

# **Forest Ecosystem Restoration by large area plantation in Republic of Korea**



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A photograph of a dense forest with tall, slender trees and a path leading into the distance. The trees are mostly deciduous with green foliage. The path is a dirt road that curves slightly to the right. The lighting is soft, suggesting a filtered sun. The overall color palette is dominated by various shades of green and brown.

# **I. Large-scale forest restoration in Korea**



# Forest Ecosystem in Korea



## ▪ Forest ecosystem as key component of biodiversity in Korea

- Total land area : 10Mha
- Forest area : 6.4Mha(64%)
- Agricultural land : 2Mha(20%)
- Developed area : 1.6Mha(16%)

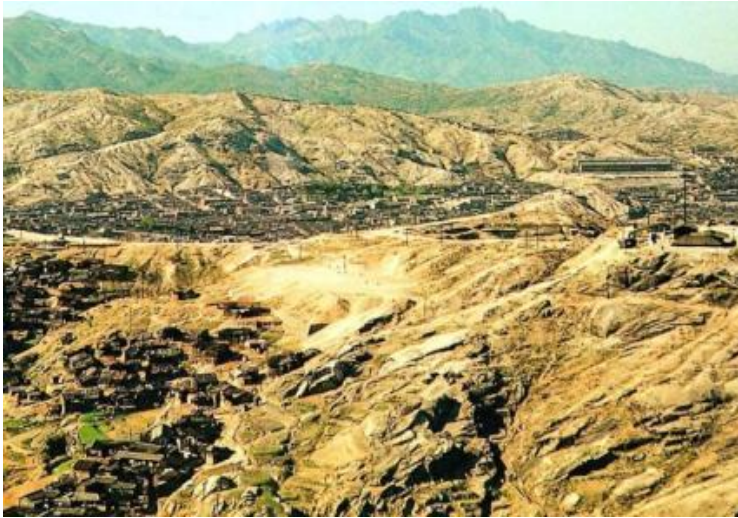


## State of Forests in 1960

- Landscape level degradation of forest ecosystem in the early 20<sup>th</sup> century
  - + Over-exploitation during the Japanese occupation(1910-1945)
  - + Korean War(1950-1953)
  - + Use of fuelwood
- ⇒ Stock volume per ha in 1960 : only 12 m<sup>3</sup>



