Traditional Gudeuljang Irrigated rice terraces in Cheongsando

[Dynamic Conservation plan]

DECEMBER 2013

Wando County, Jeollanam-do Provincial Government
Republic of Korea
Traditional *Gudeuljang* Irrigated rice terraces in Cheongsando

[ Dynamic Conservation plan]

DECEMBER 2013

Wando County, Jeollanam-do Provincial Government
Republic of Korea
Contents

I. Introduction / 3

II. Background and rationale / 4
   1. Geographical outline
   2. Agricultural outline
      1) Agricultural Land Use
      2) Agricultural Output
      3) Diversity of Crops
   3. Biodiversity Outline
      1) Biodiversity of Species
      2) Ecological System Function
   4. Global Uniqueness of Gudeuljangnon in Cheongsando Island
   5. Threats to Agricultural Heritage

III. Vision and mission / 16
   1. Basic Plans for Agricultural Heritage Usage
   2. Strategies for Promoting Agricultural Heritage Usage
   3. Setting Goals for Conservation Administration of Gudeuljangnon

IV. Site Action Plan Framework / 20
   1. Preparing conservation administration system for agricultural heritage
   2. Restoring Agricultural and Ecological Function of Agricultural Heritage
   3. Utilize pluralistic values of Agricultural Heritage

V. Cooperative System for Agricultural Heritage / 27

VI. Monitoring and Knowledge Management / 39
I. Introduction

This chapter is an outline of a plan, either being executed already or are scheduled to be executed in future, which is carried out in both Wando county and Cheongsan-myeon in order to preserve and manage [Traditional Gudeuljang Irrigated rice terraces in Cheongsando]. This application is aimed to get certified by GIAHS held by FAO.

Cheongsando Island is an island which is located 19.2km way from Wando-gun, Jeollanam-do, Korea. Gudeuljangnon is distributed over the whole island and it is an unique irrigation farming system created to allow multi-dimensional administration of the land and the agricultural water through underground culvert. Structurally it resembles terraced rice paddy distributed across Asia, the technologies used to form the farm land and irrigation system which sustained this land is unique. In order to cope with the leaky soil of Cheongsando Island, waters for agricultural usage was scientifically utilized through forming a waterways by putting flat stones (Gudeul) under the rice paddy made using stones. This is an adaptive product and heritage of the residents of Cheongsando Island as they attempted to maximize the use of geography, soil, water, and force of labor.

In Cheongsando Island, like other farming and fishing villages, the area of fallow Gudeuljangnon is increasing and being damaged as the decrease and aging farming population. In order to prevent further damage and to hand down ecological, cultural, and scientific value of Gudeuljangnon to the future generation, it is necessary to certify it as a GIAHS and provide systemized conservation and administration activities.

After Cheongsando Island Gudeuljangnon had been registered as a National Important Agricultural Heritage in January 2012, public awareness of its conservation and administration has increased and the residents started to deploy a variety of conservation administration activities by allying and forming associations with administrative institutions and experts. Currently, residents, all generations including the youth generation, of Wando county and Cheongsan-myeon are sharing their perception of the conservation of Gudeuljangnon aiming for GIAHS registration. Also, they are establishing and executing concrete plans through various consultations and education. At present, they are seeking a plan for continuous farming through interactive program between local residents and tourists(urbanites) and in long-term, they are trying to realize sustainable farming production activity and preserving biological diversity through combining agricultural production (1st phase), processing (2nd phase), and tourism/service(3rd phase).

This executive plan is describing a specific implementation for conservation and administrating of Cheongsando Island Gudeuljangnon.
II. Background and rationale

1. Geographical outline

“Cheongsando Island” is a group of islands located in Jollanam-do in Korea and affiliated with Wando County. The islands are located approximately 19.2km from Wando County and occupy a total area of 42.7㎢, comprising 5 inhabited and 9 uninhabited islands. The main means of livelihood are agriculture and fisheries. The entire island area is designated as Dadohaehaesang National Park, and the Gudeuljangnon are concentrated in the mountain-foot slope and hills of Buheung-ri village, Yangji-ri village, and Sangseo-ri village. Nationally, in 1981, Cheongsando Island was designated as Dadohaehaesang National Park, and Sangseo-ri Village was recognized for its ecological excellence and designated as a Nature Eco-Village by the Korean Ministry of Environment. Internationally, Cheongsando Island was designated as the first Slow City in Asia by Cittaslow International in 2007, and the Slow Walk of Cheongsando Island was designated as the first Slow Walk in the world in 2011. In January 2013, the Cheongsando Island Gudeuljangnon was selected as the first Nationally Important Agricultural Heritage System of Korea, and conservation management of this agricultural heritage has begun.

