

# Kyungtae Park

## International Fellow, Korea





Korea

# Geography : The Korean peninsula



**Extends southward from  
the eastern end of the Asian continent.**

Length : 612 miles

Width : 105 miles, at its narrowest point.

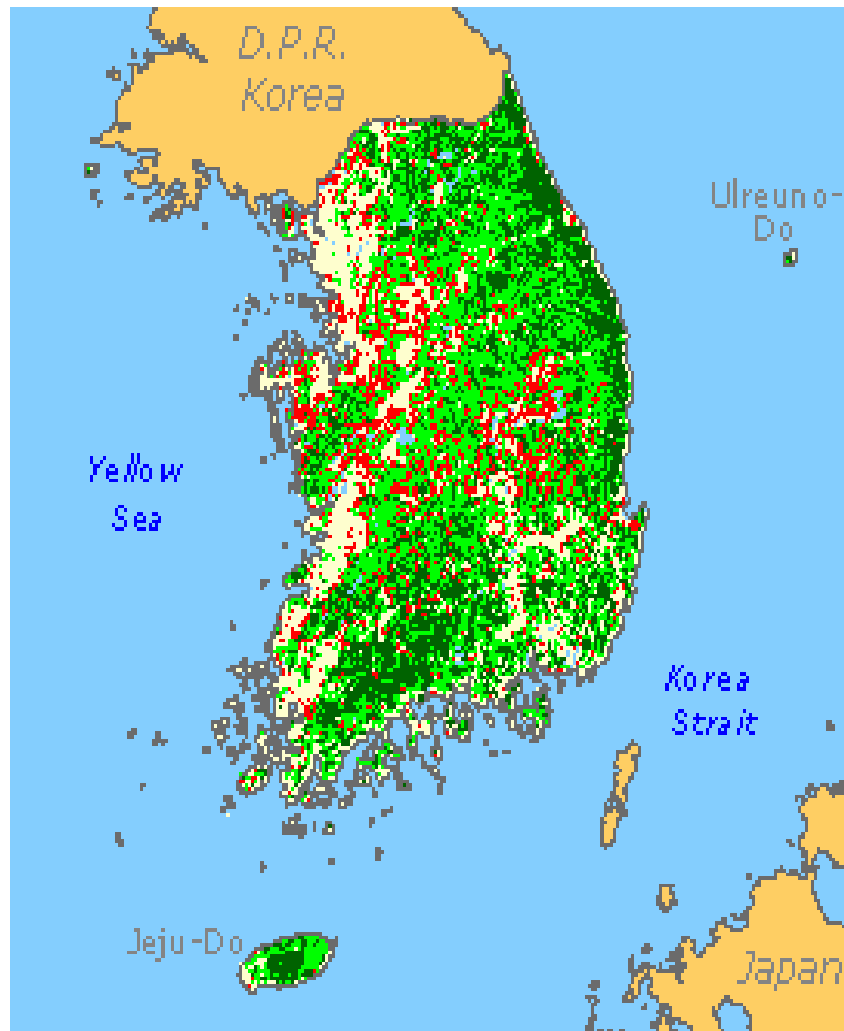
Land area : 99,500 sq km (Oregon : 251,418 sq Km)  
slightly larger than Indiana State

Population : 48 million (S.Korea) (Oregon 3.5 million)  
the capital : Seoul

# Geography : The Korean peninsula



Mountains cover 70% of Korea's land mass, making it one of the mountainous regions in the world.



- Water
- Closed Forest
- Open/Fragmented Forest
- Other Wooded Lands
- Other land cover



# Unique geographical location



## China – Korea - Japan

The shortest distance between Korean and Chinese coasts is 124 miles,  
the nearest point on the Japanese coast is also about 124 miles away.

**Chinese culture filtered into Japan through Korea;**  
a common cultural sphere of Buddhism and Confucianism was thus established between the three countries.

The Korean peninsula is divided just slightly north of the 38th parallel. → **Demilitarized Zone**



# DMZ [Demilitarized Zone]



DMZ (Demilitarized zone) is the distributed area from the present cease-fire line set up according to the cease-fire agreement on 27th June 1953.

The military demarcation line, 155 miles in length, 2.5 miles in width crossing the Korean peninsula.

Today, it is a heaven for rare animals, birds, plants and mines. About 1.12 million mines in this area.

# Four Distinct Seasons



## Spring

Warm & Sunny

from late March to May



from June to early September



## Summer

Hot & Rainy  
Monsoon rain  
Typhoon

## Four Seasons of KyungHee University

## Autumn

Clear & Dry



from September to November



from December to mid-March

## Winter

Cold & Dry  
Snow



## S. Korean Economy in the World

	Unit	S.Korea	Rank
<b>GDP (2004, E)</b>	\$ Bil.	667.4	10
<b>Trade (2003)</b>	\$ Bil.	372.6	12
<b>Ship Orders (2003)</b>	1000 CGT	18.810	1
<b>Sales of Semiconductor (2004)</b>	\$ Bil.	15.9 (Samsung)	2
<b>Companies on fortune 500 List (2003)</b>	No.	11	10
<b>Service Trade (2003)</b>	\$ Bil.	70.3	14
<b>World's Top 1,000 Banks (2003)</b>	No.	12	18

Source: MOCIE

Korea, once known to be one of the world's poorest country

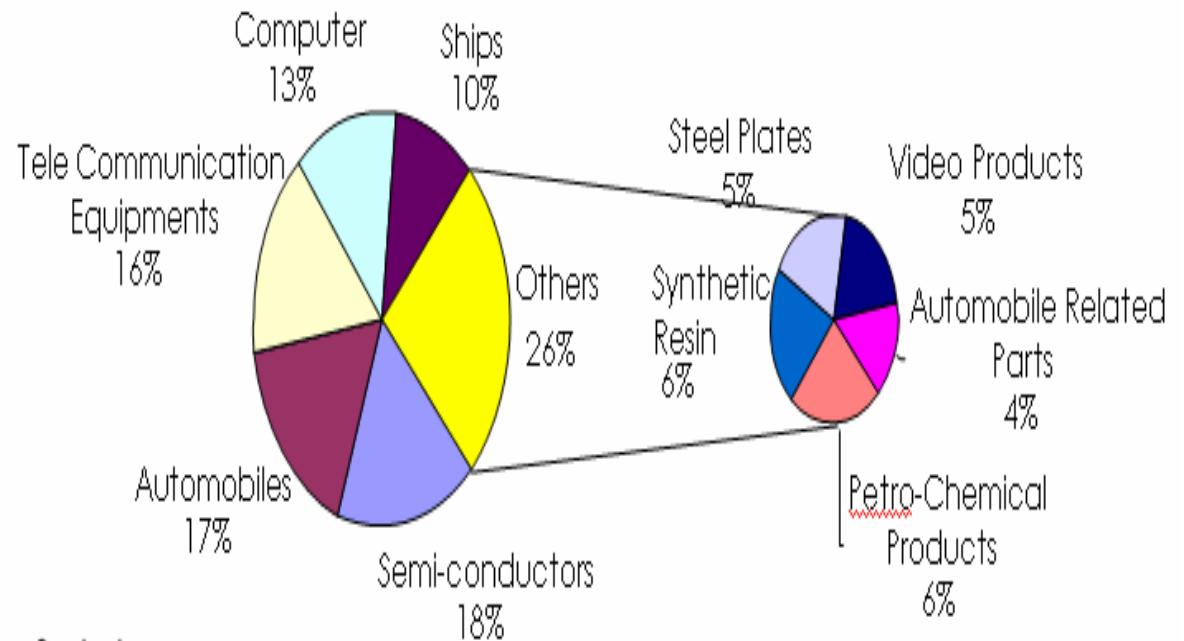
Korea developed rapidly from the 1960s, fueled by high savings and investment rates, and a strong emphasis on education.



