



The 8th Conference of ERAHS

# A Study on Designation KIHAS as OECMs to Achieve K-M GBF 2030

쿤밍-몬트리올 GBF 달성을 위한 국가중요농업유산 OECMs 등재방안

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# I . Introduction

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## 1. Study Background

1

At the COP15 of the CBD, the Kunming-Montreal GBF was adopted. A target was set to conserve 30% of the global land and sea areas by 2030 through Protected Areas and Other Effective Area-Based Conservation Measures (OECMs) to achieve in-situ biodiversity conservation.

2

As of April 2024, only 17.45% of the land area and 1.81% of the marine area are designated as protected areas and OECMs. By the end of 2020, forest area accounted for 62.7% of the total land area, of which 33.9% were national and public forests. To achieve the 2030 target, designating 66.1% of private forests is essential.

3

KIAHS have long served as in-situ conservation measures for agricultural ecosystems, consisting of tangible and intangible agricultural resources. Thus, KIAHS are eligible for OECM designation, necessitating an assessment of their potential designation.

# I . Introduction

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## 2. Study Purpose

1

Comparative Analysis of the Legal Framework and Criteria of KIAHS with OECMs

2

A comprehensive evaluation of the potential designation of KIAHS as OECMs was conducted based on the concepts and global guidelines suggested by IUCN.

# II. Methods

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## 1. Theoretical Review

- Firstly, the background and concepts of OECMs were reviewed based on the 「 CBD Decision 14/8, 2018 」 , 「 CBD Decision XI/24」 , 「 IUCN-WCPA TF, 2019) 」 , 「 IUCN-WCPA, 2022」 .
- Additionally, the definitions and legal frameworks of KIAHS were analyzed.

## 2. GIS Analysis

- For quantitative evaluation of protected areas and potential OECM sites, GIS analysis was used to analyze the overlap between existing protected areas and the study sites. GIS analysis was conducted using QGIS version 3.34.0 software.

## 3. Review of KIAHS as Potential OECMs

- Based on the theoretical review, the compatibility of selected OECM elements with KIAHS was evaluated on a 5-point scale, and specific review contents and supplementary items were suggested.
- .Finally, focusing on KIAHS reviewed as potential OECM types, management measures to enhance biodiversity and ecosystem services through OECM designation were reviewed.

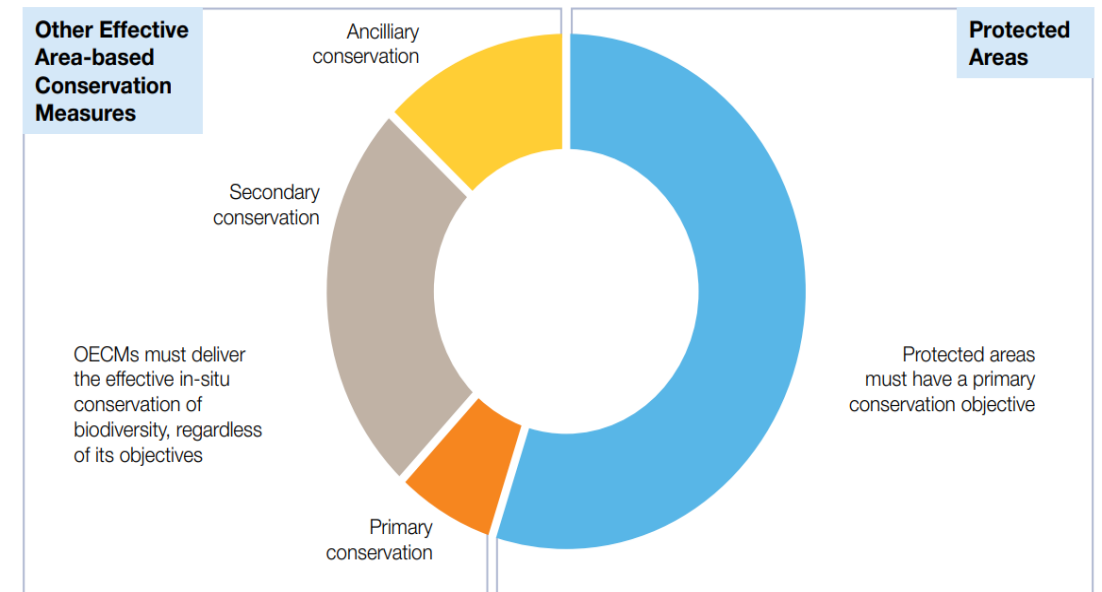
# III. Results

## 1. Overview of "OECMs"

### 1) Definition of "OECMs"

A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values. (CBD, 2018).

