



Agricultural Heritage Value of Forest Resources in Korea

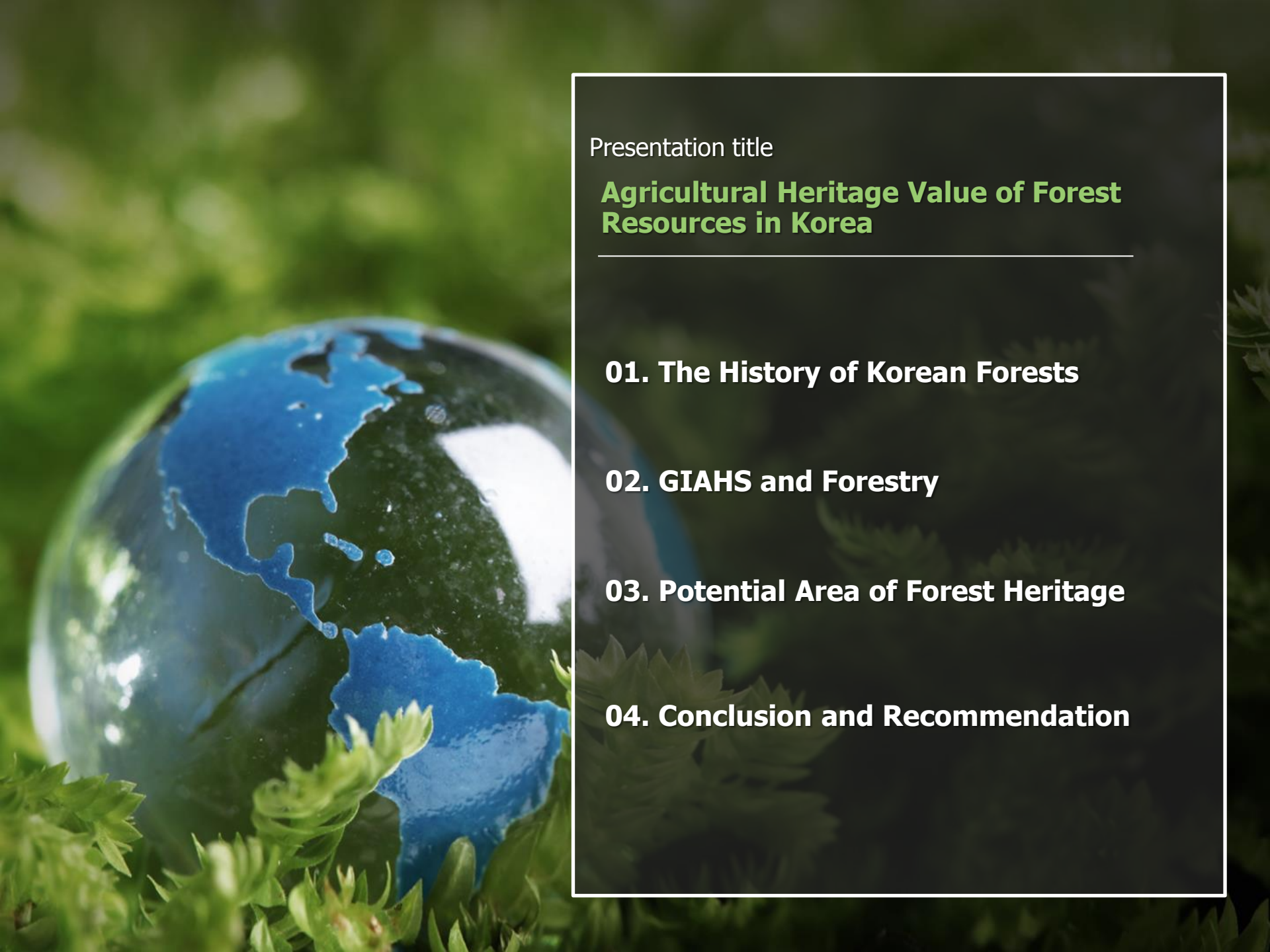
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Korea Forest Service



Presentation title

Agricultural Heritage Value of Forest Resources in Korea

01. The History of Korean Forests

02. GIAHS and Forestry

03. Potential Area of Forest Heritage

04. Conclusion and Recommendation

A photograph of a dense forest with tall, slender trees. Sunlight is streaming through the canopy, creating a hazy, golden glow. The trees are mostly evergreens, and the ground is covered in low-lying vegetation.