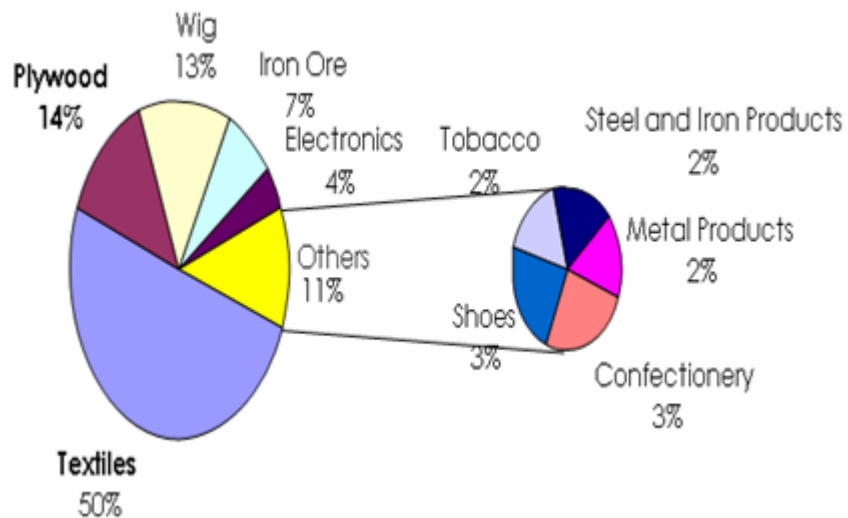
# Economic Growth



## Key Export Commodities (2003)



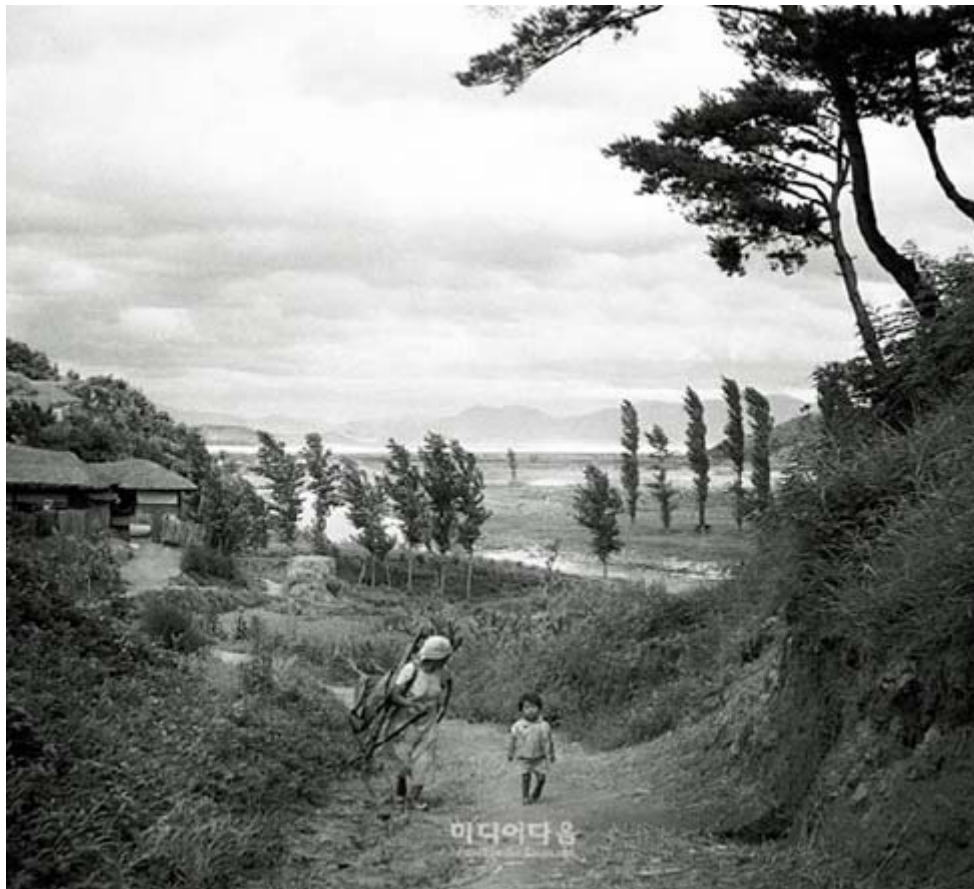
## Key Export Commodities (1970)



# Seoul : Past and Present



1960, Gang-Nam area



Current

# Most Common Housing



1900

Current





# Housing

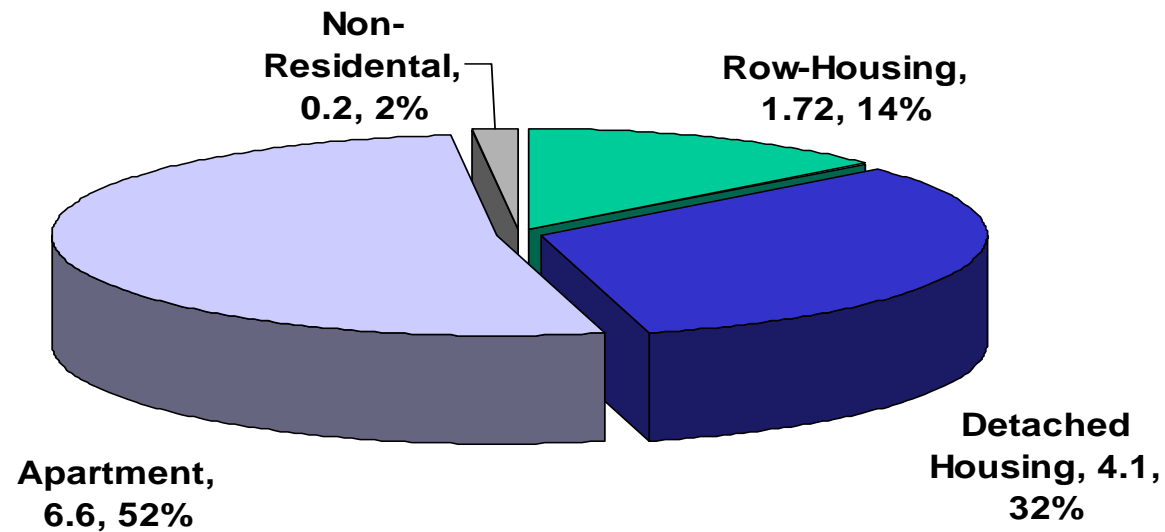


**Tower Palace in Seoul**

**I-Park in Seoul**



# High Rise Concrete Apartment



Total Housing : 12.6 M (48 M People)

