



**GOVERNMENT OF THE UNION OF MYANMAR**  
 MINISTRY OF FORESTRY  
 FOREST DEPARTMENT  
 FOREST RESEARCH INSTITUTE  
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## A Brief Account of Forest Research Institute, Myanmar

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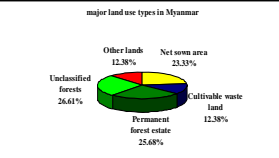
## Introduction

**Area** - 676577 km<sup>2</sup>  
**Boundaries** - China, Laos, Thailand, Bangladesh and India  
**Climate** - 3 seasons ( summer, rainy and winter )  
**Temperature** - 0° C to over 40° C  
**Rainfall** - < 1,000 mm to >5,000mm  
**Population** - 53 million (2006)  
**Population growth rate** - 1.3 %  
**Rural population** - 69.4%  
**Religion** - Buddhism (80%), Hindu, Christian, Muslim and others



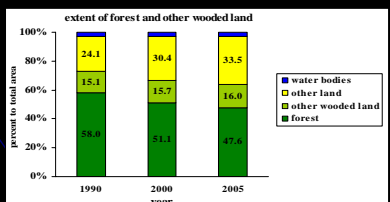
## Land Use

major land use types in Myanmar



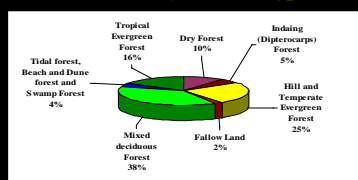
### The comparison of forest cover during 1990 and 2005

extent of forest and other wooded land



Year	Forest (%)	Other wooded land (%)
1990	38.0	15.1
2000	51.1	15.7
2005	47.6	16.0

## Status of Major Forest Types



### The plant genetic resources of Myanmar

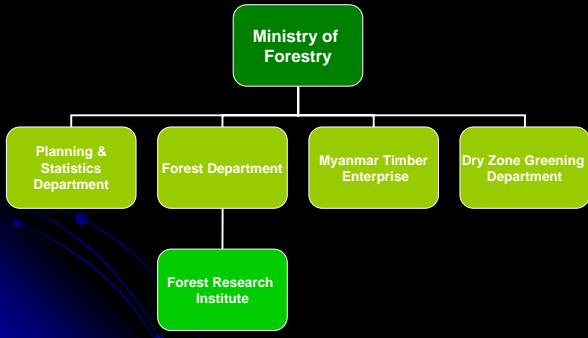
Categories	No. of species
Plants	1188
Bamboo	96
Rattan	58
Shrubs	1016
Orchids	341

## Myanmar Forest Policy (1995)

Six imperatives :

- (1) **Protection** of soil, water, wildlife, biodiversity and the entire environment;
- (2) **Sustainability** of forest resources to ensure perpetual supply of both tangible and intangible benefits accrued from the forests for the present and future generations;
- (3) **Basic Needs** of the people for fuel, shelter, food and recreation;
- (4) **Efficiency** to harness, in the socio-environmentally friendly manner, the full economic potential of the forest resources;
- (5) **Participation** of the people in the conservation and utilization of forests; and
- (6) **Public awareness** about the vital role of forests in the well-being and socio-economic development of the nation.

## Institutional Organization

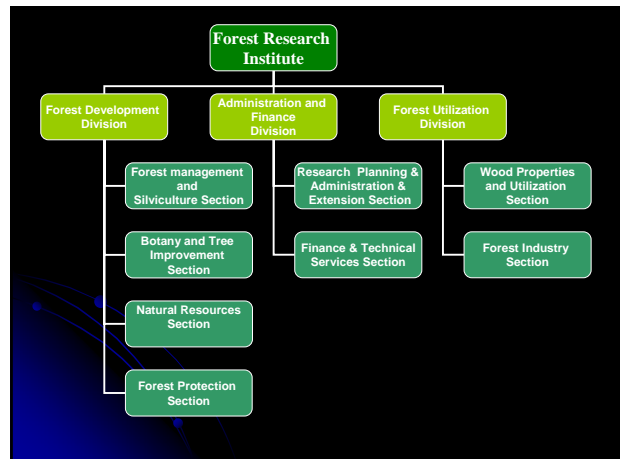


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graph TD
    MoF[Ministry of Forestry] --> PSD[Planning & Statistics Department]
    MoF --> FD[Forest Department]
    MoF --> MTE[Myanmar Timber Enterprise]
    MoF --> DZGD[Dry Zone Greening Department]
    FD --> FRI[Forest Research Institute]
  
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## A Brief History of Forest Research Institute

- 1914: Appointment of a Research Officer.
- 1922: A Research Division was established under the Utilization Circle, Forest Department.
- 1952: Forest Research and Training Circle was formed.
- 1963: A sub committee for the development of Forest Research Institute was formed which resulted in the initial planning for the establishment of the Forest Research Institute at Yezin.
- 1978-1983: Forest Research Institute Project Phase I
- 1983-1987: Forest Research Institute Project Phase II
- 1988- to date: A branch of Forest Department