- Protected areas primarily focus on conservation, while OECMs ensure effective in-situ biodiversity conservation regardless of their primary objectives.
- In other words, protected areas have nature conservation as their primary management objective, while OECMs may or may not have nature conservation as their primary objective. Nevertheless, OECMs must effectively conserve biodiversity in-situ regardless of their objectives.



| The relationship between OECMs and protected areas |  
(IUCN-WCPA TF, 2019)

# III. Results

## 1. Overview of "OECMs"

### 2) Elements of the definition

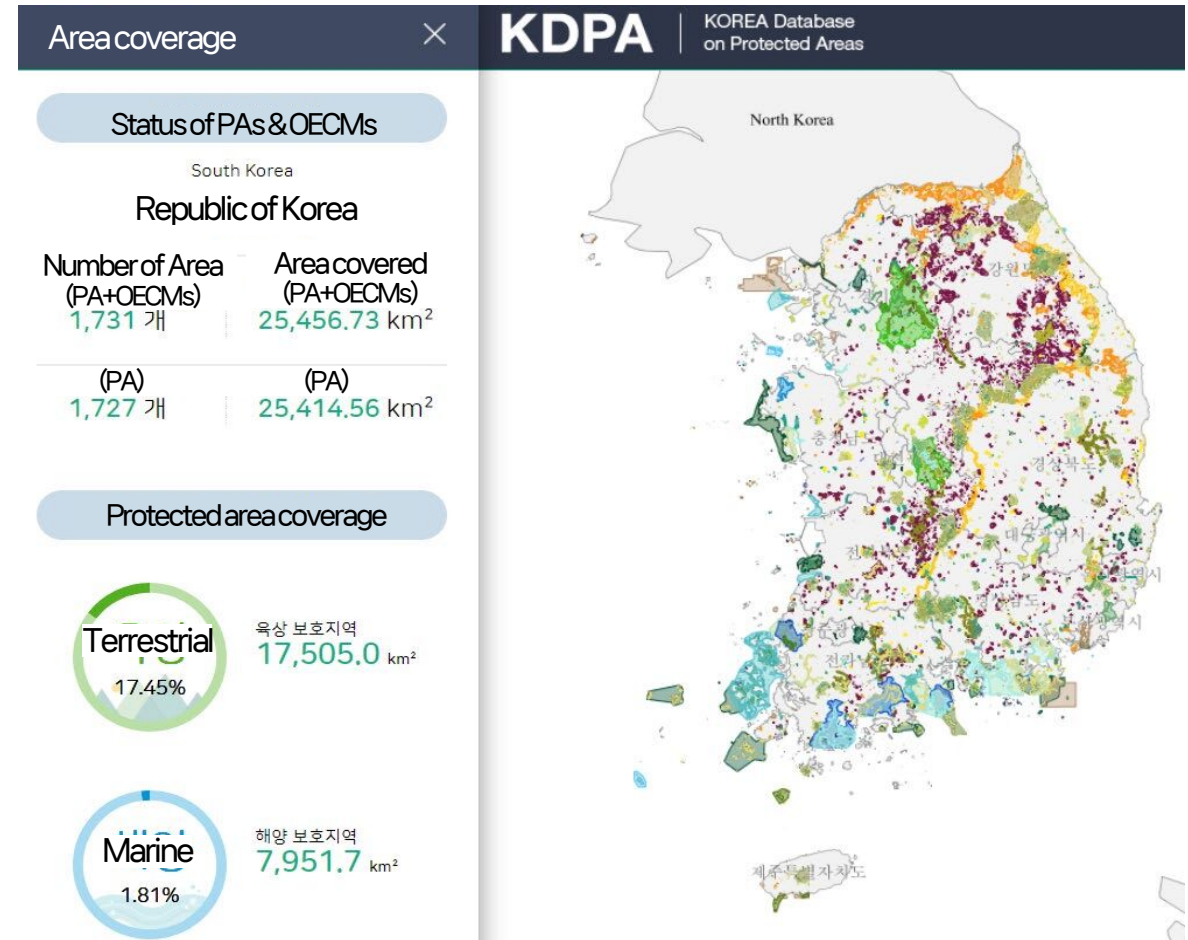
Criteria & Definition	Explanation
<b>Criterion A : Area is not currently recognized as a protected Area</b>	
a. other than a Protected area	• OECMs should not overlap with protected areas
<b>Criterion B : Area is governed and managed</b>	
b. geographically defined area	• Spatially delineated area with agreed and demarcated boundaries
c. governed	• Area under the authority of a specified entity or agreed combination of entities
d. managed	• Managed to achieve positive and sustained long-term biodiversity conservation outcomes
<b>Criterion C : Achieves sustained and effective contribution to in situ conservation of biodiversity</b>	
e." positive outcomes" for biodiversity conservation	• Delivers positive and sustained outcomes for biodiversity conservation
f. sustained long-term	• Governance and management expected to be sustained long-term
g. in-situ conservation of biodiversity	• Effective in-situ conservation of biodiversity as defined by CBD
h. biodiversity	• Achieves effective and sustained in situ conservation of biodiversity
<b>Criterion D : Associated ecosystem functions and services and cultural, spiritual, socio-economic and other locally relevant values</b>	
i. ecosystem functions and services	• Protection of ecosystem functions and services
j. cultural, spiritual, socio-economic, and other locally relevant values	• Protects key species and habitats as part of cultural, spiritual, socio-economic, and other locally relevant values and practices to enhance biodiversity