- ✓ Recently half of Koreans live in high-rise concrete apartments.
- ✓ Housing policies in Korea have been mainly supply-oriented to solve housing shortage problems.
- ✓ After 1970s, massive housing production was initiated and several regulations were imposed on the housing sector.



# Interior



# Interior

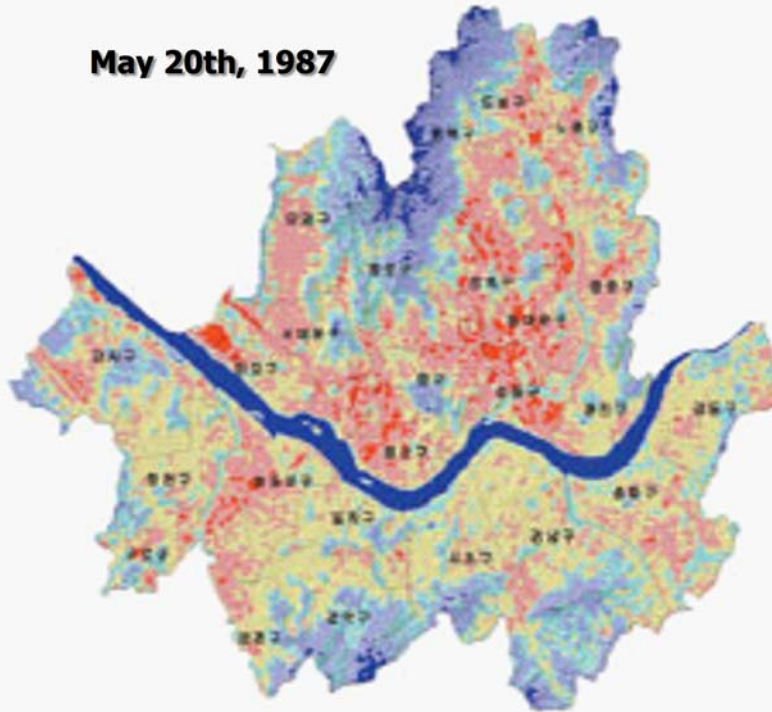


# Heat Island in Seoul

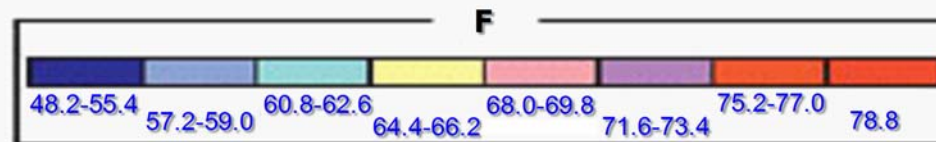
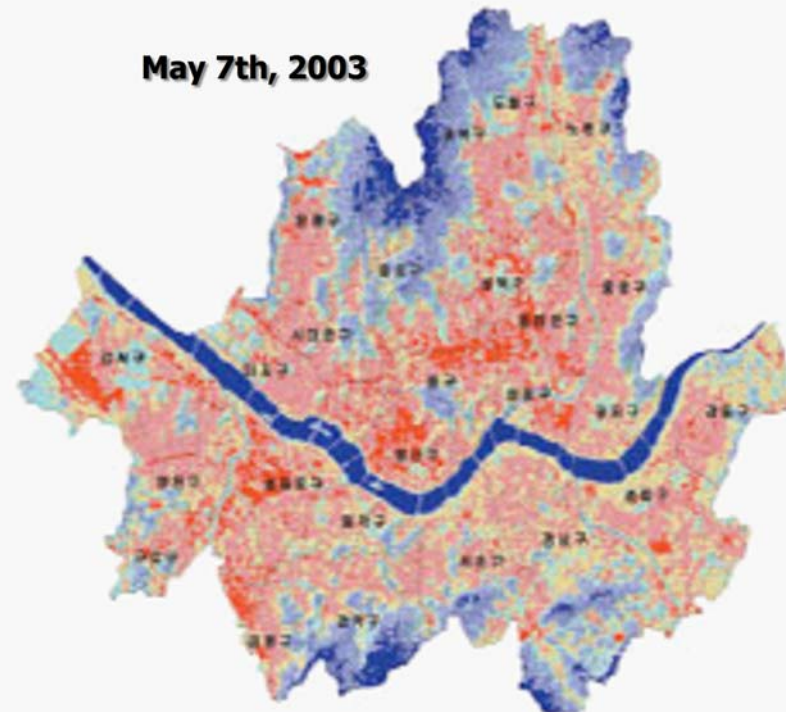


## Average temperature Change - Seoul

May 20th, 1987



May 7th, 2003



1987 → 2003

Forest Land : 47,000 acre → 40,000 acre

Developed Land : 86,000 acre → 93,000 acre









# FOREST IN KOREA



# Forest Resources



## Deforestation

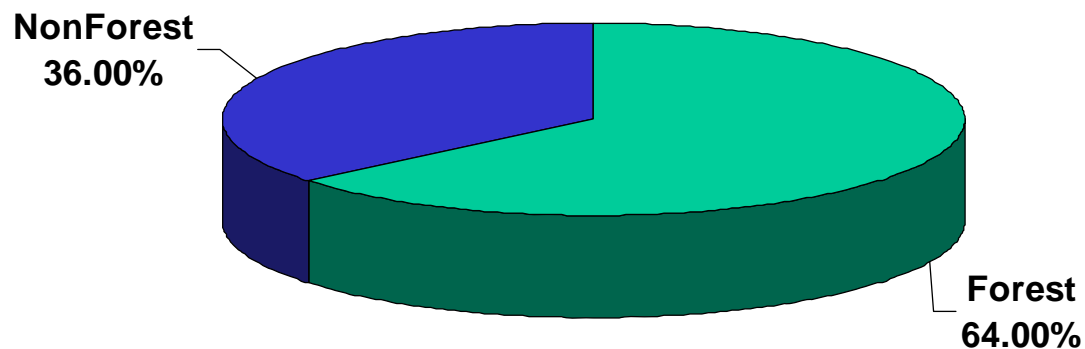
during the rule of Japanese imperialism and Korean War, most of the forested area in Korea was completely destroyed owing to illegal logging and over-harvesting.