01. The History of Korean Forests

1-1. The History of Korean Forests



Three Kingdoms Period (BC57~AD935) Goryeo Dynasty (918~1392)

Limsu(林藪) : Man-made forests

- Objective: To prevent wind and flood damages
- Use: Bonsai, timber, building and shipping materials

Joseon Dynasty (1392~1910)

Forest reservation system (1392~1608) :

Restrict and designate the use of forests for special purposes

Forest logging prohibition system (1608~1905) :

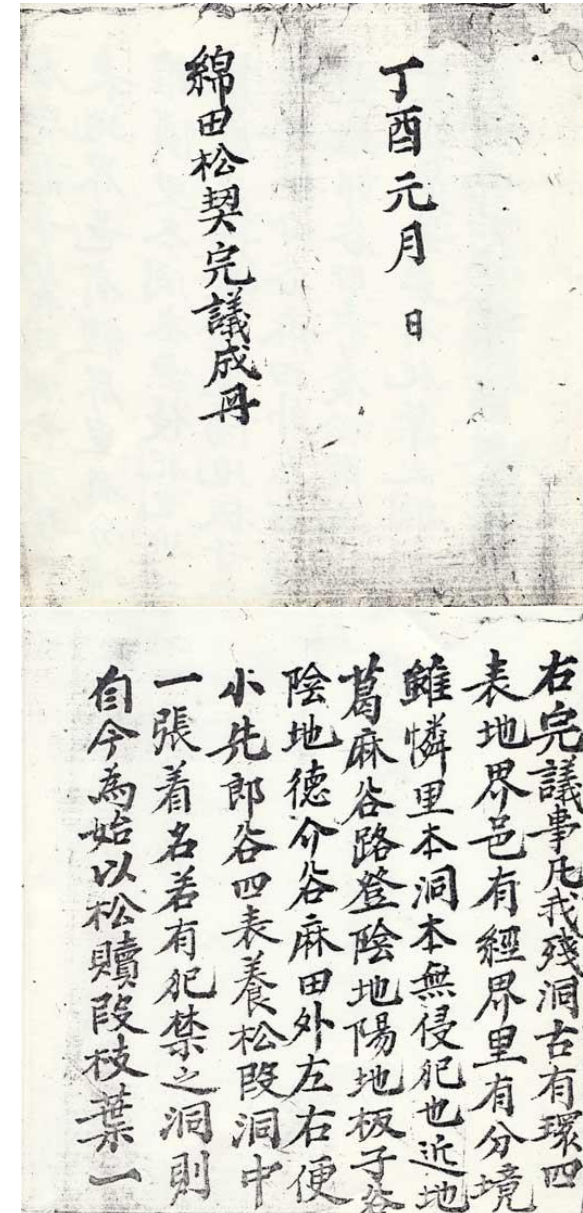
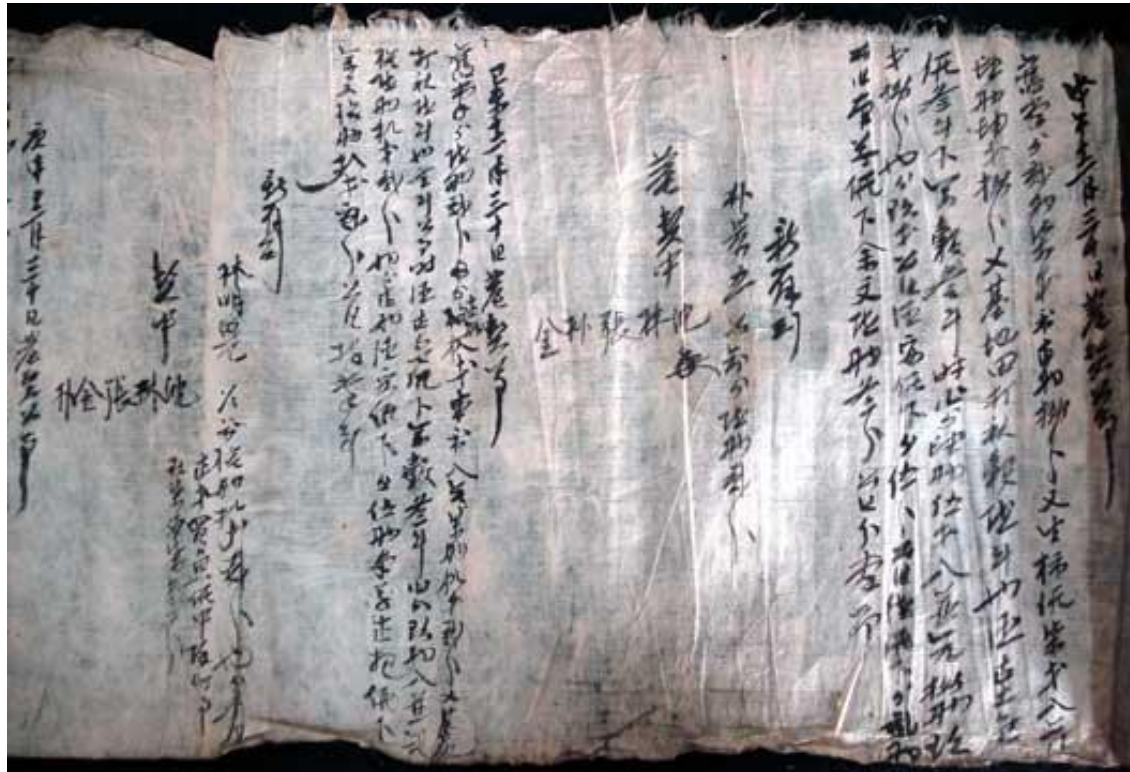
- Ban logging within certain distances by installing signposts
- Expand the scope of logging prohibition species from pine trees to oak and chestnut trees
- Manage specially designated pine trees for making Kings' coffin