# III. Results

## 1. Overview of "OECMs"

### 3) Status of PAs & OECMs in Korea

- Managed on the KDPA website
- Protected Areas : 1,727 PAs registered, covering 25,414.56km<sup>2</sup> (terrestrial:17,505km<sup>2</sup>, marine: 7,951.7km<sup>2</sup>).(As 2024.6)
- OECMs : 4 OECMs registered, covering 42.17km<sup>2</sup>.
- Importance of GIS Database : Establishing a GIS DB is crucial to verify that OECMs are "other than protected areas" by identifying overlap areas with existing PAs.



[KDPA Protected Areas Status]

[<http://www.kdpa.kr>]



# III. Results

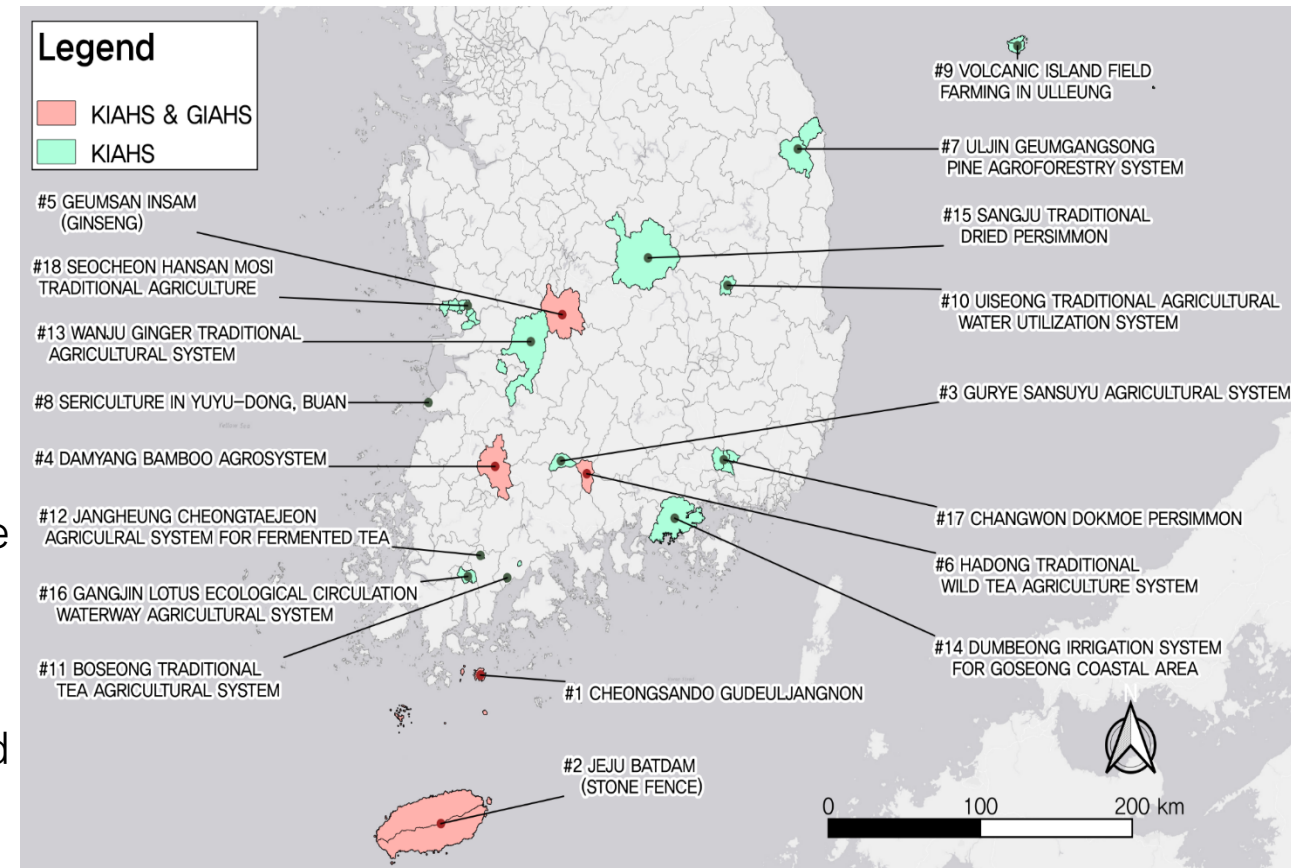
## 2. Review of the Status & Legal Hierarchy of KIAHS

