







#### The Sixth General Assembly for Asia-Pacific Forestry Education Coordination Mechanism

# Forestry Education in Vietnam: Transition from Traditional Forestry to Sustainable Forest Management

Prof. Dr. Hoang Van Sam

Vietnam National University of Forestry

(samhv@vnuf.edu.vn)

15 August 2023

### CONTENT

- Forest in Vietnam
- **■** Transition from Traditional Forestry to Sustainable Forest Management
- **►** Forestry University in Vietnam

#### **FOREST IN VIETNAM**



Vietnam is situated in Southeast Asia.

The total land area of Vietnam covers about 330,000 sq. km.

Three quarters of the country are mountainous.

Population: 100 Million people 54 Ethnic minority groups



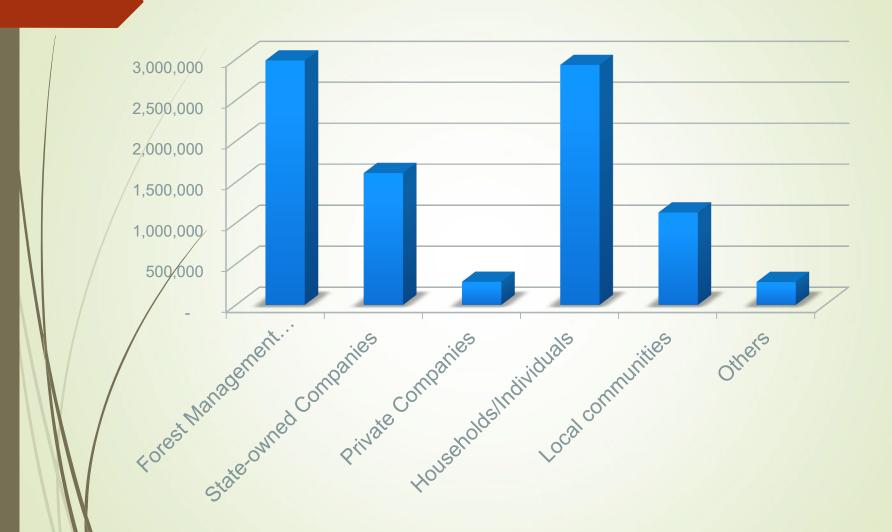




#### **FOREST IN VIETNAM**

	Area (1,000 ha)			Coverage
Year	Natural	Plantation	Total	(%)
1943	14,300	0	14,300	43.0
1976	11,077	92	11,169	33.8
1980	10,186	422	10,608	32.1
1985	9,308	584	9,872	30.0
1990	8,430	745	9,175	27.8
1995	8,252	1,050	9,302	28.2
2000	9,444	1,491	11,314	34.45
2010	10,350	3,008	13.358	39.5%
2015	10,30	3.20	13.50	40.84
2022	10,18	4,57	14,75	42,02

## Forest managed by stakeholders



Sources: VNFOREST, 2020



#### Forest types

Special use forests 2.397

Protection forests 4.411

Production forests 7.801

Total forest area: 14.609 (mil. ha)

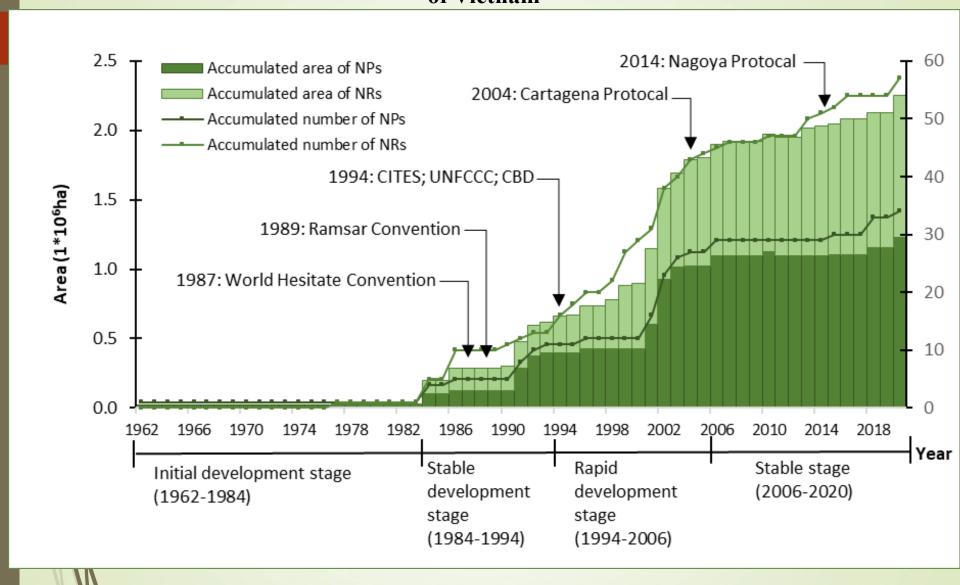
(Tung et al 2021)



