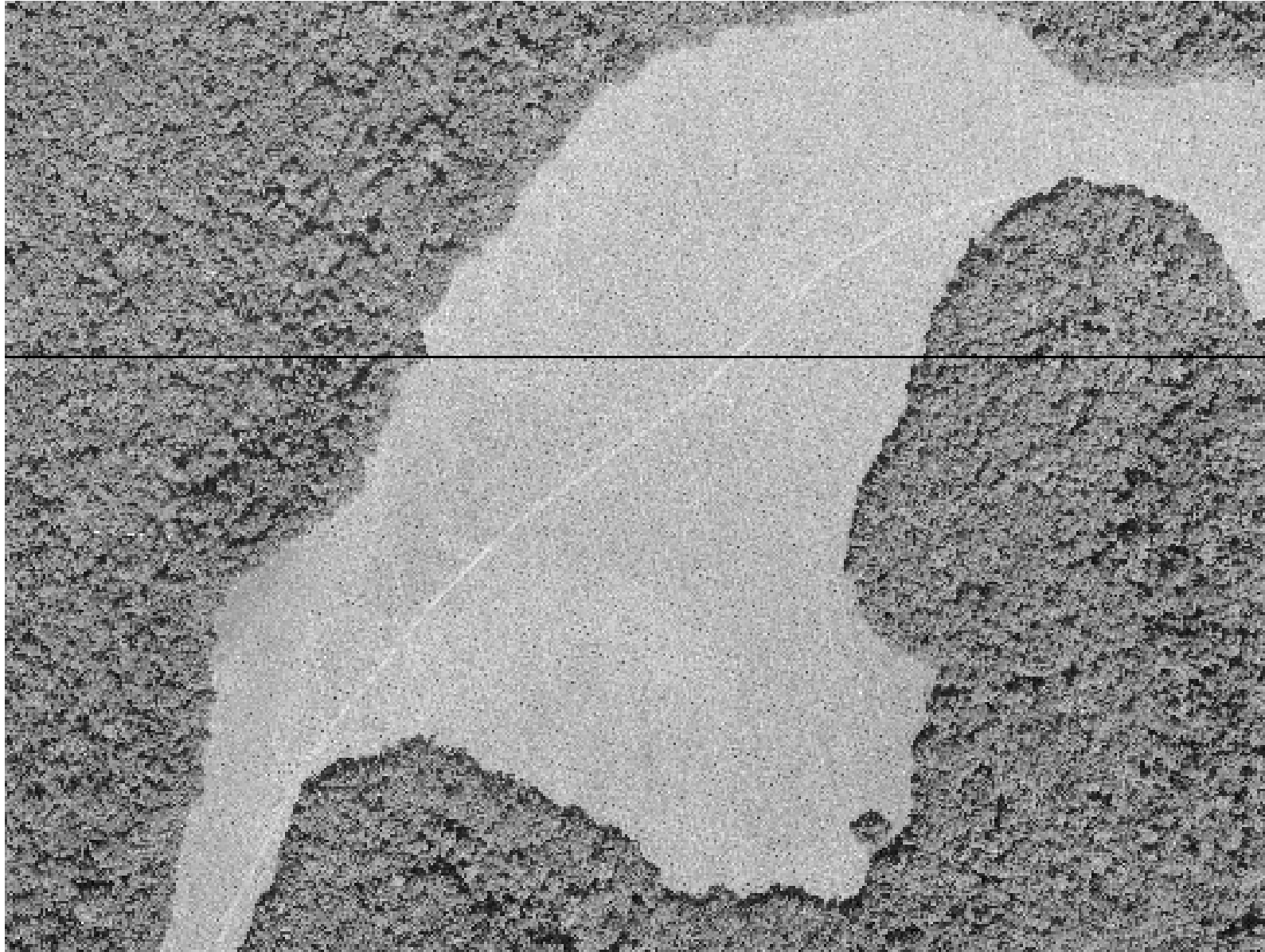
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- Conversion of forests into other land uses, especially agriculturally and aqua-culturally cultivated land;
- Development of infrastructural facilities and construction of hydro-power plants;
- Increasing market demand for timber products and fuel wood, rapid development of wood processing industry;
- High population growth, resettlement and migration;
- Inappropriate forest management and harvesting methods (e.g. excessive timber logging);
- Incomplete legal systems and lack of capacity to enforce the laws;
- Corruption: legal but illegal!