### 1) Overview of KIAHS

#### KIAHS(Korea's Important Agricultural Heritage)

"valuable traditional agricultural and fishery activity systems formed and evolved over a long period of time by farmers and fishers adapting to the environment, along with the tangible and intangible products that have resulted from these activities."

- GIAHS were introduced by the FAO in 2002, and the KIAHS have been since March 2012.
- 18 KIAHS in Korea, 4 designated as GIAHS
- Boundary Designation : Core and buffer zones based on administrative units (provinces, towns)



[Status of KIAHS]

# III. Results

## 2. Review of the Status & Legal Hierarchy of KIAHS

### 2) Criteria for KIAHS Designation

- KIAHS are addressed by the 「Special Act on Improving the Quality of Life For Farmers and Fishermen and Rural Development」
- KIAHS must encompass both tangible and intangible elements, with the designation criteria as follows:

|The Elements of KIAHS

Elements	Elements in Detail
Tangible Elements	• Agricultural infrastructure, processing facilities, living facilities, landscapes, and biodiversity
Intangible Elements	• Agricultural techniques, knowledge, agricultural culture, and social organizations.

|The Standards of KIAHS

Category	Standard	Standard in Detail
Agricultural Resource Value	Historical and Sustainable Production and livelihood Security	• Long-standing agricultural activities that continue today. • Production of crops supporting local livelihoods.
	Unique Agricultural Techniques	• Unique, systematic, and transmissible agricultural techniques.
	Traditional Agricultural Culture	• Systematic traditional agricultural culture with heritage value.
	Special Agricultural Landscapes	• Unique landscapes with tourism potential.
	Biodiversity Conservation	• Rich biodiversity that can be continuously preserved.
	Social Participation and Local Cooperation	• Voluntary resident participation and cooperation with local governments.