1-1. The History of Korean Forests



Songgae(松契) of Songgeumgae(松禁契) is an autonomous system of villagers to protect the forest resources. Once the regulations set up by villagers voluntarily is breached, a violator will be punished by the villagers or reported to the local authority.



1-1. The History of Korean Forests

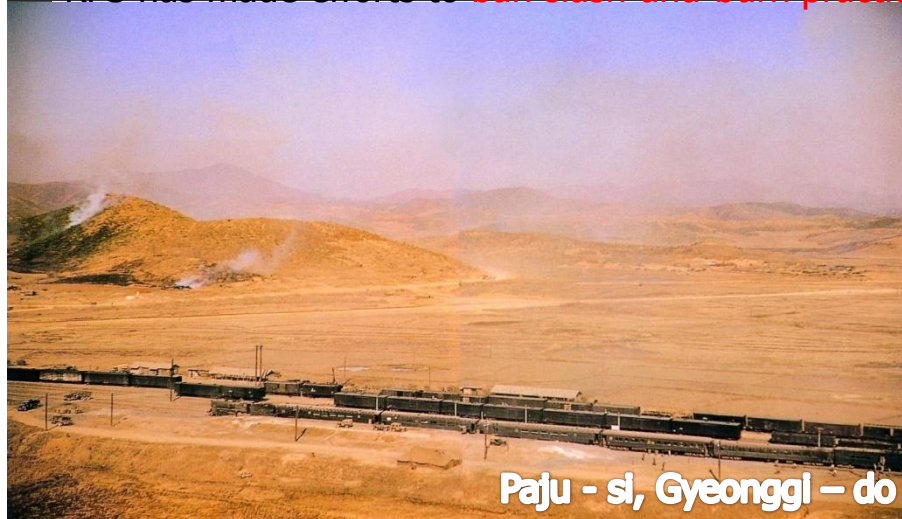


During the Japanese colonial era: Geumgangsong(Red pine tree) were massively exploited to support Japanese war materials during the World War II.

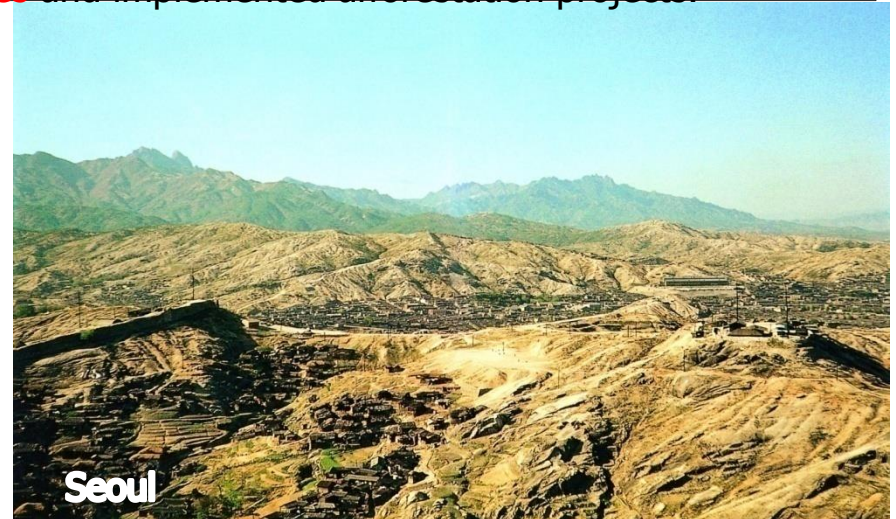
After the liberation: Korean war and reckless logging ruined the forests.