## National Forest Rehabilitation Plans (1961-1995)

Large scale reforestation

Stocked forest land : 4.0 M ha – 6.3 M ha

Stock volume per ha : 2,364 bf/ha → 30,936 bf/ha



Based on the 2004 forest statistics, Korea has 6.4 million ha of forest covering about 64.3% of total land area.

Almost 59% of forest stands are under the age of 30 years.

Thus, Korea has largely depended on imported timber, supplying about 94% of domestic timber consumption

# BaekDu Dae Gan

**"A big mountain range" staring at Mt. Baekdu**

The back bone and continental divide of the Korean peninsula.

The source of 14 mountain range,  
The beginning point of many rivers.

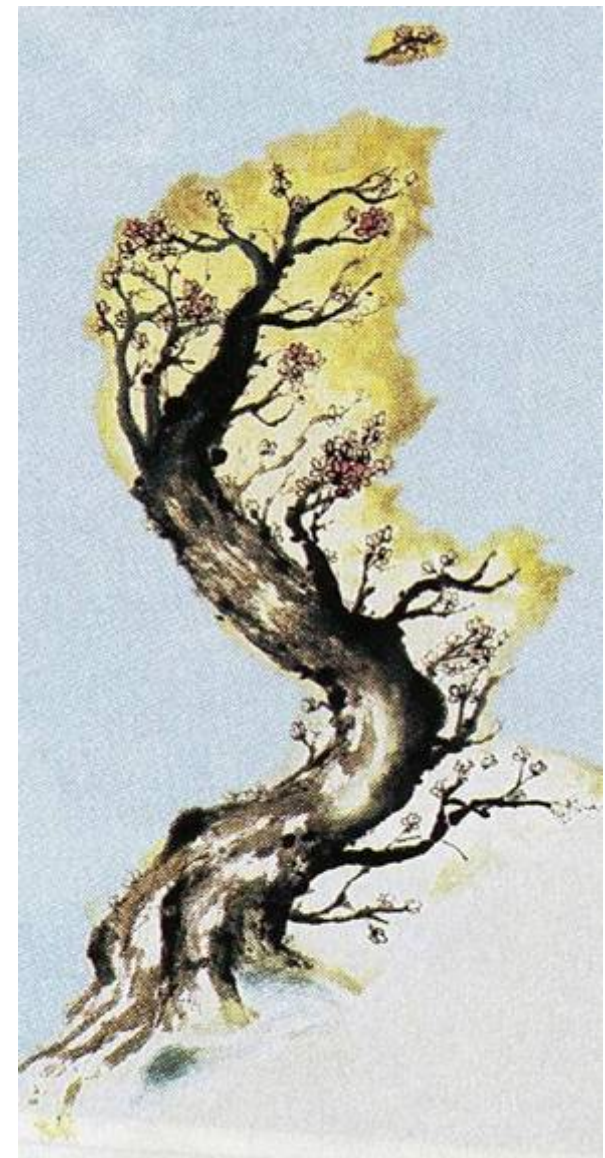
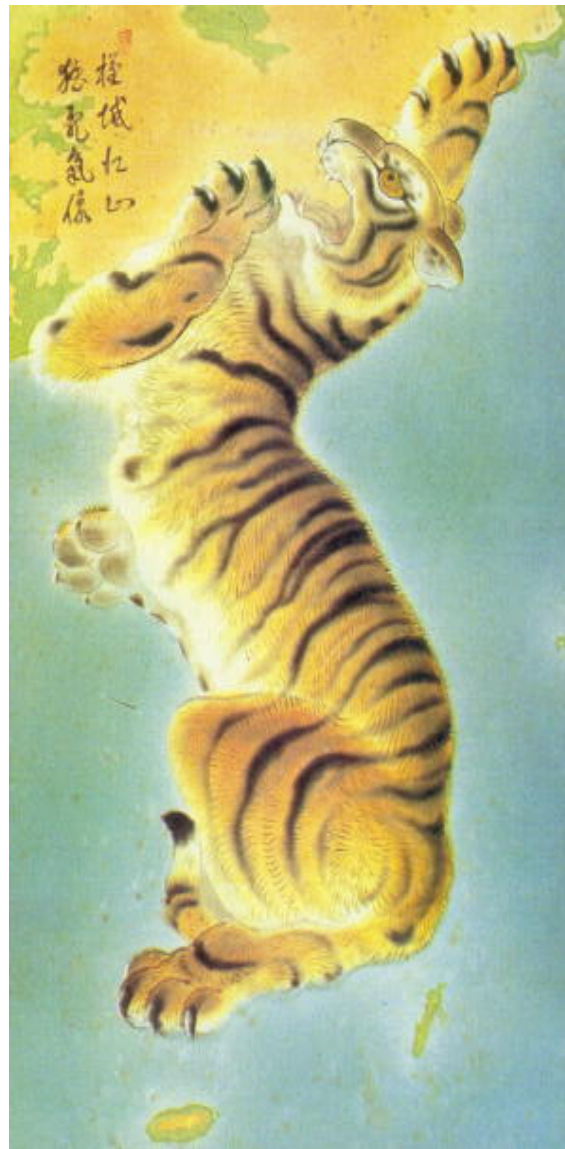
The mother of all Korean mountains.

The social, sociological, cultural, and historical foundation of the nation.