Table 1. Vietnam's special use forest system as of 12/2020

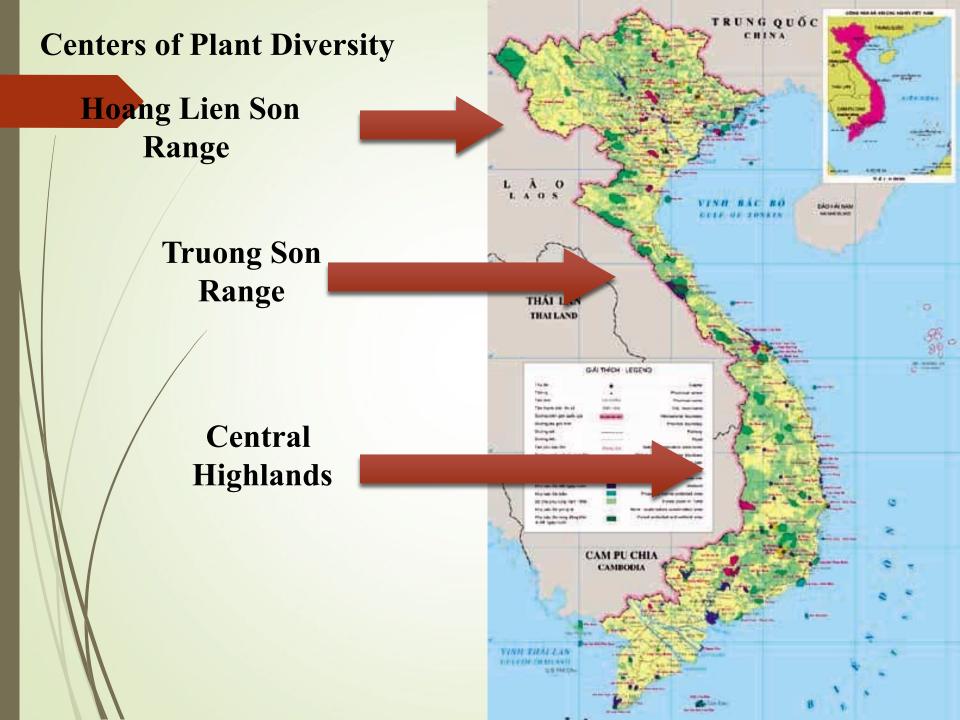
	N0	Category	Number	Area (ha)	Percentage (%)
	1	National Parks	34	1,228,962	51.3
	2	Nature Reserves	57	1,021,717	42.6
\ <del>-</del>	3	Species - habitat reserves	14	68,422	2.9
	4	Landscape protection areas	54	88,890	3.7
	5 /	Forests for scientific research and experiment	9	10,838	0.5
		Total	168	2,396,697	100