Establishment of the Korea Forestry Service (KFS):

KFS has made efforts to **ban slash-and-burn practices** and implemented afforestation projects.



Paju - si, Gyeonggi - do



Seoul



Seosan - si, Chungcheongnam - do



Gimcheon - si, Gyeongsangbuk - do

1-1. The History of Korean Forests



1-2. Views from International Community



- It seems hard to restore the Korean forest due to the long and continuous devastation (UN, 1969)

「Korea is a special and successful country in afforestation after the Second World War」 (FAO, 1982)



- 「The world is proud of the success of Korea's afforestation」 (Environmentalist Lester Brown, 2006)

「The success of Korea's afforestation is the pride of the world 」 (UNEP Executive Director Achim Steiner, 2008)



- 「Amazing Korea which has succeed in large scaled restoration of forest ecosystem」 (CBD Executive Secretary Braulio Ferreira de Souza Dias, 2014)



02. GIAHS and Forestry

2-1. Introduction



GIAHS aims at..

- international recognition;
- dynamic conservation;
- adaptive management of the agricultural heritage systems; and
- Sustaining food and livelihood security

In addition..

- Forest components could be further identified; and
- Issues of restoration of degraded forest sites could also be included

2-1. Introduction



Forest heritage systems

Forestry components of heritage systems..

- Sustainable forest management;
- Non-timber forest products including wood energy; and
- Forest and landscape restoration including watershed management and agroforestry

2-1. Introduction



Characteristics of Forests that Overlap with GIHAS

- High level of biodiversity, ecosystem services and regulators of ecosystem functions
- Agricultural ecosystem nurtured by traditional knowledge
- Preserving of rural heritage as agroforestry systems
- Resilience to changes caused by human and climatic environments
- Strong cultural values
- Build on ecosystem diversity as well as livelihood diversity
- Historical tradition and knowledge have evolved over the centuries
- Hold economic, environmental and cultural importance

2-2. Key Initiatives in FAO Forestry Department



- Ongoing Agreement with IUFRO, signed in September 2012
 - Identify case studies and potential GIAHS sites
 - Planning and organizing seminars
 - Developing research activities
- Collaborating with initiatives that share similar interests
 - Global Partnership on Forest Landscape Restoration (GPFLR)
 - International Model Forests Network
 - Great Green Wall Initiative
 - Satoyama Initiative
- Forest and Landscape Restoration mechanism at FAO

2-2. Key Initiatives in FAO Forestry Department



Global Partnership on Forest Landscape Restoration(GPFLR)