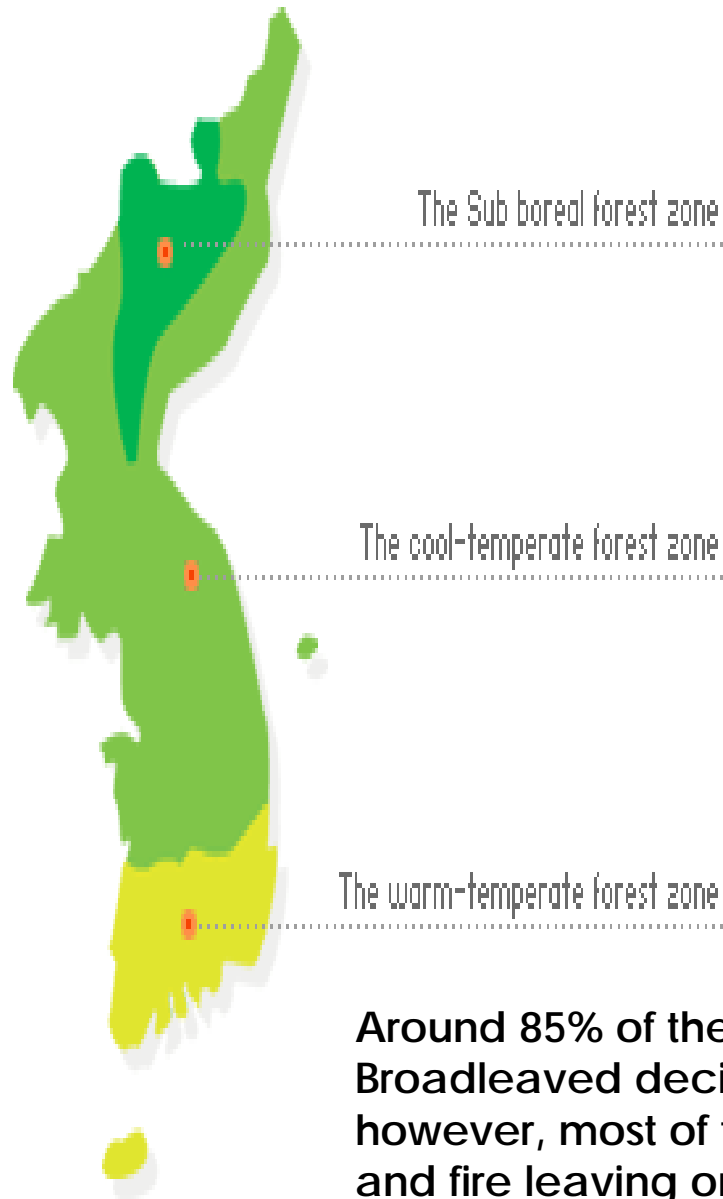




# Baek Du Dae Gan (continued)



# Forest Distribution



The Sub boreal forest zone

Temperature : 5 °C and lower.

Forests : Coniferous,

Species : **Abies spp.**, **Picea spp.**, **Larix spp.**, **Juglans mandshurica**,  
and **Betula platyphylla**.

The cool-temperate forest zone

Temperature : from 6 °C to 13 °C.

Forests : Broadleaved deciduous trees

Species: **Quercus spp.**, **Zelkova spp.**, **Fraxinus spp.**, **Pinus densiflora**  
and **P. koraiensis**.

The warm-temperate forest zone

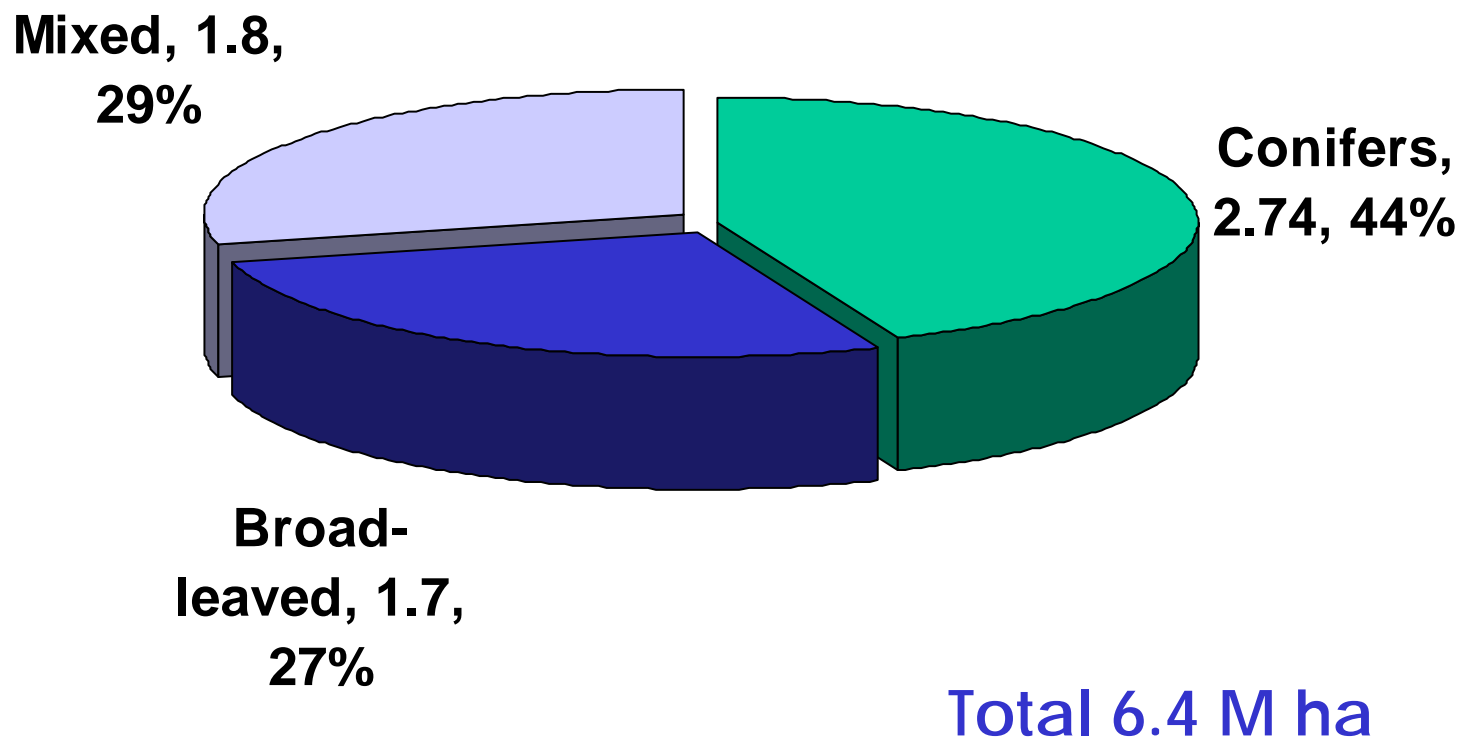
Temperature : higher than 14 °C.

Forests : deciduous, mixed, or coniferous forests.

Species : **Quercus actua**, **Castanopsis cuspidata**,  
and **Camelia japonica**.

Around 85% of them are identified as cool temperate forests.  
Broadleaved deciduous trees are predominant in the area,  
however, most of them are destroyed by agricultural activities  
and fire leaving only pines forests.