# III. Results

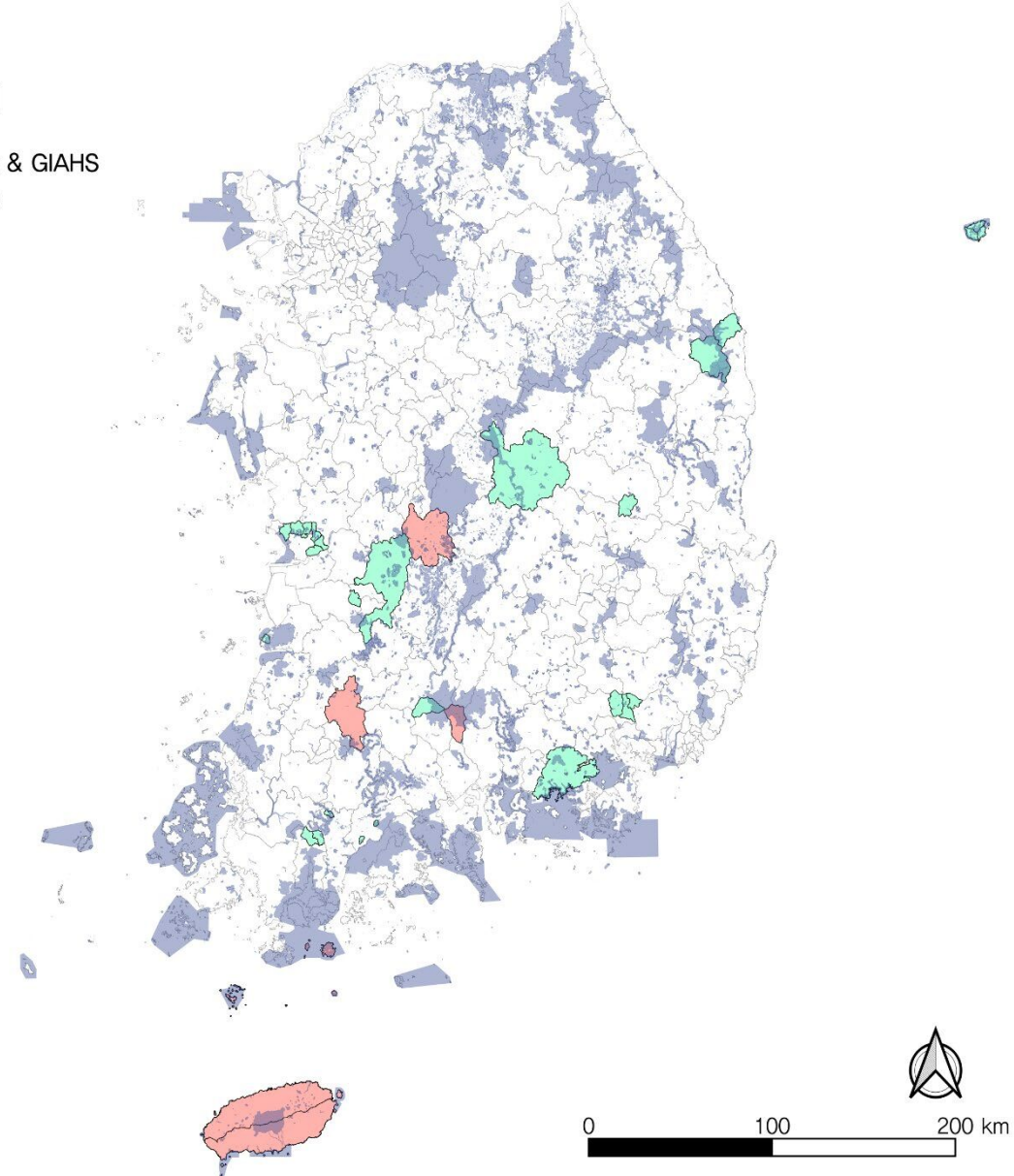
## 3. GIS Overlay Analysis : PAs · OECMs

### 1) Results of Overlapping KIAHS with PA

- KIAHS are based on administrative units (provinces, towns) and do not have clear geographic boundaries.
- Therefore, it is impossible to accurately determine the potential OECMs areas
- For future designation as OECMs, it is necessary to establish a GIS database of KIAHS boundaries by each local government and relevant agencies.