### Activities of Research Sections Forest Development Division

#### 1. Forest Management & Silviculture Section

- Silvicultural analysis of natural forests
- Restoration of degraded forests
- Effective planting techniques for teak and multipurpose species
- Seed technology, germination and nursery practice



Data collection in natural forest



Spacing Trial for Teak

### Activities of Research Sections Forest Development Division

#### 2. Forest Botany & Tree Improvement Section

- Tree improvement & genetic conservation of teak and other commercially important tree species
- Propagation of bamboos
- Collection, identification, determination, deposition and retrieval of herbarium materials covering indigenous & exotic species



Vegetative Propagation



Herbarium

### Activities of Research Sections Forest Development Division

#### 3. Natural Resources Section

- Watershed management & soil conservation
- Ecological studies on exotic and indigenous species
- Physical and chemical composition of soil
- Effect of various fertilizers on tree growth
- Analysis of physical and chemical properties of forest soils from various parts of Myanmar



Soil Science Laboratory

### Activities of Research Sections Forest Development Division

#### 4. Forest Protection Section

- Forest Entomology, Forest Pathology and Forest Fire
- Protection of forests & plantations against pests, insects and other diseases
- Impact of forest fire



Collection of Samples For Disease Diagnosis

**Activities of Research Sections**  
**Forest Utilization Division**

**5. Wood Properties and Utilization Section**

- Physical & mechanical properties of wood
- Anatomical properties of wood
- Properties and sustainable utilization prospects of non-timber forest products with special emphasis on bamboo, rattan and medicinal plants



Computerized Universal Timber Testing Machine

**Activities of Research Sections**  
**Forest Utilization Division**

**6. Forest Industry Section**

- Wood Drying and preservation
- Wood Chemistry and wood-based panels
- Improved utilization of bio-gas and by-products of different raw materials
- Development of efficient stoves



Air Drying Test



Kiln Schedule Development

**Activities of Research Sections**  
**Administration & Finance Division**

**7. Research Planning & Extension Section**

- Research Planning
- Library
- Dissemination of research findings
- Research on community forestry & Agro-forestry



Library

**Activities of Research Sections**  
**Administration & Finance Division**

**8. Finance & Technical Services Section**

- Financial and Technical Support to the institute
- Logistics Support to researchers and research projects

**Highlights**  
**of International Cooperation in the past**

Sr.	Project	Cooperation with
1.	Introducing Myanmar Lesser Used Timber Species to World Market	ITTO
2.	Neem Network Research	FAO
3.	Revision of the Checklist on "Trees, Shrubs, Herbs and Climbers of Myanmar"	Smithsonian Institution
4.	Bamboo Research	IPGRI
5.	Assessment of plant biodiversity on species concepts of the Alungdaw Kathapa National Park - Myanmar	ASEAN-Korea Environmental Cooperation Unit

**Highlights**  
**of International Cooperation in the past**

Sr.	Activity	Cooperation with
6.	Research on Restoration of Degraded forest eco-systems with emphasis on enrichment planting technique, soil conservation and pest management	ASEAN-Korea Environmental Cooperation Unit
7.	Promoting sustainability of Bamboo through Community Participation in Sustainable Forest Management PD 146/02 Rev. 1(I)	ITTO
8.	Strengthening Capacity & Upgrading the Forest Research Institute TCP/MYA/3003 (A)	FAO

## On-going Cooperation Projects

- *Ex-situ* and *In-situ* Conservation of Teak (*Tectona grandis* L. F.) to Support Sustainable Forest Management
- ITTO Project PD 270/04 Rev. 2 ( F )
- Project Area: Shwebo, Yamethin, Pyay, Yangon (north), Hinthada and Gangaw Districts.
- Funding : US\$ 474,941.00 from ITTO  
MMK 9,270,800.00 from Myanmar Govt.
- Period : 2006 to 2008

## On-going Cooperation Projects

- Market Development of Bamboo and Rattan Products with Potential
- Project Area : Forest Research Institute, Yezin
- Funding : US\$ 45,000.00 from International Network for Bamboo and Rattan (INBAR) & Common Fund for Commodities (CFC)  
: MMK 60,000.00 from Myanmar Govt.
- Period : May 2005 to May 2008

## Membership in International Organizations

- Asia-Pacific Association of Forestry Research Institutions (APAFRI) (2004)
- International Union of Forest Research Organization (IUFRO) (2007)

## Current Efforts towards Improvement of Research Activities

- Re-direction of Research Priorities
- Human Resource Development
- Strengthening Lab Facilities
- Enhancing Efficiency of Supporting Field Staff

## Important Sectors to be strengthened

- Scientific Capabilities of Researchers
- Access to Information and Upgrading Research Library
- Upgrading and Proper Handling of Research Facilities and Equipments
- Further Collaboration with International Research Societies and Networks

**Thank you !**