# Forest Type

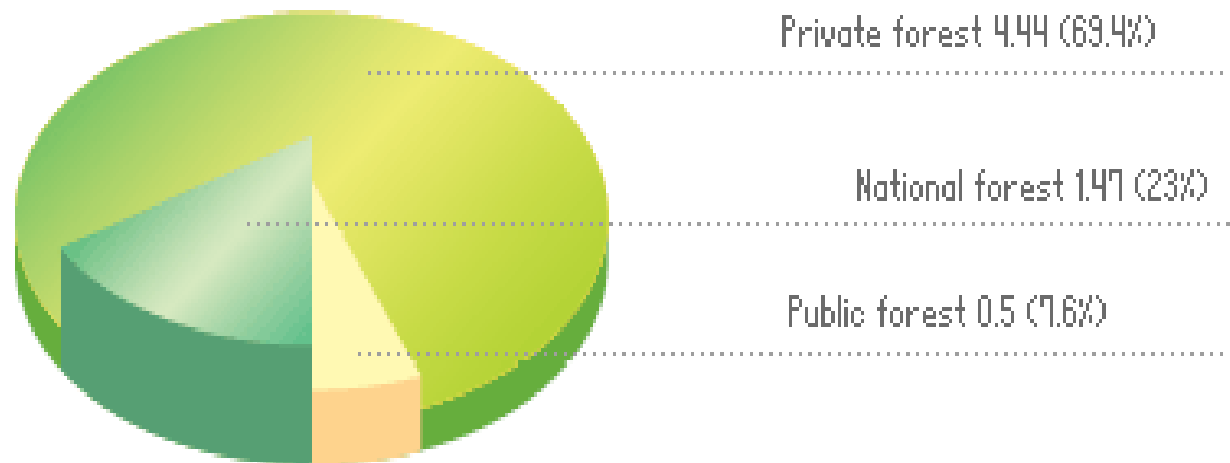




# Forest Ownership



Forest ownership (unit: million ha)



## PRIVATE FORESTS

Owned by individuals, corporations, non-commercial organizations, temples, etc.

About 2 million private forest owners and 82% of them own less than 50 ha.

53% of the area is owned by negligent landowners who are not concerned about forest management.

# Current Issues



**Forest Fire Prevention in Pine Forests**

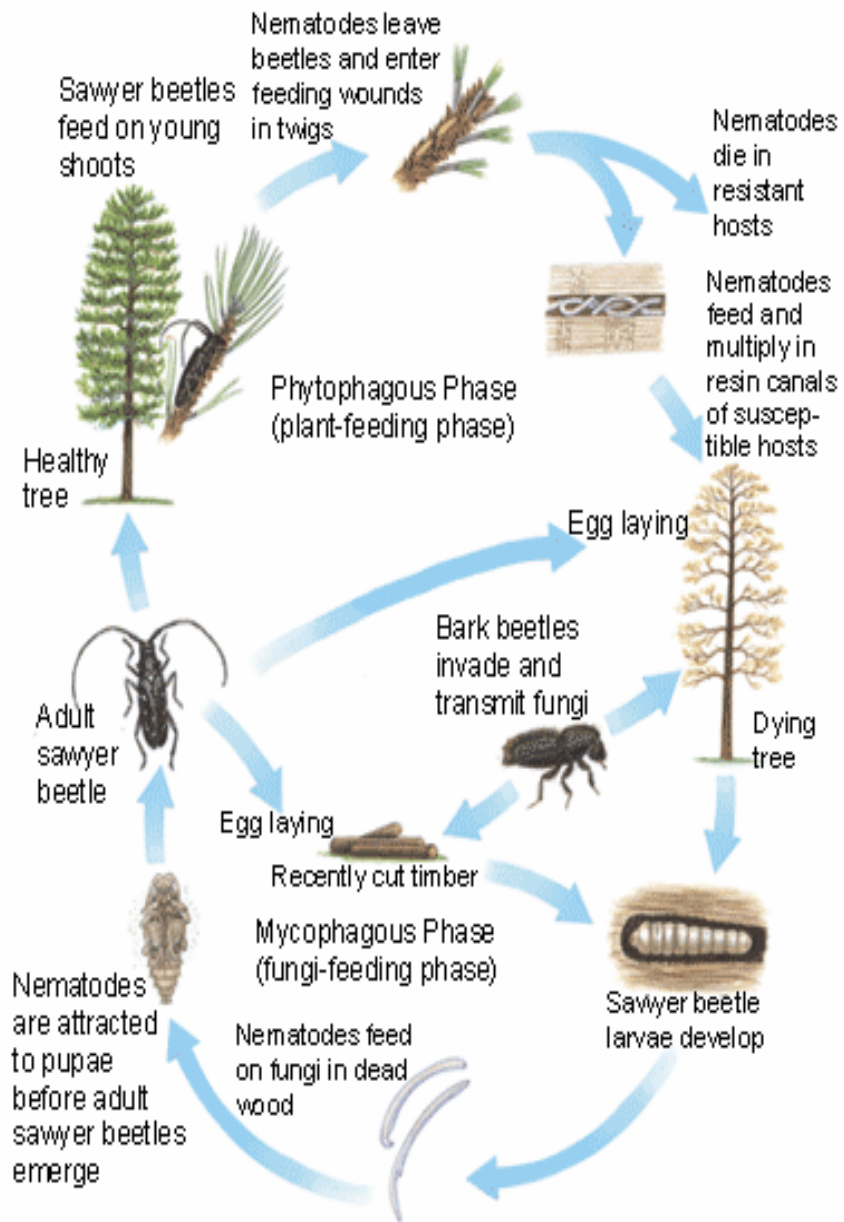
**Pine Wilt Disease Control**

**Sustainable Forest Management**

**Deforestation in North Korea**

**Enhance Commercial Forestry**

# Pine Wilt Disease



Pinewood nematode adult male with spicule (see arrow) at posterior end.



Adult *Monochamus* beetle.







## Forest Fire in YangYang area at arbor-day .

Forest burn : 430 ha and 246 houses.

Naksan Temple : built about 1300 years ago.

Bell : made about 600 years ago.





