

Korea Urban Forest Policies

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Overview of Korea Forest Policy

Status of Korea

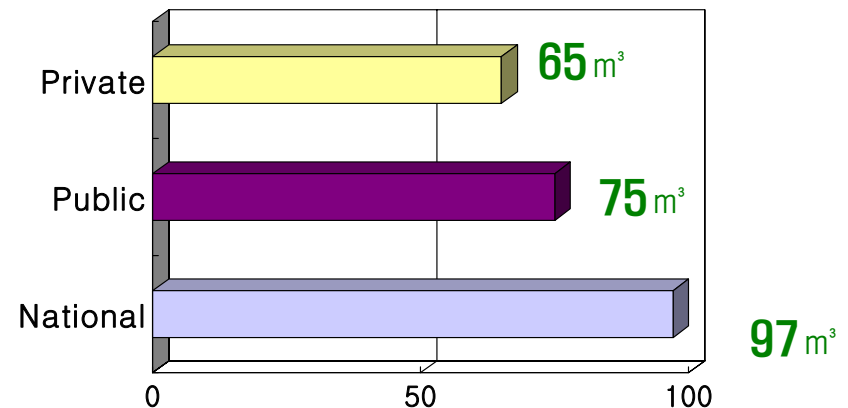
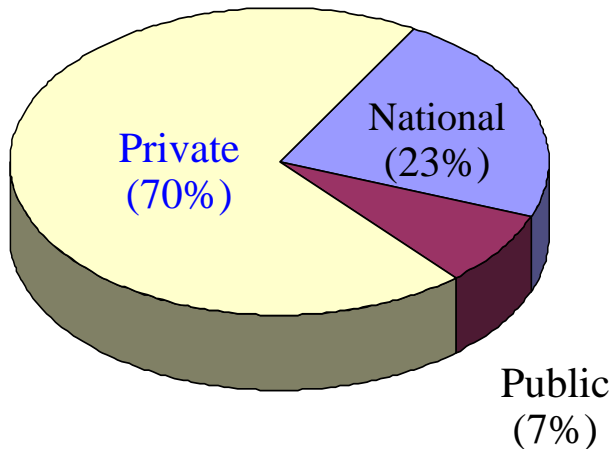
	2005	Ranking Worldwide
Population (million)	48	26
Foreign Trade (Billion US\$)	545	12
a) Exports	285	12
b) Imports	260	13
GDP (Billion US\$)	788	11
GNI per capita (US\$)	16,291	34

Organization

- **5 Regional Forest Services**
 - 27 Forest Offices
- **Korea Forest Research Institute**
- **National Forest Aviation Headquarters**
 - 7 Regional Offices
- **National Arboretum**
- **Human Resources Development Institute**
- **Nat'l Natural Recreation Forest Office**

Forest Cover

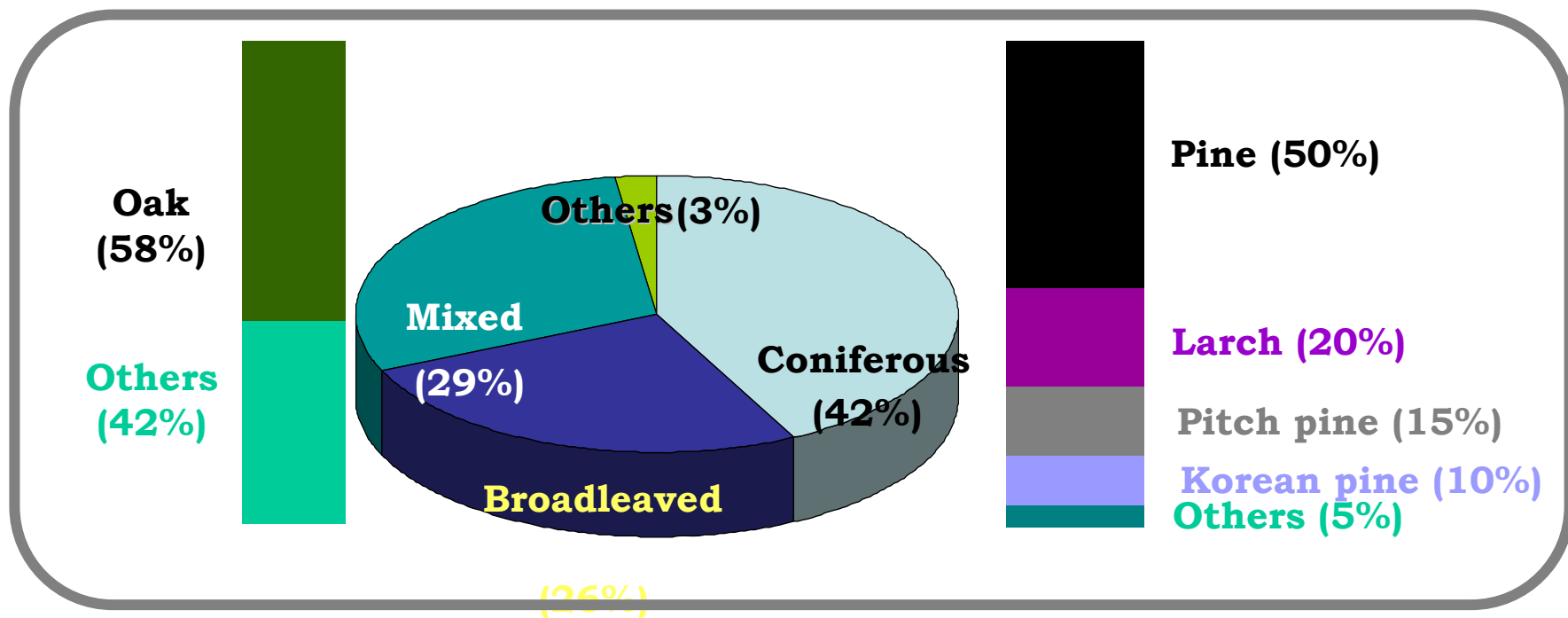
- ❖ Forests cover 64% of the total land area
- ❖ 70% of the forests are privately owned
- ❖ Stock volume per ha is 79 m^3