## The history development (1962-2020) of Nature Reserves (NRs) and National Parks (NPs) of Vietnam



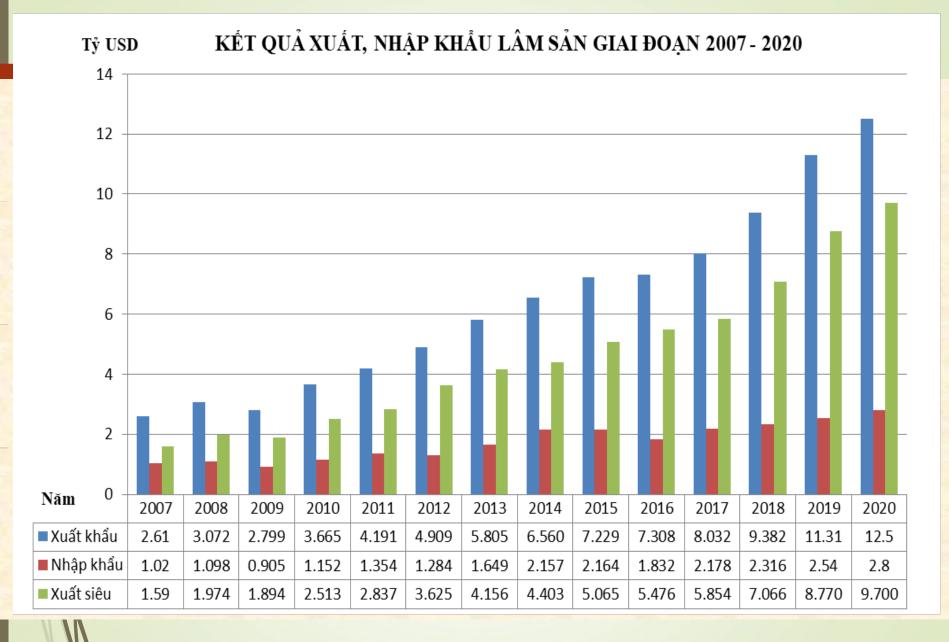


Vietnam has a globally significant proportion of rare and endemic species of plants and animals. An estimated 15,000 plant species with about 8% of known plants are endemic.

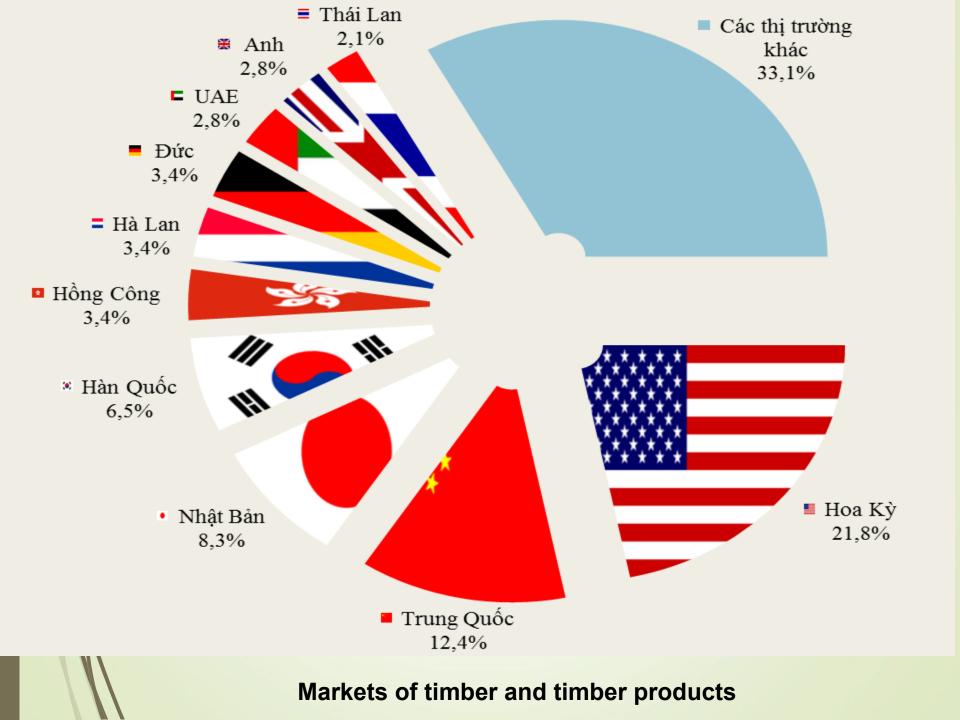




Over 5000 plant species are used by people for food, medicines, timber, oil, and other uses.