2. Agricultural outline

1) Agricultural Land Use

Land use in Cheongsando Island is classified as 72% forest and 21% arable land. In 1608, when the first settlers arrived on Cheongsando Island, arable land was more scarce than it is currently. The desperation of trying to maintain their livelihood in a hilly and stony environment was reborn as a love for the land. The residents cultivated the land even up to the mountain ridge to build Gudeuljangnon paddies. The Gudeuljangnon system was developed in an effort to produce even a small increase in arable land through avoiding unnecessary canals and ditches above the ground, so as to produce even slightly more food. As the Cheongsando Island population increased from 1352 people in 1759 to 13,117 people in 1970, traditional agriculture through Gudeuljangnon continued until the mid-20th century.
### Table 1. Land use for each category on Cheongsando Island

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Forest</th>
<th>Rice paddies</th>
<th>Dry fields</th>
<th>Orchards</th>
<th>Levee/streams</th>
<th>Drain</th>
<th>Support</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (㎡)</td>
<td>41,950,955</td>
<td>30,384,475</td>
<td>5,147,449</td>
<td>3,706,935</td>
<td>14,277</td>
<td>108,468</td>
<td>244,816</td>
<td>741,732</td>
<td>1,602,803</td>
</tr>
<tr>
<td>Number</td>
<td>23,983</td>
<td>4,072</td>
<td>5,950</td>
<td>5,906</td>
<td>11</td>
<td>513</td>
<td>172</td>
<td>2,919</td>
<td>4,440</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>100</td>
<td>72.42</td>
<td>12.3</td>
<td>8.8</td>
<td>0.03</td>
<td>0.25</td>
<td>0.6</td>
<td>1.8</td>
<td>3.8</td>
</tr>
</tbody>
</table>

#### 2) Agricultural Output

Unlike typical terrace rice paddies, Gudeuljangnon paddies, in which aqueducts are used for irrigation management, allowed for versatile use of the land. In years with low precipitation, the rice paddies were converted into dry fields; when 2 crops were planted in a year, water was irrigated in the paddies to grow rice during summer, and after the rice harvest, the field was used to grow garlic, onions, and ferns. The current agricultural production on Cheongsando Island is still highest for rice, and previous staples such as tubers and condiment vegetables are now cultivated for income.

#### Table 2. Cheongsan-myeon Agricultural Production (grains) (Unit: ha/ton)

<table>
<thead>
<tr>
<th>Type</th>
<th>Rice</th>
<th>Barley</th>
<th>Other grains</th>
<th>Legumes</th>
<th>Root Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Paddy Rice</td>
<td>Field Rice</td>
<td>Naked Barley</td>
<td>Malting Barley</td>
<td>Corn</td>
</tr>
<tr>
<td>Area (ha)</td>
<td>258</td>
<td>–</td>
<td>0.4</td>
<td>0.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Production (M/T)</td>
<td>1,016</td>
<td>–</td>
<td>1.6</td>
<td>1.7</td>
<td>2.9</td>
</tr>
</tbody>
</table>

#### Table 3. Cheongsan-myeon Agricultural Production (vegetables)

<table>
<thead>
<tr>
<th>Type</th>
<th>Fruit vegetables</th>
<th>Leafy vegetables</th>
<th>Root vegetables</th>
<th>Condiment vegetables</th>
<th>Special crops</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Squash</td>
<td>Cabbage</td>
<td>Radish</td>
<td>Chilly</td>
<td>Onions</td>
</tr>
<tr>
<td>Area (ha)</td>
<td>0.3</td>
<td>4.0</td>
<td>1.3</td>
<td>8.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Production (M/T)</td>
<td>16.5</td>
<td>306</td>
<td>83</td>
<td>27</td>
<td>415</td>
</tr>
<tr>
<td>Number of households</td>
<td>7</td>
<td>12</td>
<td>6</td>
<td>31</td>
<td>24</td>
</tr>
</tbody>
</table>

#### 3) Diversity of Crops

Traditionally, rice, barley, millet, and cotton plants have been cultivated in Cheongsando Island. A type of brown rice is grown in Gudeuljangnon that has 8 times the content of gamma-aminobutyric acid (GABA), than that of normal brown rice, and 4 times the GABA content of black rice. This rice can help promote the growth and development of adolescents, and can strengthen the immune system. On Cheongsando Island, tubers
(sweet potatoes and potatoes) and garlic have been cultivated. Presently, produce such as garlic, onions, legumes, and spring cabbages are cultivated in dry fields for income, and not as staple foods. The farmhouse population of Cheongsando Island has been decreasing each year, and the number of households participating in both agriculture and fisheries has been increasing through increased abalone farms. Recently, canola and green barley have been planted as landscaping and decorative crops.