# Large-scale Forest Restoration



**1960**

**79 USD**

**26 million**

**12m<sup>3</sup>/ha**

**GNI per capita**

**Population**

**Forest stock volume**

**2010**

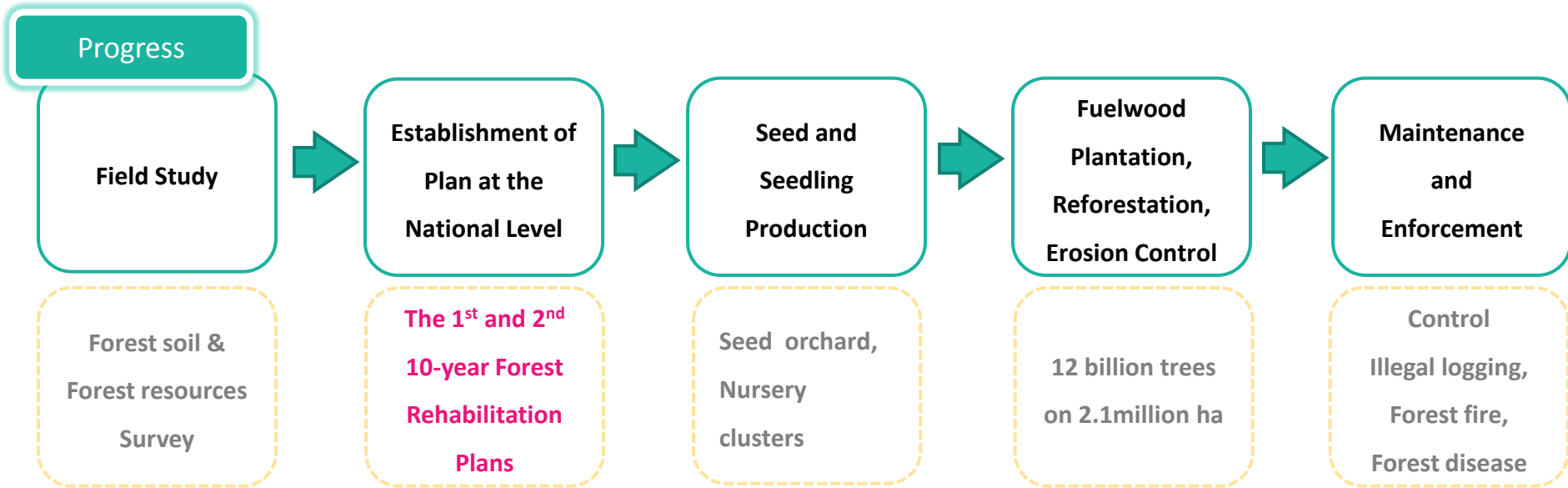
**28,650 USD**

**48 million**

**126 m<sup>3</sup>/ha**



# Stages of Forest Restoration





# Challenges and Solutions

## Lack of governance

- Establishment of the Korea Forest Service and reorganization of the administrative structure
- Revision of relevant laws



## Lack of scientific knowledge and technology on forest restoration

- The first National Forest Inventory Survey on public and private forests ('60-'70)
- Classification criteria of forest utilization based on tree species (mid-1960)
- Initiation of technology research on seedlings and saplings production





# Challenges and Solutions

## Lack of financial and human resources

- Financial support from International Organizations (UNDP, FAO, WFP, etc.)
- Mobilization of human resources through the *Saemaeul Undong* (New Village Movement)

## Lack of vital seedlings and saplings of dominant tree species

- The parameters to distinguish vital seedlings and saplings
- The production of various species by enhancing the genetic and breeding technology



## Challenges and Solutions

Lack of efforts in eliminating the main drivers of deforestation and forest degradation