**Export and import timber products** 



# Transition from Traditional Forestry to Sustainable Forest Management

- Law on forestry, 2017
- •Law on biodiversity, 2008
- •Vietnam's forestry development strategy for the 2021-2030 period, with a vision toward 2050
- National biodiversity strategy to 2030, Vision to 2050

PES PFES ABS Carbon REDD+



**Poverty Reduction** 

**Food Crisis** 

Climate Change Adaptation

**FLEGT** 

**Good Governance** 

Social Responsibility

Carbon Markets

Coastal Zone Protection

**Energy Crisis** 

**REDD** 

Public Private Partnership

Carbon Funds/

Biodiversity Convention

**Biodiversity Corridors** 

Decentralisation

Climate Change Mitigation

Systainable Forest Management

Sustainable Development

Financial Mechanisms

Certification

**Financial Crisis** 

Strategic Environmental Assessment

## Classical Forestry Sector

Forestry Sector covers the sustainable provision of goods and services like:

- Timber
- Fuel Wood
- NTFP
- Agroforestry
- Nature Conservation

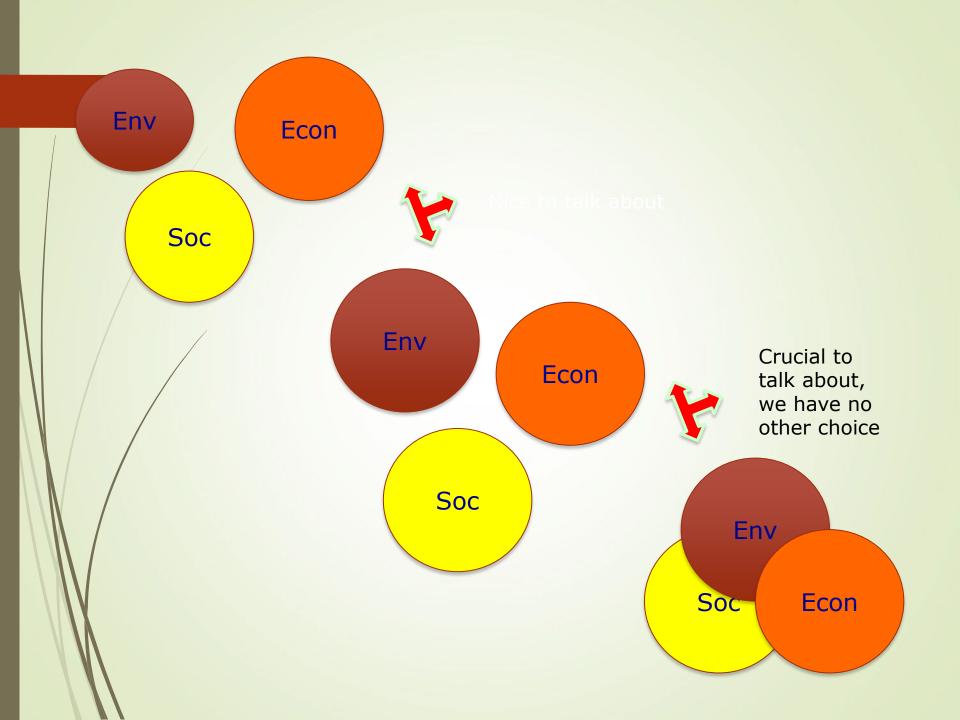
Forestry Sector covers the sustainable provision of a higher variety of goods and services like:

- Timber
- Fuel Wood
- NTFP
- Agroforestry
- Nature Conservation



- Climate change mitigation and adaptation
- Carbon sequestration
- Biodiversity conservation
- Coastal Zone Protection (Mangroves)





#### **EDUCATION ON FORESTRY IN VIETNAM**

#### A total of 235 Universities in Vietnam

01 Unviersity: Vietnam National University of Forestry



#### 07 other University with Forestry Faculties/Departments

- **Thai Nguyen University**
- Hong Duc University
- **►** Hue University
- **Tay Nguyen University**
- Nong Lam Ho Chi Minh University
- **Tay Bac University**
- **■** Bac Giang agriculture and Forestry University

## HUMAN RESOURCES

Total of staff: 998; About 220 professors, Asso. professors and Doctors.



## Training

from VNUF. More than 500 international students have graduated from VNUF.