Table 4. Trend of the changes in agricultural households of Cheongsando Island in the past 5 years

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of households</th>
<th>Agricultural population</th>
<th>Increase /decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td>2008</td>
<td>786</td>
<td>786</td>
<td>551</td>
</tr>
<tr>
<td>2009</td>
<td>805</td>
<td>805</td>
<td>564</td>
</tr>
<tr>
<td>2010</td>
<td>785</td>
<td>785</td>
<td>550</td>
</tr>
<tr>
<td>2011</td>
<td>760</td>
<td>760</td>
<td>532</td>
</tr>
<tr>
<td>2012</td>
<td>716</td>
<td>716</td>
<td>491</td>
</tr>
</tbody>
</table>

3. Biodiversity Outline

1) Biodiversity of Species

Gudeuljangnon facilitate species diversity of the flora and fauna inhabiting the upper areas, and in the domestic plants and animals of the lower village region. Plants found on Cheongsando Island, including the Gudeuljangnon areas, include 93 species, such as Rubus hirsutus, Lysimachia japonica, Digitaria sanguinalis, Solanum nigrum, Sonchus oleraceus, Sonchus asper, Justicia procumbens, Conyza canadensis, Acalypha australis, Lobelia chinensis, Wahlenbergia marginata, and Melia azedarach. Five representative mammal species are found around the rice paddies or mid-mountain: the lesser white-toothed shrew (Crocidura suaveolens), brown rat (Rattus norvegicus), black-striped field mouse (Apodemus agrarius), otter (Lutra lutra), and wild boar (Sus scrofa). The 15 species of amphibians and reptiles include longtail tadpole shrimp (Triops longicaudatus); salamander (Hynobius leechii); black-spotted pond frog; tree frog; cat snake; red banded snake; Leiolopisma laterale Amphiesma vibakari ruthveni red-sided water snake; Zamenis spinalis
rat snake (Elaphe schrenckii); viper snake, Gloydius ussuriensis Emelianov rock mamushi
Hydrophis melanocephalus and annulated sea snake. Birds observed in the Gudeuljangnon
included 1665 individuals of 51 species. The most common species was barn swallow (496,
29.7%), followed by tree sparrow (369, 22.1%), siskin (90, 5.4%), spot-billed duck (78,
4.6%), oriental greenfinch (72, 4.3%), yellow-throated bunting (61, 3.6%) and rufous turtle
dove (54, 3.2%). Three legally protected species including the common buzzard (Buteo
buteo) and Japanese sparrowhawk (Accipiter gularis), recognized at Endangered Bird
Species Level 2, have been observed.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Plants</th>
<th>Amphibian and reptiles</th>
<th>Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhabiting species</td>
<td>87 species, including Eurya japonica, Rubus hirsutus, Lysimachia japonica, Digitaria sanguinalis, Solanum nigrum, and Sonchusoleraceus</td>
<td>Endangered species level 1: rat snake (Elaphe schrenckii) Endangered species level 2: longtail tadpole shrimp (Triops longicaudatus) Other species: 9 species including salamander, black-spotted pond frog, tree frog, cat snake, and red banded snake</td>
<td>Endangered bird species level 2: Japanese sparrowhawk (Accipiter gularis), common buzzard (Buteo buteo) Natural monument: little cuckoo Other species: 47 species including black-throated diver, great crested grebe, cormorant, and gray heron</td>
</tr>
</tbody>
</table>

Table 5. Plants and animals around Cheongsando Island
2) Ecological System Function

The Cheongsando Island Gudeuljangnon was constructed using the stone-stacking method for the lower part of the structure. The terrace paddies built by this method prevent soil erosion on the slopes and increase soil fertility. Furthermore, due to the geographic characteristics of the island, the runoff coefficient is high, but Gudeuljangnon cultivation creates an environment where the water resource can remain in the soil for an extended time. The ecological cycle is strengthened in this manner and can support a habitat for amphibians, reptiles, and other taxa.