- Alternative fuel sources and the clearance of shifting cultivation

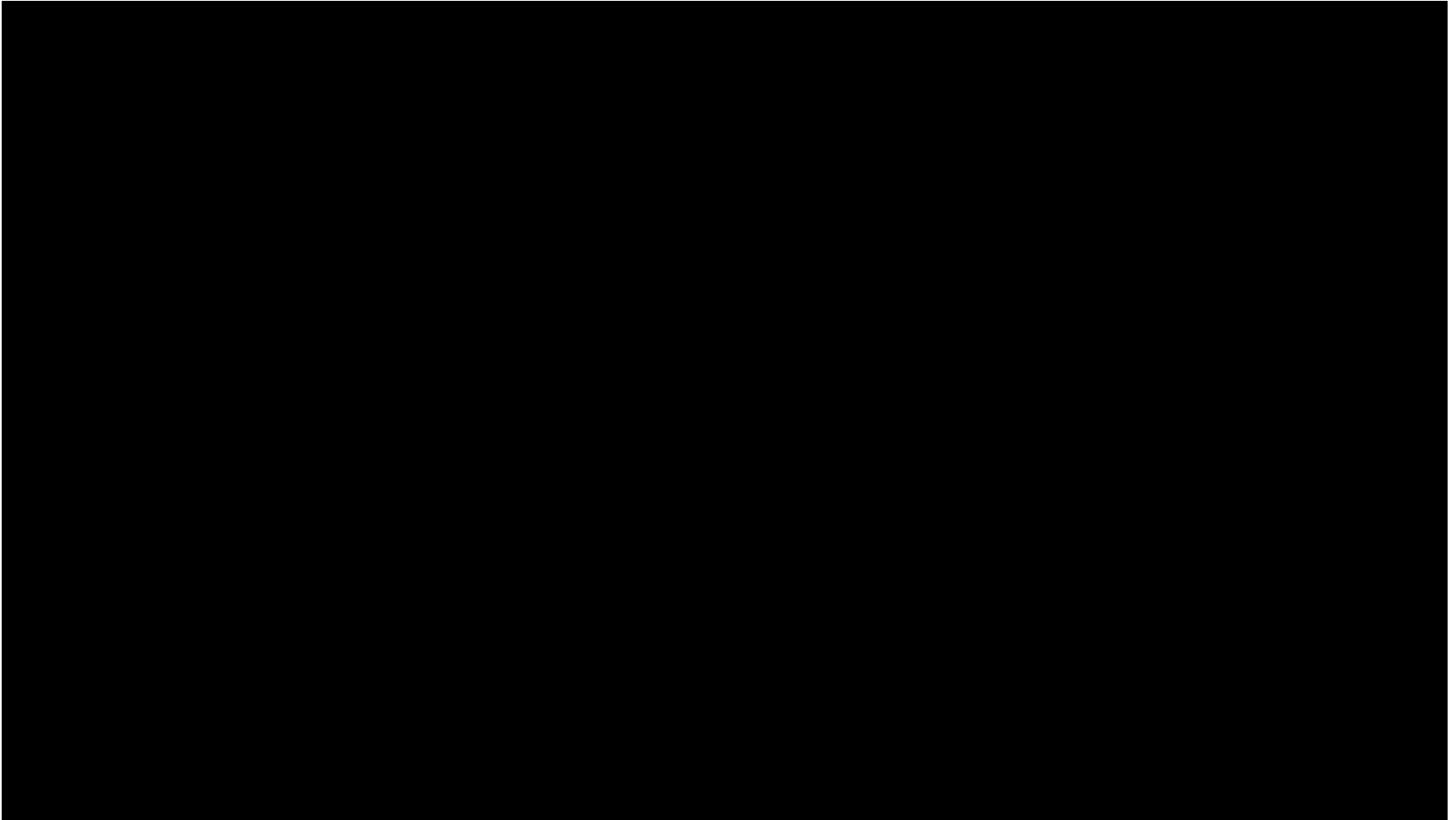




A photograph of a dense forest with a path leading into the distance. The trees are tall and thin, with a thick canopy of green leaves. The path is a narrow, light-colored trail that recedes into the distance, flanked by green undergrowth. The overall atmosphere is serene and natural.