#### Legend

- KIAHS & GIAHS
- KIAHS
- KDPA

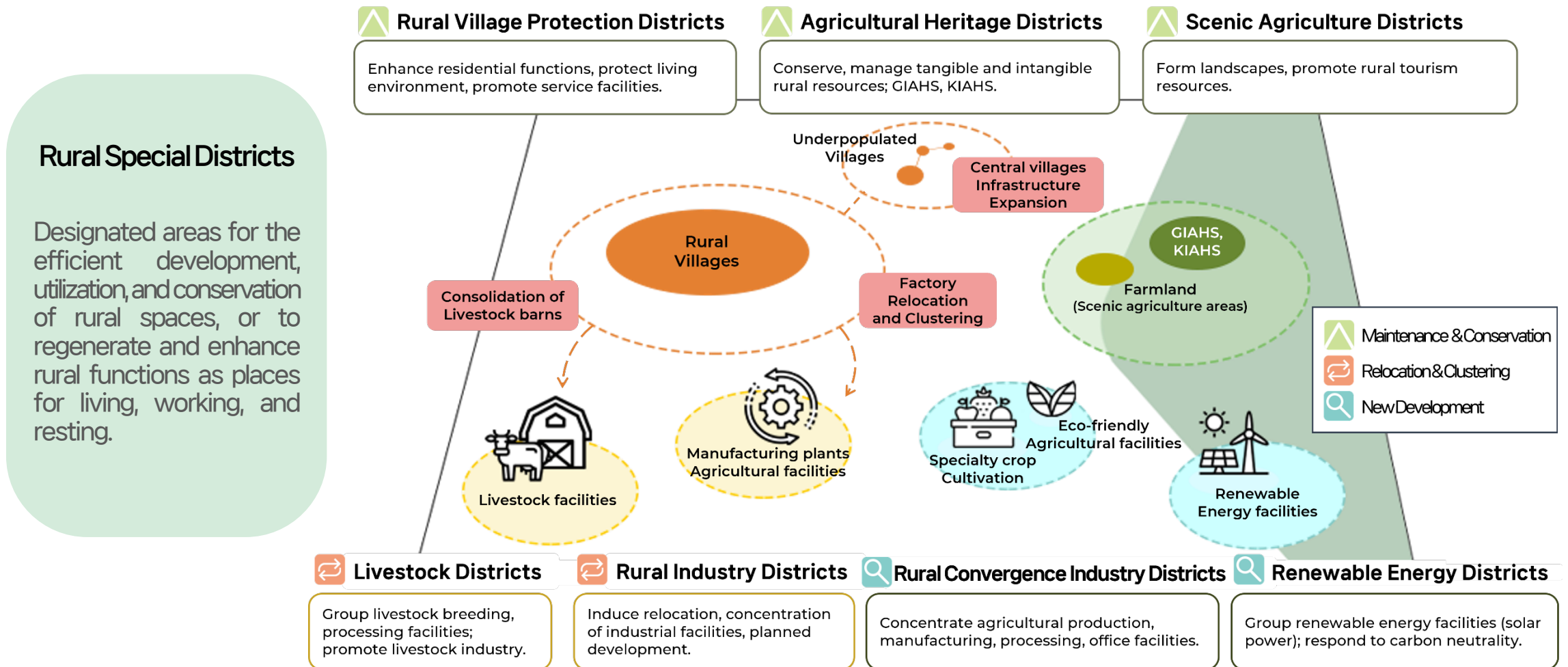


# III. Results

## 4. Agricultural Heritage Districts by New Legislation

### 1) Rural Special Districts Concept

- Therefore, in March 2024, the [Act on Rural Spatial Restructuring and Regeneration Support] was newly enacted, designating Rural Special Districts and categorizing them into 7 specific districts.