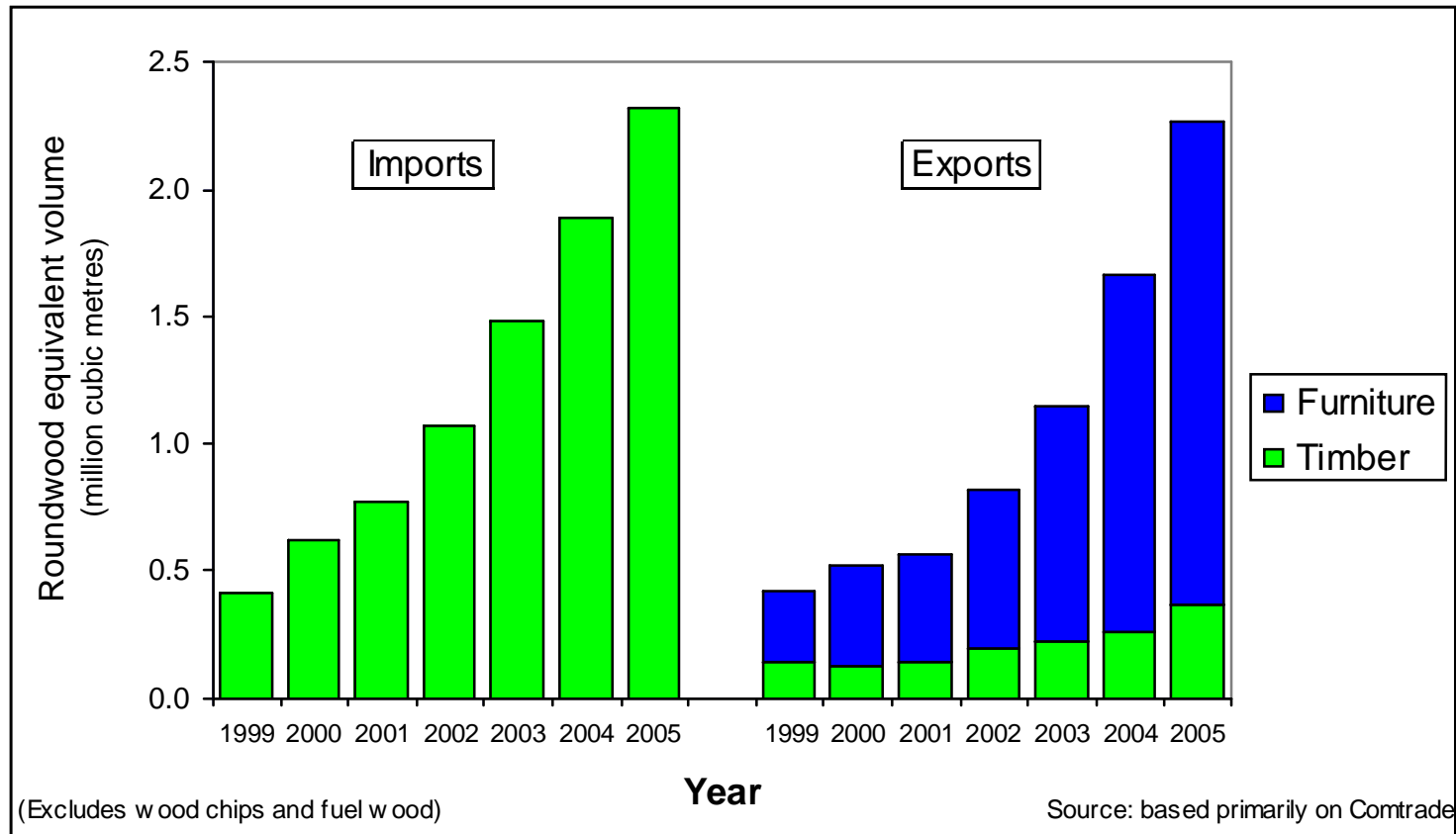
# Land encroachment







# Timber import and export trends 1999-2005



- ◆ It is estimated that VN wood processing industry will need 10-12 mill m<sup>3</sup> of round-wood by 2010