## II. The Green Will

# Young-il Forest erosion control project





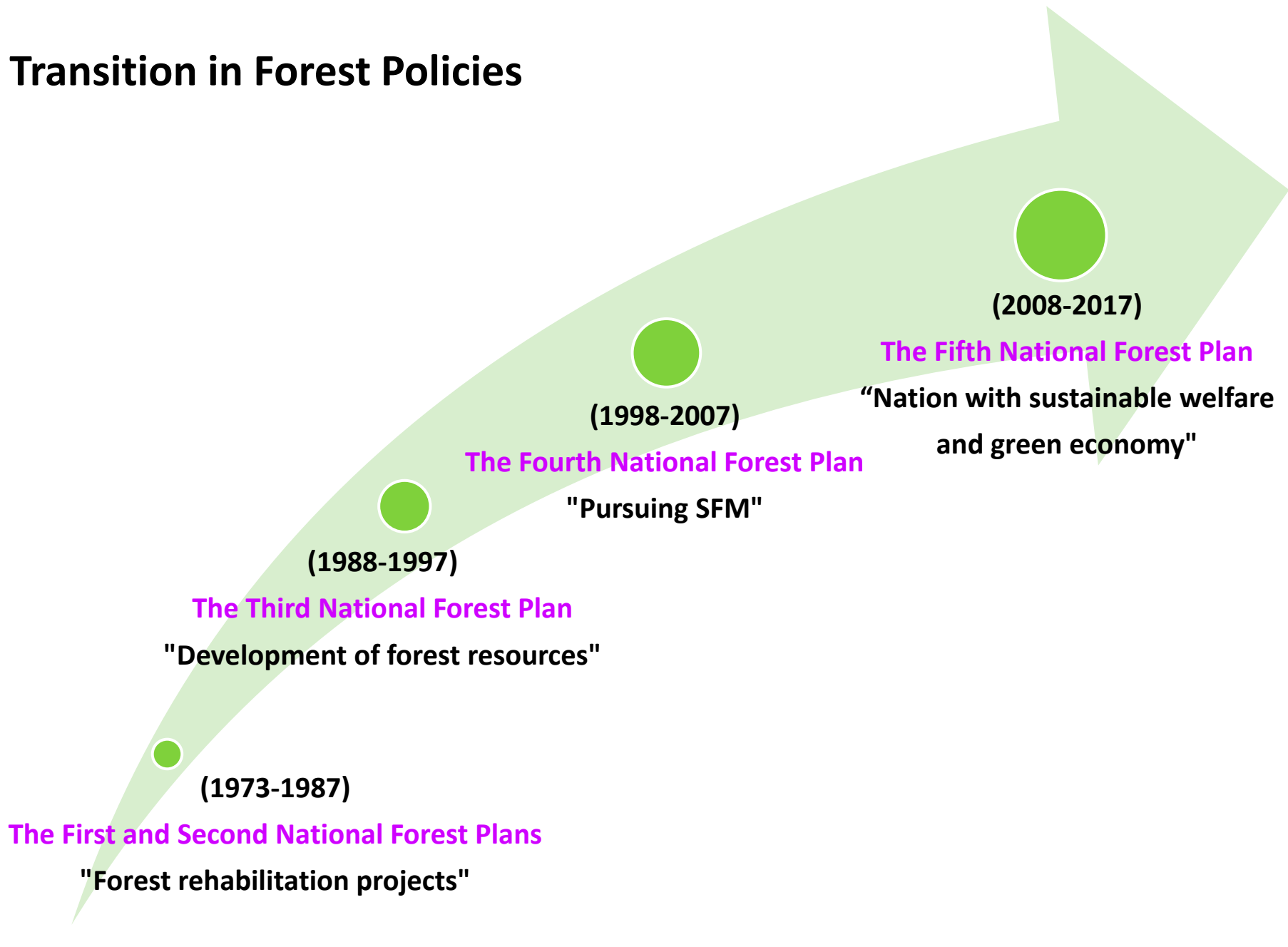
# Factors of Successful restoration



A photograph of a dense forest with tall, thin trees and a path leading into the distance. The trees are mostly deciduous with green leaves, and the path is a dirt road that curves slightly to the right. The lighting is soft, suggesting a filtered sun. The text "III. After the Successful Restoration.." is overlaid in white on the right side of the image.

### III. After the Successful Restoration..

# Transition in Forest Policies



# Current state of forests in Korea

*New paradigm of forest use*  
**"from cradle to grave, life with forests"**



Prenatal

Early  
Childhood

Adolescent

Adult and  
middle Age

Third Age

Death

Prenatal care  
in forest  
(4 units)

Forest  
experience  
centers for  
children  
(13 units)

Forest  
educational  
facilities for  
juvenile  
(21 units)

Recreational  
forests  
(157 units)  
Eco-healing  
forest  
(173 units)

Healing forest  
(4 units)

Natural burial  
and memorial  
in forests  
(58 units)



## Current state of forests in Korea

Development of resources for carbon sink  
Conservation of biodiversity



Raw materials for emerging industries including  
new pharmaceutical and bioenergy development