2-2. Key Initiatives in FAO Forestry Department



Biocultural Diversity

Traditional forest-related knowledge and history

Maeulsoop, South Korea



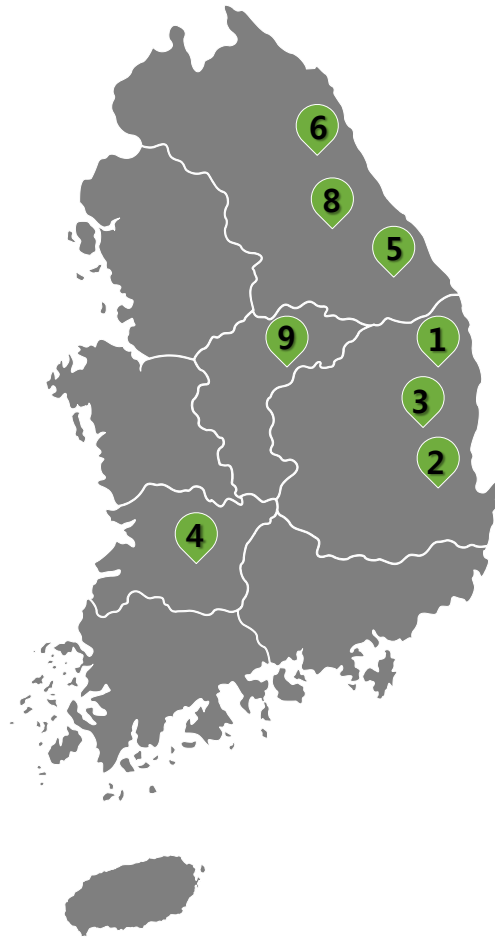


03. Potential area of Forest Heritages

3.1 Potential Resources for Korean Agroforestry Heritage



List of agroforestry resources of great value



1. Geumgangsong in Uljin-gun



2. Town forests



3. Wild edible plants



4. Lacquer (漆) technique



5. Farming on the Baekdudaegan



6. Alpine agriculture



7. Timber carrier(log raft) in Jeongseon



8. Cultivating the paper mulberry and traditional Korean paper 'Hanji'

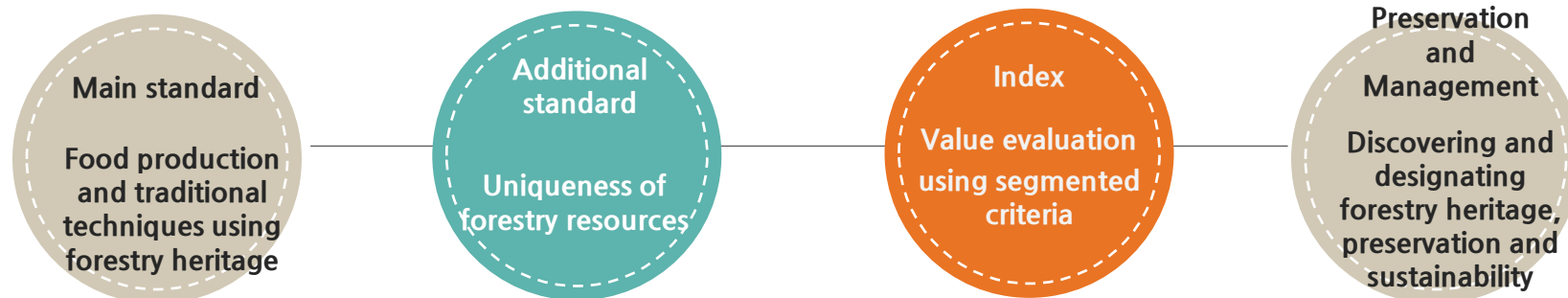


3.2 Standard of Value of Korean Agroforestry Heritage Resources



- Discovering agroforestry heritage by applying FAO GIHAS and MAFRA

Standard	Indicator	Element	History
Food and livelihood security	Conditions of forestry	Forestry environment, production, cultivation area and food culture	◎
Knowledge system And adopted technologies	Possession of trees and crops species	Unique forest resources, traditional crops	◎
Biodiversity and Function of the ecosystem	Habitat conservation	conservation of ecological environment and habitat	
	Inhabitation of animals and plants	Diverse species of plants and animal	
-Culture and value system -Social organization	Passing down the forest culture	Rituals, festivals, forestry culture	◎
	Passing down the culture of mountain village	Food and living culture, community	
Enhanced management on landscape, land and water resources	Forest-scape	Livelihood of mountain village	
	Water landscape	Water landscape harmonized with forest resources	



3.3 Forest Heritage in Korea



□ Uljin Geumgangsong



Securing
foods
and
means of
living

Timber, pine mushrooms, wild edible plants



Management
of landscape
and water
resources

Forest-scape, Forest Recreation
(e.g. Geumgangsong eco trail)



Biodiversity
and
Ecosystem

- Forest Landscape Conservation Area
- Protected Area for Forest Genetic Resources
- Habitat for endangered species (e.g. mountain goats, otter)

Knowledge
systems
and
Applied
technology

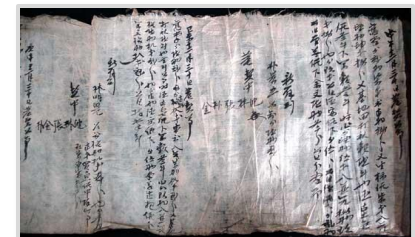


Mt. Hwangjangbong-san:
Management of red pine forest

Culture,
value system
Social
organization



Roads used by merchant called
'Bobusang',
Pine forests management system



3.3 Forest Heritage in Korea



❑ Uljin Geumgangsong Pine Tree Forest

- Systemic management of the forest through the forest conservation and regulations