Stock volume per ha

Forest Type Distribution

- ❖ Coniferous forests make up a large proportion
- ❖ Mainly Pine and oak species



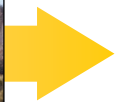
Timber Supply and Demand

- ❖ Total Domestic Demand of timber 27million m³
- ❖ Largely depended on imported timber products
- ❖ Current timber self-sufficiency rate(2006) is 9%
- ❖ Increase the current level to 50% by 2050



Changing Forest Policies

State of Extreme Devastation



- After the Korean War
- Excessive Cutting
- Timber Used for Fuel

National Greening Campaign



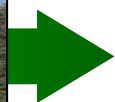
- Nationwide Tree Planting
- Beginning of forest Tending (1973-1987)

Successful Forest Recovery



- recognized by FAO as a successful country in reforestation
- Commercial forests (1988-1997)

Sustainable Forest Management



- Ecological Methodology
- Valuable Forest Resources (1998-present)

Urban Forest Policy

Status of Urban Forests

- Rapid urbanization causes to reduce green area
 - 90% people in total population live in city (as of 2005, Ministry of construction and transportation)
- Continually deteriorating ecological healthy forests and landscape value
- Average urban forests area per person : 6.56 m^2 /inhabitant (as of 2005, Korea Forest Service)
 - Below 2/3 of WHO (World Health Organization) standard, 9 m^2 /inhabitant

Changes in social settings

- Increase city heat-island phenomenon
- Spread well-being culture
- Expand citizen's interests from using urban forests to willingness to participate in urban forest management
- Eventually citizen need urban forest and easy access to forests in the view of time and money (2006, Gallup Korea survey)

Effects of Urban Forests

- Mitigate microclimate (eg. urban heat-island)
 - Absorb average 664kcal per leaf volume 1 m^2 correspondent to operating 8 air conditioners of 49.587 m^2 for 5hrs (KFS research institute)
- Attenuate noise
 - Forest belt of width 10m and length 30m, reduce 7dB

Effects of Urban Forest (cont'd)

- Clean air
 - If a Zelkova (1,600m² leaf area) photosynthesize 8hrs per day in May to October), it sinks 2.5t carbon dioxide and emits 1.8t oxygen
- Foster emotion and recreation
- Build up beautiful city landscape

The Urban Forest Plan

Vision and goal

- Vision : City in Forest and Forest in City
- Goal
 - Provide beautiful and comfortable green life environment to the people
 - Create Green Network with urban forests, roadside trees, school forests, forest park etc

Strategies

- Consolidate relevant implementing systems (eg. research current status of urban forests)
- Build up management infrastructures (eg total green volume)
- Strengthen green quantity and quality
- Encourage citizen participation
- Improve law and budget system

Key Policies

Urban forests and woods

- Build urban forests (woods) in inner city owned national or public

The street trees

- Transfer from roadside trees to roadside forests in order to make more sustainable green areas.
- play significant axis in the Urban Green Network.

School forests

- Build school forests in grounds and the place tearing fences etc
- Cooperate students, teachers, residents together
- Use a place of educating and of exchanging culture with residents

Forest Park

- Establish recreational forest parks for people's easy access to forests, neglected and located in the outskirts of city
- provide neighborhood forests to people and prevent fragmentation between inner and outer green spaces

Landscape Forests

- Narrowly in the viewer's perspective consider scenery, visual beauty
- Broadly include ecological soundness, socio-culture sense
- Provide a sustainable and beautiful city environment

The Urban Green Network

- Composed of urban forests, school forests, street trees, forest parks, and landscape forests.
- Scheme of the Urban Green Network

Thank you so much!