The agricultural water retained in the Gudeuljangnon is combined with compost to promote microbiological reactions, preventing hardening of the soil. Furthermore, due to the surrounding forests and artificially created pools, a biologically self-sustainable environment is created. The water that enters the Gudeuljangnon continuously flows to the lower paddies, and is combined with microorganisms, strengthening the capacity for purification of the paddies.

Gudeuljangnon paddies are manmade areas of arable land that trace the mountain valleys. The upper forest area, the Gudeuljangnon, and the lower village area are connected in an ecological cycle, increasing biological diversity. This signifies a connection of the ecological cycle with the forested hills that were separate before the formation of the Gudeuljangnon. The constructed Gudeuljangnon contain gaps in the lower structure that allow rodents, arthropods, amphibians and reptiles, and the surrounding forest eco-tone to be connected as an eco-corridor, and to increase the biological diversity in the Gudeuljangnon.

Figure 13. Gudeuljangnon lower stone wall structure

Figure 14. Gudeuljangnon self-purification

Figure 15. Schematic diagram of the Edge effect

Figure 16. Sectional view diagram of the Edge effect
4. Global Uniqueness of Gudeuljangnon in Cheongsando Island

1) Structural Distinctiveness of Gudeuljangnon

The Gudeuljangnon paddy system was born out of the natural environment of the island being disadvantageous for paddy agriculture due to steep slopes, sandy soil with rocks and rapid drainage, and a scarcity of water for paddy farming. To overcome these limitations, the “Gudeuljang” structure, used in the traditional Korean home-heating system called Ondol, was applied to build the irrigation system for the rice paddies. The residents of Cheongsando Island called this “Gudeuljangnon” because the ditches that serve as aqueducts had the appearance of Gudeuljang flagstones. Gudeuljangnon is a traditional agricultural irrigation system of Cheongsando that uses an underground culvert structure and aqueduct system for three-dimensional use and management of agricultural water. Structurally, it appears similar to the terraced paddies distributed in other Asian countries, but the technology to build the paddies and the irrigation system that maintain this structure are unique. Below the paddies, stones of various sizes are stacked to build a stone wall and a large, flat flagstone (Gudeul) is laid to support the ceiling of an aqueduct; soil is layered over this structure to provide arable land.
Gudeuljangnon are constructed of 4 layers. The lower walls of Gudeuljangnon are constructed by mixing and stacking up stones of various sizes (20-50cm in diameter). The heights of the stone walls differ depending on the elevation of the terrain. On average, the walls are 100-150cm high, but can range from 70 to 300cm. The aqueducts are constructed by laying a large flat flagstone (Gudeul) above the lower stone walls, taking into consideration the water flow and the crops on the upper and lower paddies. The size of the aqueducts differs depending on the location of the Gudeuljangnon, and the average diameter is 30-50cm. The sizes are generally larger upstream than downstream. The upper part of the lower Gudeuljangnon stone wall is composed of different soil layers. The very bottom, which contacts the wall, is covered with approximately 15-20cm of red mud. The mud layer prevents water loss and allows the water be retained for maximum amount of time possible. The roots of the crops do not reach the mud layer; a 20 to 30cm thick soil layer is placed above the mud layer for cultivation. Because this soil layer is thin, with the thickness differing for each Gudeuljangnon, intricate farming techniques are required.

The aqueducts of Gudeuljangnon were approximately 50-200 cm deep, and there were approximately 2 to 3 per plot on average. The aqueducts had the basic function of irrigating and draining the water needed for agriculture. Furthermore, unnecessary water was kept out and excess water was directed through the bottom, such that the lower aqueducts functioned in drainage. The drainage aqueducts as sluices finally released the water from both the upper and lower aqueducts. The average number and size of the aqueducts differed depending on the lots the location and number of aqueducts were determined based on the water flow.

![Figure 22. Structure of the Gudeuljangnon](image)
2) Operational Management of Traditional Agricultural Activities

The water resources of Cheongsando Island were not abundant enough to warrant a large-scale water management system. Therefore, small-scale water-utilization facilities were made to dam water on the surface to collect the water in the paddies. The small water-management facilities distributed throughout the slope were called "Bo." The water stored in the "Bo" was supplied to a group of several adjacent paddies. The construction and management of Bo for Gudeuljiangnon irrigation was done repeatedly every year, from the beginning of the agricultural season until the end of the harvest. Photo 54 illustrates the Buheung-ri region where water from upstream is divided into several streams, to provide the water to the lower streams. The division of waterways served the function of providing water to the lower paddies, and increased the water temperature to help prevent cold damage to the crops.