울진 소광리 황장봉계표석
(蔚珍 召光里 黃腸封界標石)

경상북도 문화재자료 제300호
위치 : 경북 울진군 서면 소광리 산262

이 표석은 봉산(封山)의 경계를 표시하기 위한 것이다. 황장봉산제도(黃腸封山制度)는 조선시대 왕실에서 관곽(棺槨)으로 사용되는 황장목을 보호하기 위해 국가에서 황장목이 있는 산을 봉산으로 지정하여 일반인들이 함부로 벌채하지 못하도록 한 것으로 일종의 산림보호정책이다. 이 제도는 조선 숙종(肅宗) 6년(1680)에 시작되었으며, 그후 여러 지역으로 확대되어 지정되었다. 이 제도에는 장래에 필요한 황장목을 직접 장악하고자 하는 중앙정부의 정치적 의도가 있었다. 황장목은 중심이 황색인 소나무의 일종이다.

명문은 자연석의 앞면에 “黃腸封/ 界地名生達/ 巖女一王山/ 大里堂城/ 四回/ 山直命吉” 라고 23자가 새겨져 있다. 이는 “황장목의 봉계지역은 생달현, 안일왕산, 대리, 당성의 네 지역이며, 관리 책임자는 산지기 명길이다.”라는 내용이다.

Landmark of boundary in Sogwang-ri, Uljin

Gyeongsangbuk-do Cultural Property Material No. 300
Location : San 262, Sogwang-ri, Seo-myeon, Uljin-gun, Gyeongsangbuk-do

This stone landmark indicates that anyone cannot entered a forest and cut the trees. This system is designed to protect a particular pine tree for the coffins of the royal family. If a certain area is designated as a protective forest, anyone cannot enter the forest and cut the trees in the designated area. This system started in 1680, the 6th year of Joseon King Sukjong.

On the natural rock, 23 characters are inscribed. The landmark indicates not to trespass those areas, Saengdalhyeon, Anirwangsan, Daeri, and Dangseong, and it also says that the managing director is Myeong Gil.

국가 산림문화 자산 2015-0004
지정일자 : 2015. 8. 21

황장봉산 동계표석
(黃腸封山 東界標石)

“黃腸封山(황장봉산) 東界鳥城(동계조성) 至西二十里(지서이십리)”라고 적혀있다.

이는 “황장봉산의 동쪽 경계는 조성(鳥城)으로부터 서쪽으로 이십리”란 것으로 조성(鳥城)은 안일왕산성을 의미하는 것으로 추측된다. 황장봉산 계도는 양질의 소나무인 황장목을 확보하기 위한 일종의 산림보호 정책으로 우리나라의 최고 오지인 소광리 일대가 조선숙종때 부터 황장봉계로 관리되어 온 것은 울진 금강소나무의 우수성을 증명하기에 충분하다.

다른지역은 주로 황장목표가 발견되었지만, 울진 소광리는 황장목표가 발견된 점은 조선왕조의 특별한 관리를 받았다는 것을 의미하며, 한 지역에 이렇게 두 개의 황장목표가 발견된것은 우리나라 최초이다.

산림청 남부지방산림청장

3.3 Forest Heritage in Korea



❑ Town Forest



- To protect farmland from damages caused by wind and flood and to control microclimate
- To serve as eco-corridor connecting the ecosystem and boundary of the village
- To protect the village with Feng shui
- To offer a resting place

❑ Wild edible plants and food culture



- Main ingredients of Korean cuisine
- Used in temple cuisine and considered as healthy food
- Serve as hunger crops in difficult times
- A base of pyramid of the ecological system
- Joint management of cultivation and collection of wild edible plants

3.3 Forest Heritage in Korea



□ Korean traditional lacquer technique □ Baekdudaegan/mountain agriculture



- Lacquer tree (*Rhus verniciflua*)
- Ivy tree (*Dendropanax trifidus*)
- Lacquer extracted from the lacquer trees is used for 'lacquer painting'

- Mountain ranges running through the Korean peninsula
- Areas where forestry and agriculture co-exist
- Maintain unique agriculture and living culture