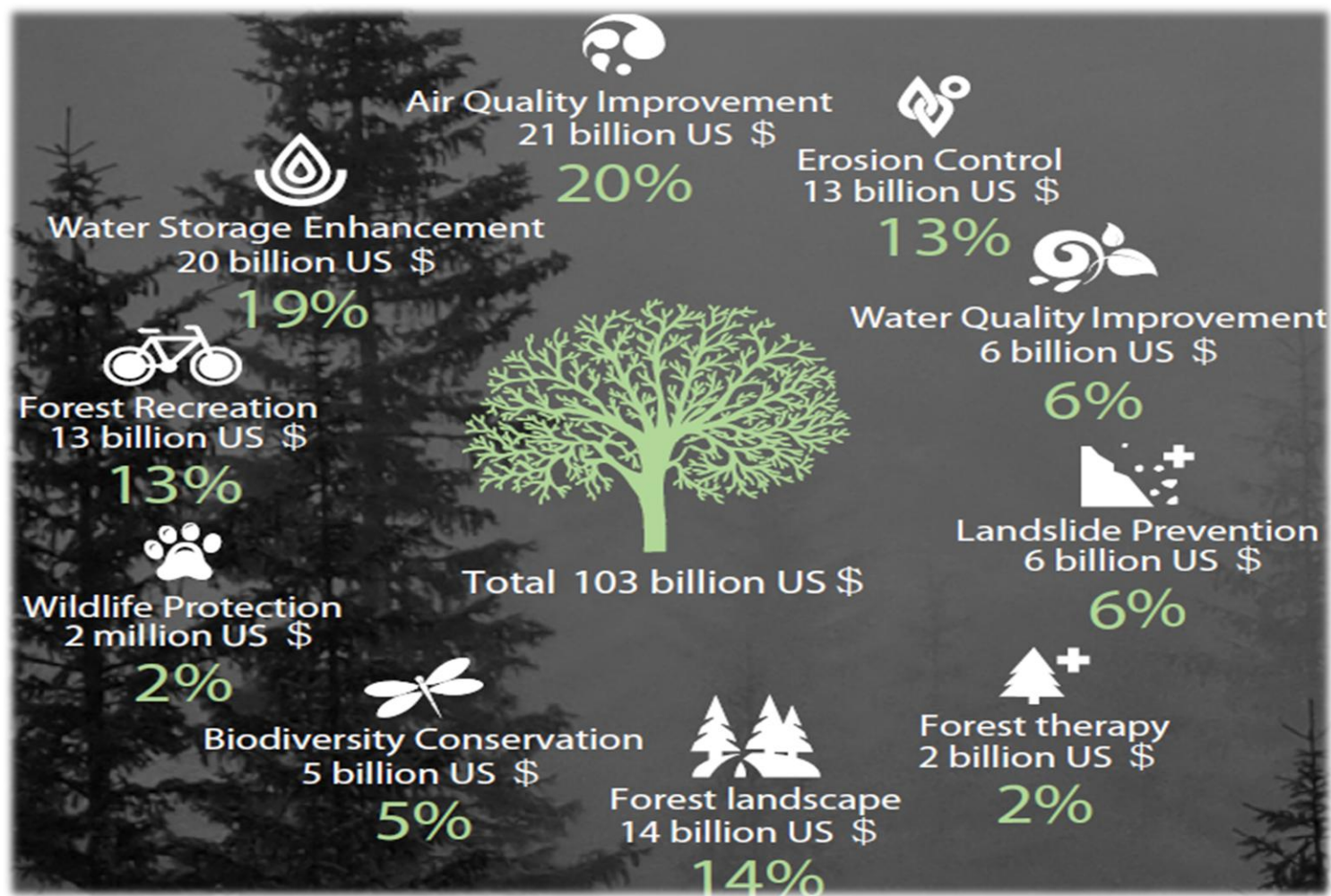
fine **wood**, fine **living**

Forest for public health  
(e.g. forest therapy and recreational forest)