# III. Results

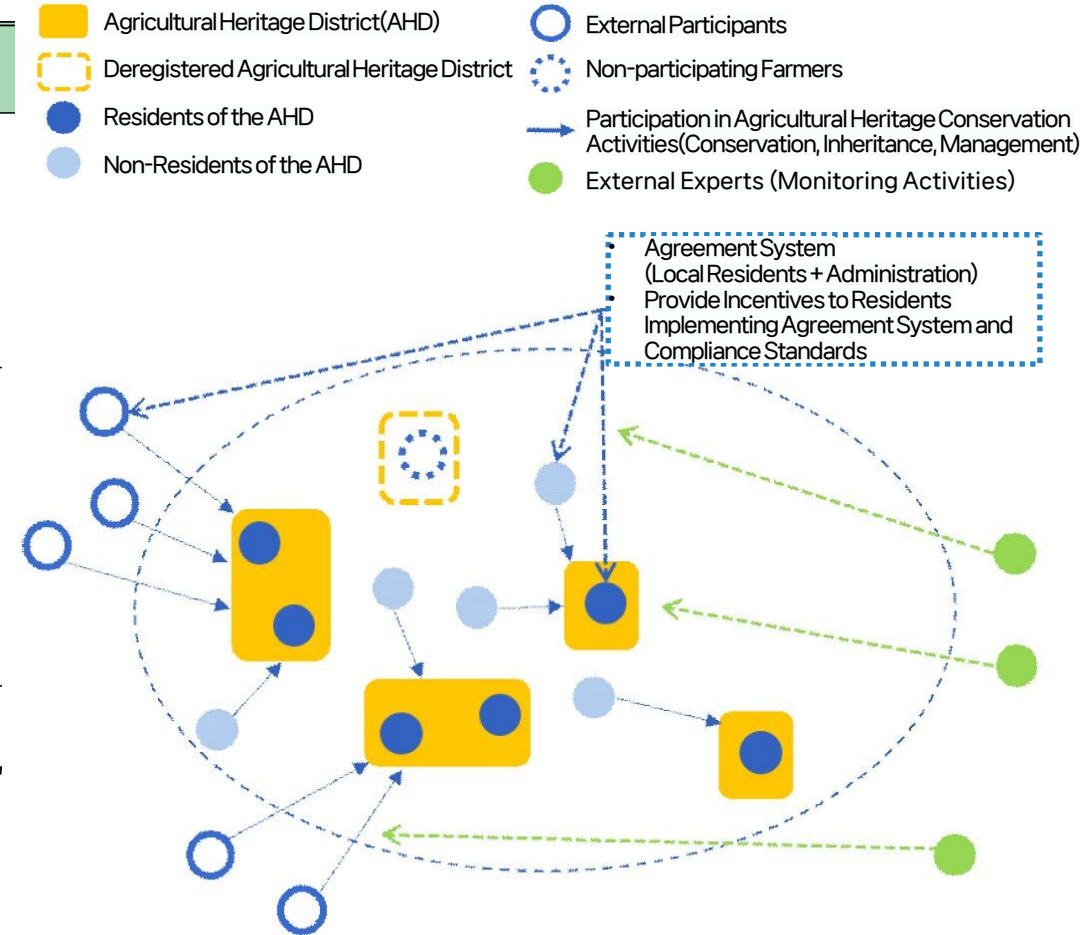
## 4. Agricultural Heritage Districts by New Legislation

### 2) Designation Criteria for Agricultural Heritage Districts

[Criteria for Agricultural Heritage Districts]

Category	Criteria
<b>Limited Special-Purpose Areas</b>	<ul style="list-style-type: none"> <li>Urban Areas (green areas only), Control Areas, Agricultural and forest areas, or Natural environment conservation areas as per the 「National Land Planning And Utilization Act」</li> </ul>
<b>Designation of GIAHS &amp; KIAHS</b>	<ul style="list-style-type: none"> <li>Areas designated as KIAHS, GIAHS, or areas requiring comprehensive land use management for their agricultural, ecological, knowledge, cultural, or landscape conservation value.</li> </ul>
<b>Regional Scope Criteria</b>	<ul style="list-style-type: none"> <li>If the designated areas for KIAHS &amp; GIAHS are extensive, the criteria apply to areas with core resources or areas where conservation and effective utilization of agricultural heritage are feasible.</li> </ul>

[Act on Rural Spatial Restructuring and Regeneration Support (Article 12)]



[Diagram of Agricultural Heritage Districts]

# III. Results

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## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

- Based on theoretical considerations from CBD (2019), IUCN (2019), and IUCN-WCPA (2022). Assessed KIAHS using a five-point scale for alignment with OECM criteria.
- IUCN-WCPA (2022) suggests individual assessments for potential OECMs
- this study provides a preliminary evaluation, highlighting the need for further research.

#### <Primary framework >

- IUCN-WCPA (2019) definitions and criteria, supplemented by IUCN (2019) and IUCN-WCPA (2022) elements
- Comprehensive review of KIAHS compatibility with OECM concept.
- Proposed necessary enhancements and methods for improvement.