Foundation : 1972 in Incheon, Korea

5 domestic companies

6 in overseas : USA, Chile, China, Solomon Islands

2 representative offices : Indonesia, Malaysia

Ea = 利 = Beneficial

Gon = 建 = Construction, Building

EAGON = 利 建 = Beneficial to Construction

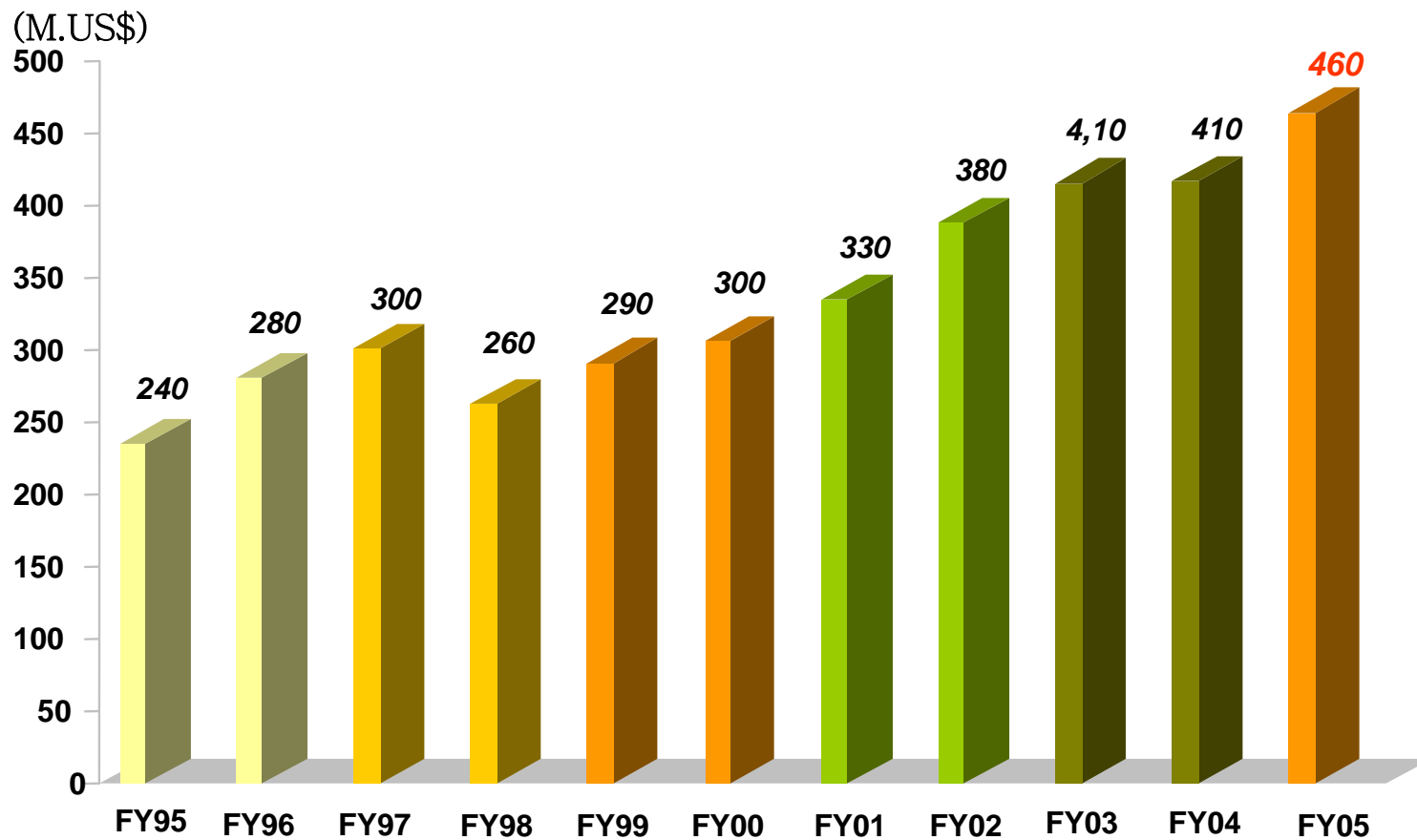
**- Create a Beautiful Living Environment -**

# The Sun Never Sets on the EAGON

EAGON 



Employees : about 2,500 people



## Vertically Integration in Wood Industry

### Forest Genetics

- Seed selection
- Tree breeding
- Nursery
- Developing new hardwood species in Solomon Islands

### Plantation

- Plantation carried out over 25,000 ha at New Georgia, in Solomon Islands under sustainable-yield management
- Annually about 100,000m<sup>3</sup> is harvested at present, and this volume is expected to reach 500,000m<sup>3</sup> by year 2012
- Main Species : Teak, Eucalyptus, Terminalia, Mahogany



## Manufacturing

- Plywood
- Flooring, Windows, Doors, Furniture
- Various Building Materials
- Wood-Composite Deck

## Recycling

- Pressed Wooden Pallet

## Trading

- Plywood/Particle Board/MDF/OSB
- Building Materials, Sawn-Timber, Molding
- Logs (Hard and Soft Wood)

# Solomon Islands



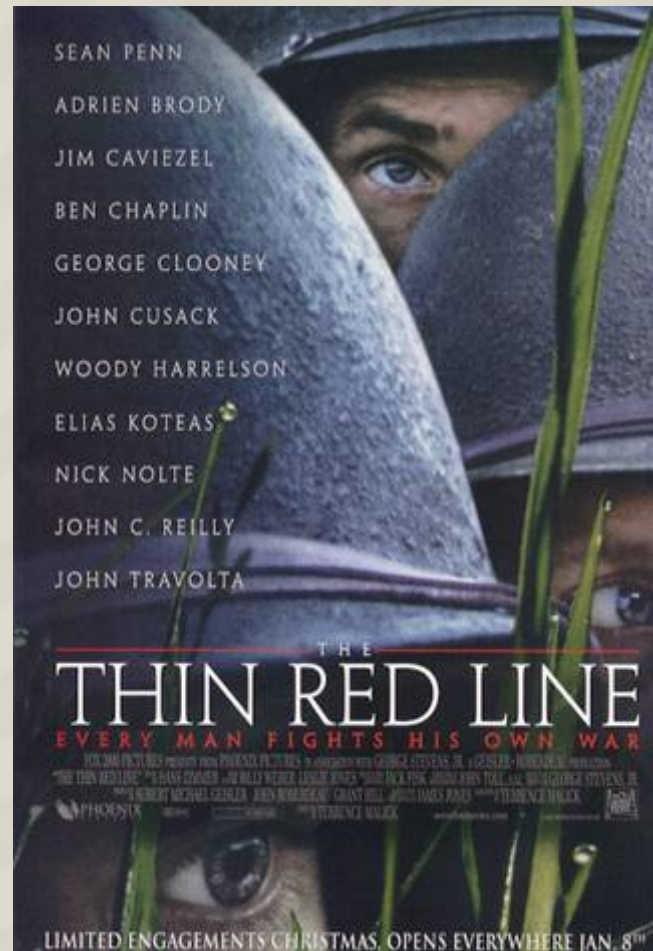
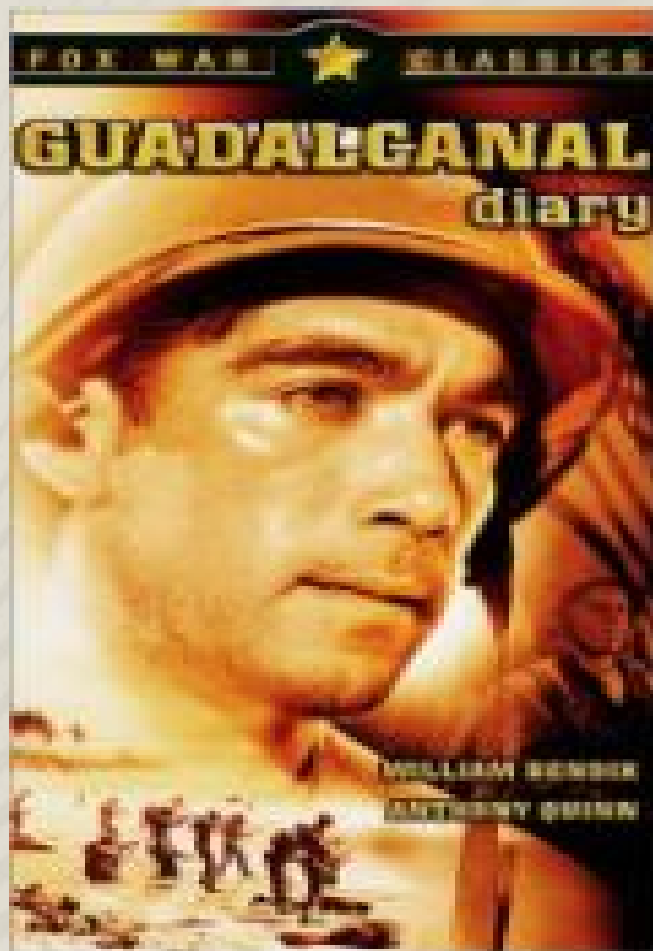
**Geographical Location**  
155°E ~ 170°E, 5°S ~ 12°S