## Current state of forests in Korea

### *Public benefits from the forest*

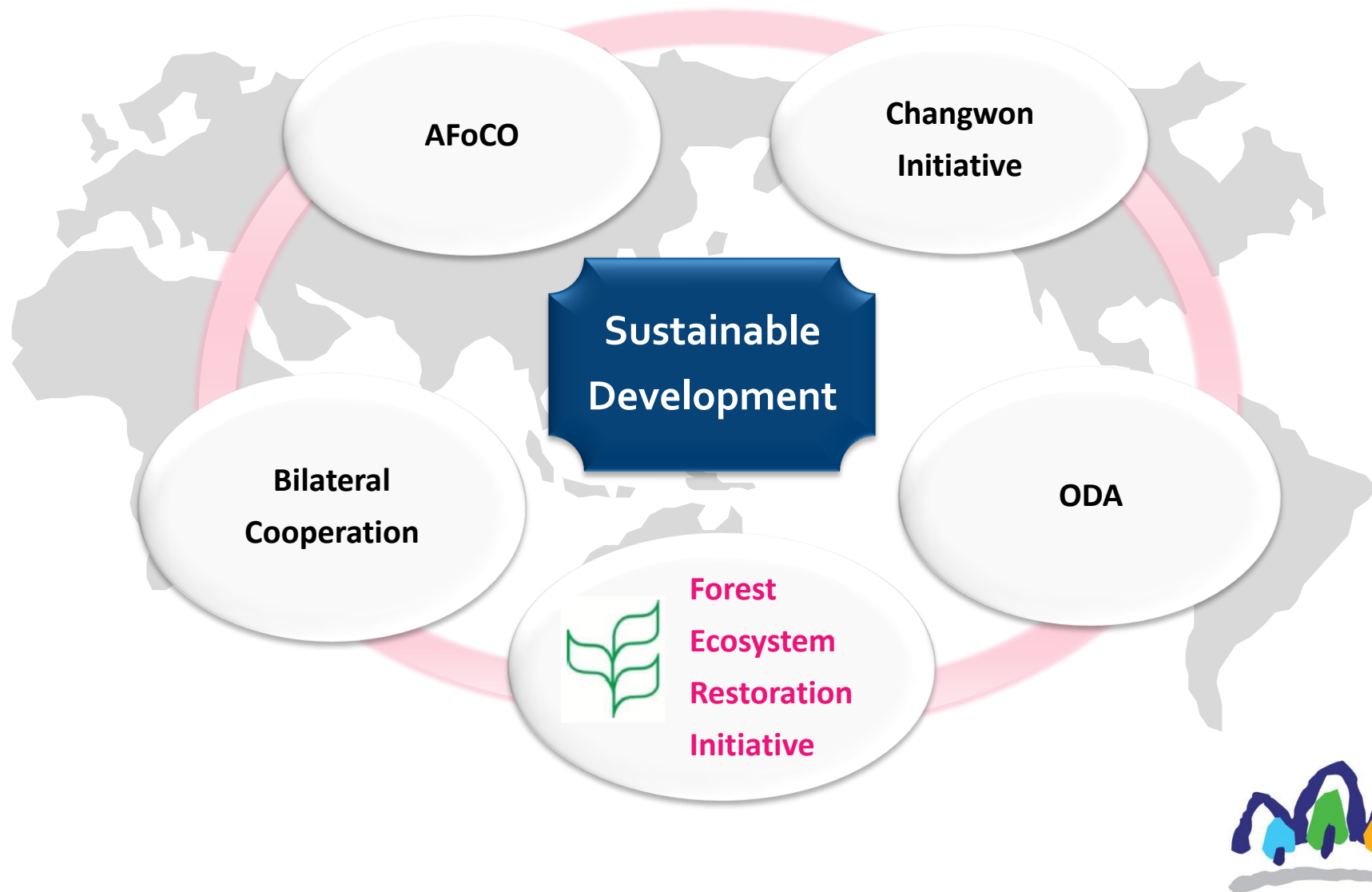




A photograph of a dense forest with tall, thin trees and a path leading into the distance. The trees are mostly deciduous with green leaves, and the path is a dirt road that curves slightly to the right. The lighting is soft, suggesting a filtered sunlight through the canopy.