Water stored in the distributed Bo has been managed by groups of 5 to 6 residents. The constituents of these groups were called Bojagin, and this is a type of a water-management cooperative. The group of Bojagin that manages a Bo is the residents that live in nearby rice paddies. Each year during seedling-transplantation season, the valley’s streams were directed by the Bojagin, using stones and mud, into the rice paddies in various places. Furthermore, to prevent arguments over water usage, rules for water use were developed and enforced. As the agricultural society shrunk from a community-oriented society to a family or individually oriented system, the Bojagin system has declined.
3) Farming Songs and Food of Cheongsando Island

The Gudeuljangnon agricultural activity is very laborious. According to oral histories, the basket placed on the lower abdomen and shaken to sift out stones led to calluses on the farmers. To tolerate the difficult labor, farmers often sang agricultural songs. The songs differed slightly in lyrics and melody depending on when they were sung (e.g., when gathering grass, weeding the fields, or harvesting). If one person sang ahead, the rest sang the chorus. It has been said that if the rhythm was synchronized, the efficiency of labor increased.

An adage from Cheongsando Island says, "If a bride eats more than 2 mal (traditional Korean unit of measure, approximately 18 L) of rice before she gets married, she is well off." Rice was scarce on Cheongsando Island, and hence people ate pure rice only during the holidays or during ancestral memorial rituals. Since rice was valuable, a unique tradition developed of placing rice on the table for ancestral memorial rituals. "Cheongsando Tang (Stew)" is a unique culinary tradition in Cheongsando Island, where rice harvested from Gudeuljangnon is mixed with seafood such as octopus or abalone.

The traditional Cheongsando Island culture, where rice was very scarce, naturally created a unique culinary culture. From the 17th to the 19th century, the staple foods of Cheongsando residents included sweet potato, potato, barley and rice, millet and rice, or mugwort and rice. Small quantities of rice were mixed with barley and millet, and with seaweeds (fusiform and gapeore seaweeds), tubers (potato and sweet potato), and root vegetables (radish). These dishes, a part of the traditional Cheongsando Island culinary culture that arose from the need to survive where rice was scarce, are popular in the modern society as healthful foods.
4) Remarkable Characteristics of Landscape

Because the Cheongsando Island Gudeuljangnon was built along the slopes under the constraints of geography, soil conditions, and water resources, the landscape differed depending on the viewpoint. Generally, "coast-village-Gudeuljangnon-forest" is a typical landscape that represented Cheongsando Island. Gudeuljangnon were geo graphically located in the middle of a slope, and the upstream forest and downstream village were connected, forming a complex landscape. Therefore, from a lower, downstream viewpoint at lower altitude, the landscape was mainly agricultural and mountainous from the upstream, higher viewpoint, the agricultural land, coast, and village were fused.

Gudeuljangnon, created by transforming the natural terrain, not only had a unique structure, but also provided a beautiful landscape. As Gudeuljangnon were built using stacked stones, it appears as if rice paddies were placed atop a stone wall. The aqueducts at the edges of Gudeuljangnon also provided a unique landscape that is not seen in normal terraces. In particular, in the summer when rice is actively cultivated, the drainage of agricultural water can be seen in Gudeuljangnon, and this is a scene unique to Cheongsando Island. Seasonal changes in color and landscape are also seen, from transplantation of seedlings in the spring to harvest in the fall. Recently, landscape agriculture using fallow Gudeuljangnon paddies has been introduced, to cultivate plants such as green barley and canola. The space between Dorak-ri village and Dang-ri village is full of blooming flowers during the annual Slow Walk Festival in April, and is currently used for cultural tourism.
5. Threats to Agricultural Heritage

The changes in population trends reflect historical incidents and changes in the means of living. According to written records, Cheongsando Island had significant settlement starting in the 17th century, and in the early 18th century, the population reached 700 families (approximately 2,000 people). However, in 1759, the population drastically decreased to 1,352. It has been recorded that during this period, the population scattered to avoid the high public duty. The decrease in population continued until the end of the 18th century.