## STUDENTS

About 11.000 students at various training levels (Ph.D, MSc, BSc and high school students)



## Training

### Undergraduate (26 majors)

- Forestry,
- Silviculture,
- Forest resources & Environment Management,
- Natural resources management
- Environmental Science,
- AgroForestry,
- Urban Forestry
- Wood Technology,
- Industry for Rural Development.
- Forest management
- Ecotourism

## COOPERATION WITH COLORADO STATE UNIVERSITY, USA (BSc program on Natural resources management)



## Training

#### Masters degree

- 1.Silviculture,
- 2. Forest Resources Management & Protection;
- 3.Wood Technology;
- 4.Mechanical Forestry Techniques.
- 5. Economic of forestry
- 6.Environmental Science
- 7.Biotechnology
- 8.Land use management
- 9. Economic management
- 10.Interior Design
- 1/1.International tropical foresry



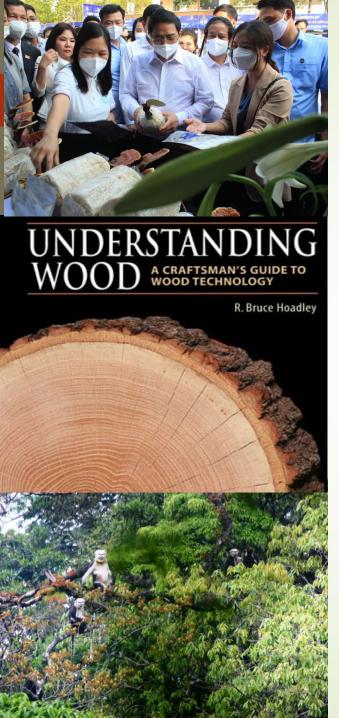


## Training

#### <u>Doctorate</u>

- 1. Genetics and forestry tree variety selection;
- 2. Forest inventory and planning;
- 3. Silvicultural techniques;
- 4. Mechanical techniques and forestry equipment.
- 5. Forest Resources Management;
- 6.Agriculture economic



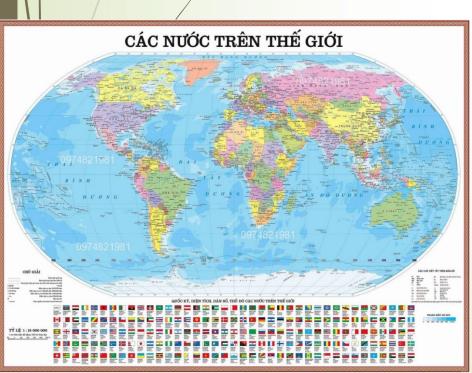


## SCIENTIFIC RESEARCH

**Silviculture Biotechnology application Urban Forestry and Landscape Biodiversity**; Wildlife management Climate change **Forest Resources Management None-Timber Forestry Product Eco-tourism Environment management** GIS and remote sensing **Agriculture and Rural Development Policy Land Management Forestry Mechanization Civil Engineering Techniques Wood Technology** REDD; CDM; PES, PFES Sustainable forest management

## INTERNATIONAL COOPERATION

COOPERATION WITH 140 UNIVERSITIES, RESEARCH INSTITUTES OUTSIDE VIETNAM



- France
- South Korea
- •Laos
- Cambodia
- Germany
- Switzerland
- Canada
- Spain

- The Netherlands
- China
- Japan
- Thailand
- Philippines
- Nepal
- Russia
- USA
- Australia
- Sweden
- Malaysia
- Finland
- Indonesia
- Hungary
- . . . . . . . .



## INTERNATIONAL COOPERATION



FAO, WWF, IUCN, FFI, FAO, UNDP, WB, WWF, ITTO, JICA, JIFPRO, GIZ, HELVETAS, DAAD...









#### **PUBLICATION**

About 400 Papers/year

nature

International weekly journal of science

INAUGURAL ISSUE: 1 April 2010 | \$10

natural Science CONTRACTOR AND ADDRESS OF TAXABLE PARTY.

Wood Science

The Japan Wood Research Society





\_\_\_\_\_

#### POTENTIAL COOPERATION

- 1) Exchange of staff and students.
- 2. Joint training program, double degree (short courses BSc, MSc, PhD)
- 3) Joint research projects
- 4) Joint publication
- 5) joint conferences
- 6) .....

#