# III. Results

## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

| Results of Compatibility Review of KIAHS and OECMs|

Criteria & Definition of OECM	--	-	0	+	++
Criterion A : Area is not currently recognized as a protected Area					
a. other than a Protected area	✓				
Criterion B : Area is governed and managed					
b. geographically defined area	✓				
c. Governed			✓		
d. Managed			✓		
Criterion C : Achieves sustained and effective contribution to in situ conservation of biodiversity					
e." positive outcomes" for biodiversity conservation)				✓	
f. sustained long-term				✓	
g. in-situ conservation of biodiversity				✓	
h. Biodiversity				✓	
Criterion D : Associated ecosystem functions and services and cultural, spiritual, socio-economic and other locally relevant values					
i. ecosystem functions and services				✓	
j. cultural, spiritual, socio-economic, and other locally relevant values					✓

# III. Results

## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

#### Criteria & Definition of OECM

Criterion A : Area is not currently recognized as a protected Area

a. other than a Protected area

Criterion B : Area is governed and managed

b. geographically defined area

- If existing protected areas partially overlap, external areas can be potential OECMs, requiring confirmation of their boundaries and areas.
- KIAHS applications must include a detailed topographic map showing agricultural resources and distinguishing core and buffer areas.
- However, current core areas are often designated by administrative units or without considering in-situ conservation values, lacking a GIS DB for accurate geographic boundaries.
- Additionally, in some KIAHS, the intangible knowledge system transmission makes it difficult to pinpoint specific locations.
- Clear geographic boundaries must be established and managed in a database for evaluating KIAHS as potential OECMs.



# III. Results

## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

#### Criteria & Definition of OECM

##### Criterion B : Area is governed and managed

##### c. governed

- OECMs must be governed by a specified entity or agreed combination of entities, ensuring equity and fairness.
- [Agricultural Heritage Designation Management Standards] require forming a community council of agricultural heritage owners and local residents and establishing an Agricultural Heritage Advisory Committee.

##### d. managed

- Areas must be managed for positive, sustained long-term biodiversity conservation.
- According to [Agricultural Heritage Designation Management Standards], mayors or county heads must manage with residents' active cooperation.
- Annual monitoring and investigations, including structural safety, damage, and environmental changes, are mandated.

# III. Results

## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

#### Criteria & Definition of OECM

Criterion C : Achieves sustained and effective contribution to in situ conservation of biodiversity

e. " positive outcomes" for biodiversity conservation

- Maintaining rural landscapes through traditional agricultural activities.
- Although biodiversity conservation is not the primary goal, it achieves positive and sustained outcomes for biodiversity by minimizing negative impacts on significant biodiversity values.

f. sustained long-term

- While KIAHS preserves agricultural heritage at national and local levels, there are no legal restrictions on activities.
- Inconsistent ecosystem surveys and preventive approaches across local governments pose management challenges.

g. in-situ conservation of biodiversity

h. biodiversity

- Agricultural heritage maintains rural agricultural biodiversity and genetic resources, contributing to environmental conservation through unique rural landscapes.
- Further investigation on in-situ conservation aspects is required for future OECM designation.

# III. Results

## 5) KIAHS as Potential OECMs

### 1) Compatibility Review

#### Criteria & Definition of OECM

Criterion D : Associated ecosystem functions and services and cultural, spiritual, socio-economic and other locally relevant values

#### i. ecosystem functions and services

- High Cultural Value: KIAHS regions host diverse rural tourism programs (farming experiences, local food experiences) and are central themes in local festivals, highlighting their high cultural service value.
- Ecosystem Services: KIAHS provides provisioning services (food production, by-products, genetic resources) and regulating services (water quantity, disaster control, water quality, air quality, carbon storage).

#### j. cultural, spiritual, socio-economic, and other locally relevant values

- Agricultural heritage evolves with humanity and the natural environment, maintaining unique agricultural traditions and ecosystems.
- Unlike typical PA, agricultural heritage requires dynamic conservation activities, combining socio-economic benefits and adaptation to societal changes.
- The commitment of residents to sustain agriculture enhances the cultural, spiritual, socio-economic, and other locally relevant values.

# IV. Conclusion

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1

- KIAHS lack clearly defined geographic boundaries and are managed based on administrative units, which limits OECM designation.
- Core areas submitted during KIAHS application are not adequately considering in-situ conservation and biodiversity.

2

- For OECM designation, establishing GIS databases and setting core areas based on biodiversity monitoring is required.
- Consider utilizing Agricultural Heritage Districts as geographic boundaries for OECMs.

3

- Further research is needed to assess OECM designation potential for each KIAHS after establishing geographic boundaries through Agricultural Heritage Districts.

**Thank you for your attention**

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