**Honiara Head Office**

# Solomon Islands and World war II - Guadalcanal

EAGON 







Plantation Area (New Georgia Island)



Nursery bed with local employee



Mahogany



Logs for export



# Products

EAGON 



Logs from Solomon Islands  
(Sustainable Plantation)



Plywood for concrete panel  
(Non-Formaldehyde)



Phenol film faced Plywood



Reusable Packing System



Pallet made from recycled wood



Wood-Plastic Composites



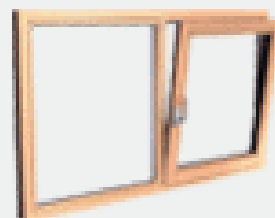
Lift Sliding



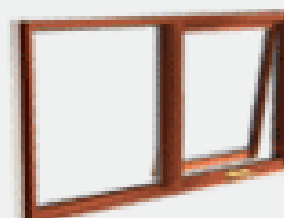
Lift Sliding  
200



Lift Sliding&Tilt  
161



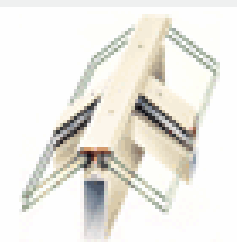
Turn&Tilt



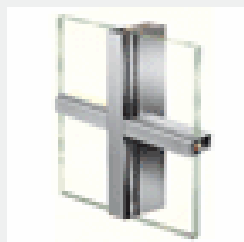
Awning



Casement



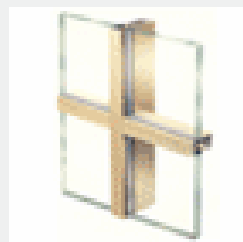
FACADE  
SK60



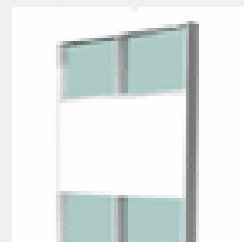
FACADE  
SK60V



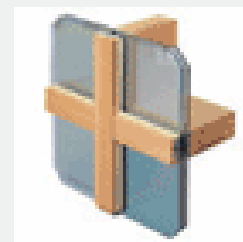
FACADE  
SG50



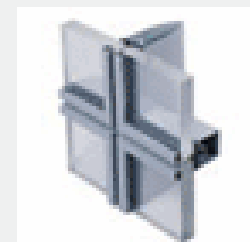
FACADE  
FW50



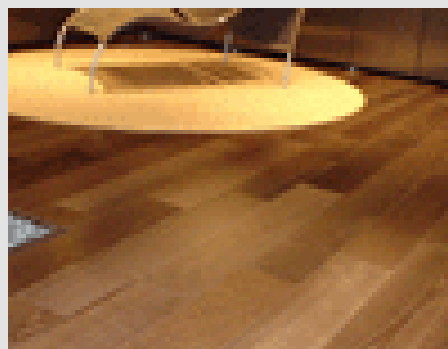
FACADE Unit  
Curtainwall



FACADE Wood  
Curtainwall



FACADE Steel  
Curtainwall







## **Eagon Foundation in Solomon Islands**

Medical Support

Agricultural & technical Support

Renovation of Solomon National Art Museum in Honiara. 1997

## **Scholarship Program**

China, Solomon Islands, Chile

## **Cultural • Art Activities**

Eagon Concert

Every year from 1990

Free performance to public

## **Other Activities within Community**



Seung-Min Memorial Hospital (Solomon Island)



Plantation school for local people



Marcus Roberts Trio (From USA) 15<sup>th</sup> Eagon Concert



Awarding Scholarship ( Eagon, Chile)



## ✓ Green Building Material

High Quality & High Profit

Eco-Friendly Material

High Energy Efficient Material

Building Integrated Solar Panel

Recycled Material

## ✓ FSC Certification in Solomon Islands

## ✓ New Plantation & Plywood Plant Investment : India & Vietnam

## ✓ US Housing Market : Chile Plywood Plant

## ✓ China Price



# Eagon Headquarter & Window Factory

EAGON 



- Total Area : 6.6 acre
- Construction Area : 5.2 acre

# Eagon Headquarter & Window Factory

EAGON 





# EAGON Butterfly (*Deudorix Eagon*)

EAGON 



Found by British entomologist,  
Dr. John Tennent  
in 1997 at Solomon Island



# Green!

## The New Color of Money.

Kyungtae Park  
International Fellow, Korea  
March 15, 2006



WORLD  
FORESTRY  
CENTER

EAGON 

The background of the slide is a close-up photograph of green leaves, likely from a tree, with sunlight filtering through them, creating a bright and natural feel.

# Project Background

## Korean Green Building Materials Market

- ❖ Still small, but expected to grow rapidly.
- ❖ Everything is Green?
- ❖ Green Building Certificate System.
- ❖ Technical development & Quality competition.
- ❖ Prepare to enter emerging market.

The background of the slide is a close-up photograph of green leaves, likely from a tree, with sunlight filtering through them, creating a bright and natural feel.

# Project Objectives

- ❖ Explore US green building materials
- ❖ Understand US and Korean wood markets and green building material markets
- ❖ Determine reasons why US consumers buy green building materials
- ❖ Determine what products, tech. and companies may be adaptable to the Korean market
- ❖ Review US standards laws and regulations



### In US

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# End of Documents

## Thanks!