## IV. Sharing Experiences

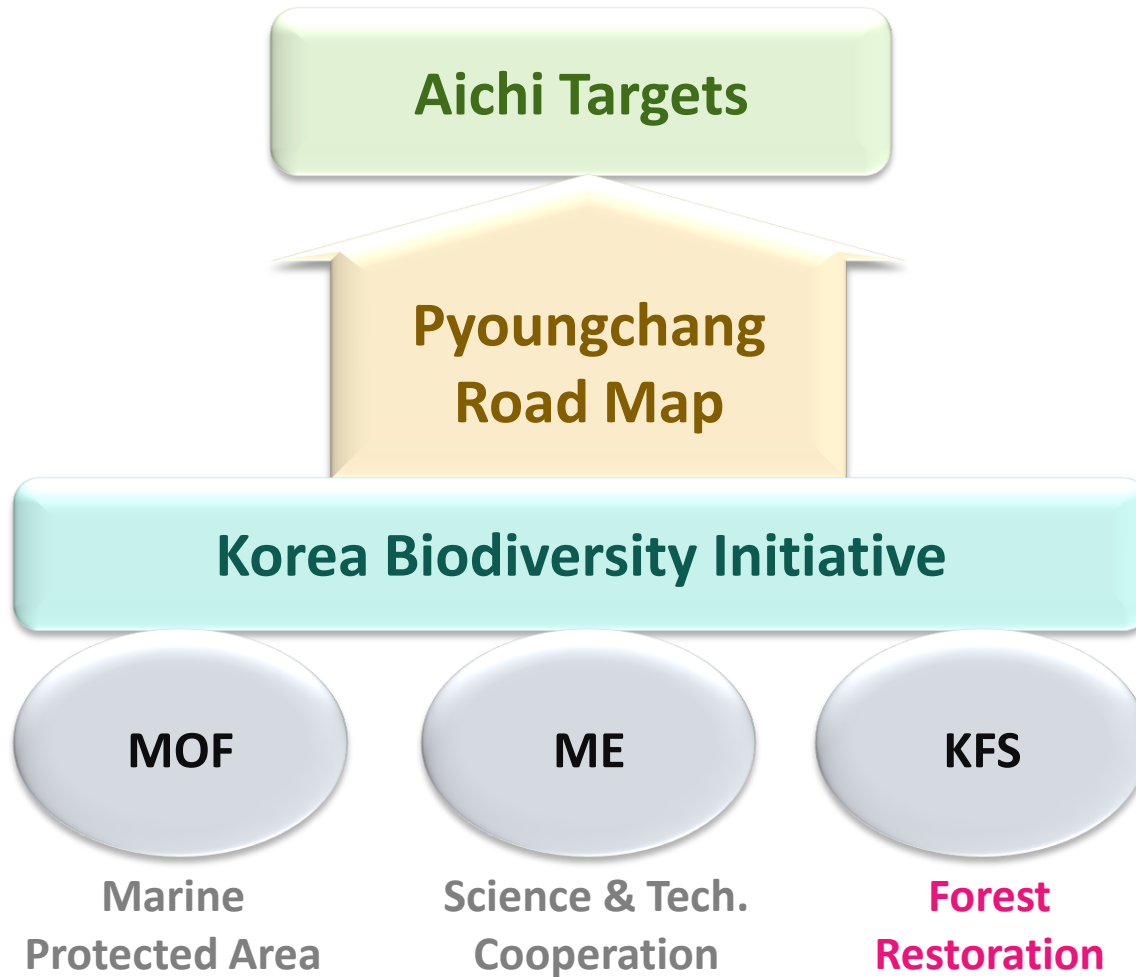
## Sharing with International Communities







# Forest Ecosystem Restoration Initiative

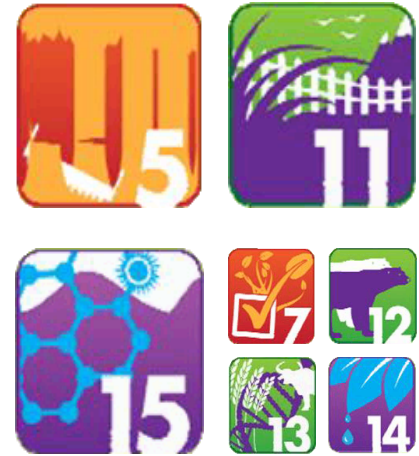




# Forest Ecosystem Restoration Initiative

## Contents

- ✓ Capacity Building
- ✓ Implementation support (10 countries)
- ✓ Technical support and cooperation
- ✓ Expert process
- ✓ What Else?



**Aichi Targets**





**Thank you !**  
**감사합니다!**

<http://www.forest.go.kr>