3.3 Forest Heritage in Korea



❑ Timber rafting in Jeongseon



- Timber rafting (traditional way of carrying timber)
- Related to a cultural meaning of a folk song 'Jeongseon Arirang'
- Unique housing style using timber

❑ Paper mulberry and Korean traditional paper



- Cultivating paper mulberry and making Korean traditional paper 'Hanji'
- Archival culture using 'Hanji'

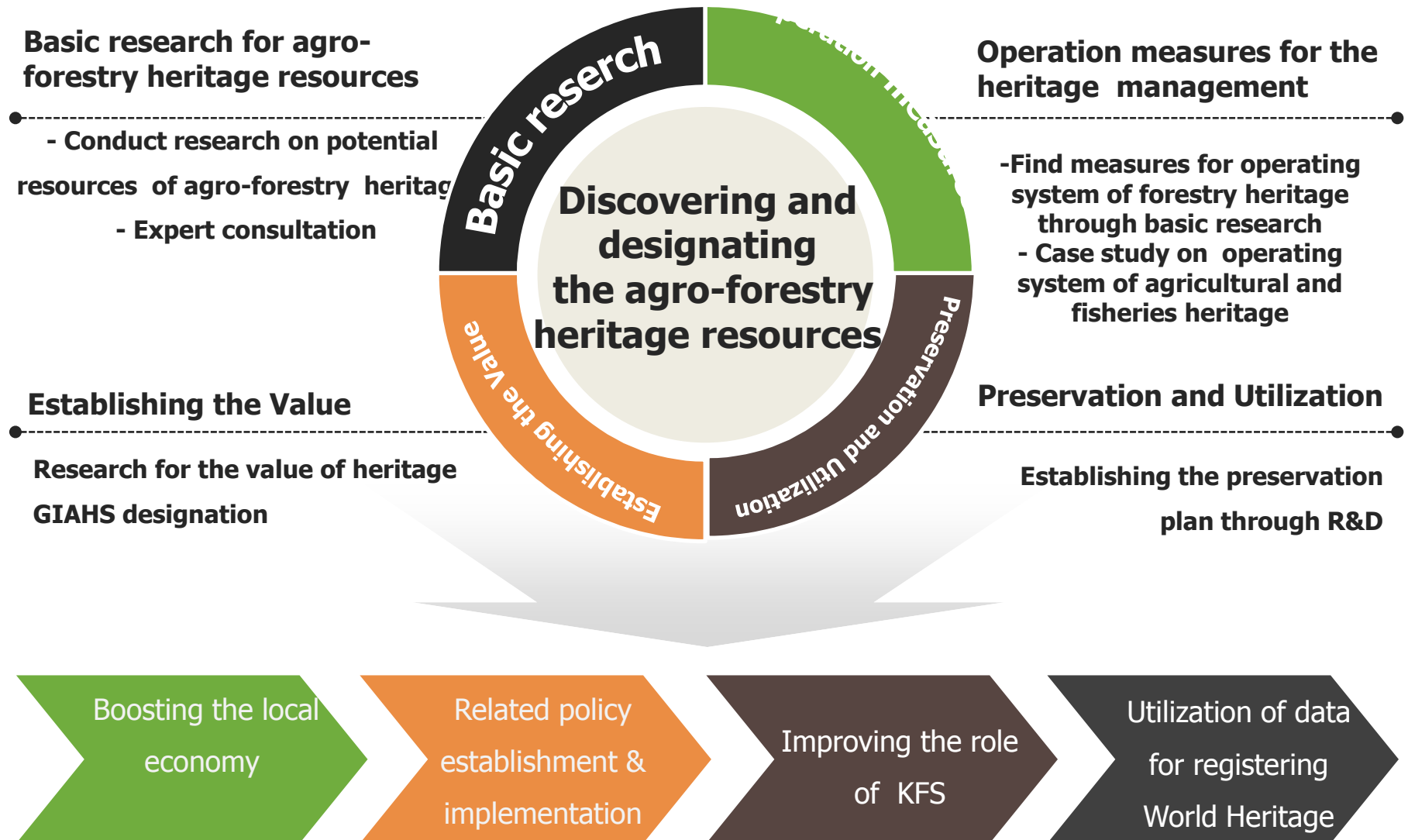


04. Conclusion and Recommendation

4.1 Conclusion and Recommendation



- ❑ Organized management through discovering the heritage of agroforestry resources



Thank you