# Conversion of forests into agriculturally cultivated land in the North





# Conversion of forests into commercial crops in the Central Highlands





## Exploitation of Melaleuca forest (Peatland forest)



**Conversion of peatland forests to agriculturally cultivated land and shrinking farms causes huge CO<sub>2</sub> emission and soil degradation**



# Conversion of Mangrove forest to shrimp farms in Ca Mau Peninsular



## **IV. Some responses**

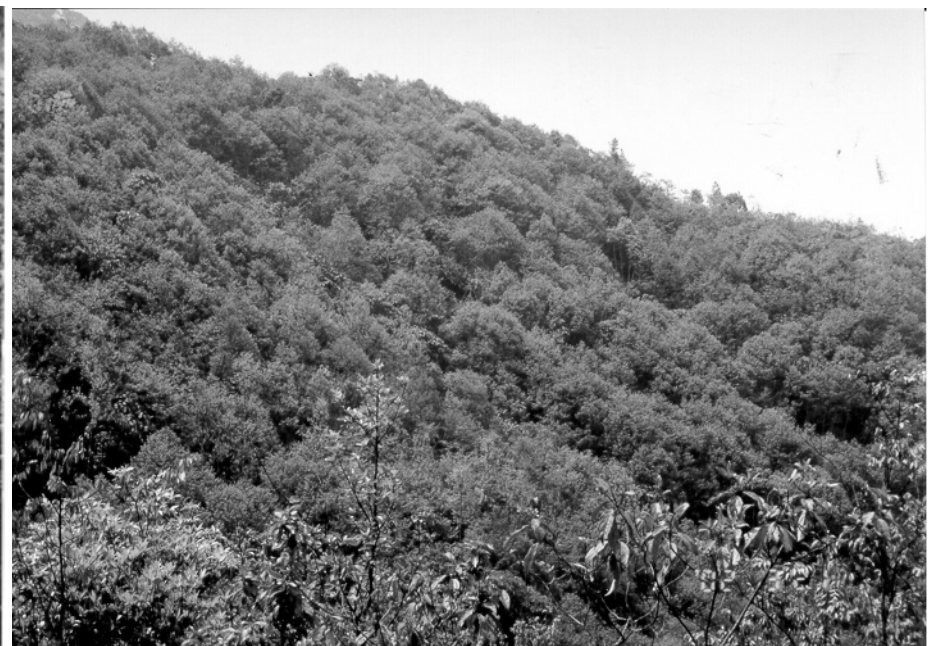
# 4.1 Some responses

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- **Re-planning and re-zoning forest categories:**
  - ✓ Production forest: 8.34 mill ha of which 4.15 ha of forest plantations, 30% FA receives FSC
  - ✓ Protection forest: 5.68 mill ha
  - ✓ Special-use forest: 2.16 mill ha;
- **Improvement in forest tenure security:** Forest land allocation and forest leasing. By 2010: all forests are allocated to individual HHs, local communities & legal economic entities;
- Provisions of loan with preferable interest rates and extension services;
- Improvement in processing and access to markets;
- **Innovative & sustainable financing mechanisms:** Implementation of national PES policy;



**Improvement in forest use rights and participation of indigenous people in FM**



## 4.2 Some responses

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- Screening potential land for A/R CMD and REDD for entire country starting from June 2009;
- CFM Pilot Program with participatory forest monitoring;
- National FIMAP (FAO-Finland Partnership Prog);
- FOMIS (Finland & TFF);
- Pilot studies: GTZ-GFA, KfW, Winrock Inc (USAID), Japanese FA & JICA, AusAID, TFF, etc.;

**Thank you very much  
for your attention!**

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