The population of Cheongsando Island increased again until the end of the 19th century, and reached 2,655 in 1895. The main means of livelihood on Cheongsando Island had been agriculture. After the increase in populations during the initial settlement in the 17th and 18th centuries, the population increased again from the end of the 18th century to the end of the 19th century. During this period, numerous Gudeuljangnon paddies were built to increase agricultural output. A drastic change in population occurred in the 20th century. This period was a turning point for changes in the industries of Cheongsando Island from agriculture to fishing. The seasonal mackerel market, active in the 1920s and 30s, and the seasonal Japanese Mackerel market, active in the 1950s to the 70s, contributed to a drastic increase in population. However, due to the decrease in fishing output, the population of Cheongsando Island drastically decreased again in the 1990s. The population of 13,117 in 1970 decreased to 3,642 in 26 years (by 1996), and by 2011 it had decreased to 2,589. Presently, the decline in population is accompanied by rapid aging of the population. Due to this aging, the construction of Gudeuljangnon also declined drastically, leading to an increase in fallow land.

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2005</th>
<th>1996</th>
<th>1970</th>
<th>1895</th>
<th>1759</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2,589</td>
<td>2,803</td>
<td>3,642</td>
<td>13,117</td>
<td>2,655</td>
<td>1,352</td>
</tr>
</tbody>
</table>

Table 6. Trends in the changes in population of Cheongsando Island

The areas in which Gudeuljangnon is concentrated that have been surveyed so far are Buheung-ri village, Yangji-ri village, and Sangseo-ri village. However, interviews with residents have revealed that there are Gudeuljangnon scattered around Bojeoksan forest areas, in Dongcheon-ri village, Sinheung-ri village, Ji-ri village, and Modo-ri village.

Figure 36. Fallow Gudeuljangnon paddies covered in weeds
The common characteristics in the remaining Gudeuljangnon are a high proportion of fallow land. Currently, the proportion of fallow Gudeuljang paddies is 14% (0.007㎢) out of 0.05㎢, but this proportion is predicted to increase. The reason for the increase in fallow land is the decline in the population devoted to agriculture, and the aging of the population, both of which decrease opportunities for cooperative agriculture at the village level. Furthermore, the difficulties in approaching Gudeuljangnon, which are located on the mountain slopes, and difficulties in introducing automated agriculture, have contributed toward many Gudeuljangnon areas becoming fallow.

After its designation as a Slow City in 2007, the number of tourists on Cheongsando Island increased dramatically. Approximately 50,000 visitors were noted in 2005; this number has increased four-fold in 5 years, to approximately 200,000 visitors. In 2011, the number exceeded 300,000 people. The drastic increase in the number of tourists is due to the popular trend of walking in Korea, and to the gain in popularity of healing tourism.

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tourists</td>
<td>76,304</td>
<td>72,026</td>
<td>88,703</td>
<td>126,250</td>
<td>199,912</td>
<td>320,000</td>
</tr>
</tbody>
</table>

Table 7. Yearly changes in the number of tourists

Due to the increased number of visitors, Cheongsando Island has encountered several changes in the past few years. Although service facilities such as transportation, lodging, and restaurants have contributed to an active economy, some negative externalities have also become apparent. Until 2007, individual houses were used as lodging and homestays. However, to accommodate the increased number of visitors, modernized pension-lodging facilities started to be built. These architectural elements could harm the landscape identity of Cheongsando Island. Furthermore, with the increased number of visitors, increase in trash and damage to the environment have also become problematic.
### III. Vision and Mission

#### 1. Basic Plans for Agricultural Heritage Usage

First, encourage local residents to participate as a subject of practical use in order to recreate and utilize resources of Cheongsando Island in a modern view. Through this, we can develop diverse local products, experiential program, and tourism product and secure sustainability of agricultural heritage by cultivating competence of local residents who can take part in operation management on field.

Second, a process to make history, culture, and social memory related to Cheongsando Island into an systemized contents is necessary. Through storytelling originally unorganized local resources, it is possible to reestablish humanistic and social values of agricultural heritage. This eventually unearths activities revitalizing village values, administrating tourism programs, and business income.

Third, it is necessary to cultivate a network for conservation administration in order to spread recognition from inside to outside and to advertise using variety of pathways. On domestic level, a cooperation project to connect with contiguous municipalities is necessary. Also, by forming an alliance with other countries which holds agricultural heritage, heritage value can be advertised on an international level and it would be possible to spread conservation activities.
2. Strategies for Promoting Agricultural Heritage Usage

First, realize [understanding/education] strategy for Gudeuljangnon usage. Both mature human capability of local residents and professionalism about related policies and administrations should be secured for diverse links and usages of agricultural heritage. For this, introduce and systemize to basic process and advanced course for experts and establish basic theory education, community knowledge workshop, and training courses for experts.

Second, realize [Conservation/Usage] strategy to manifest creative values of Gudeuljangnon. There is a need to introduce tourism resources as a cultural tourism within the boundary of conservation by expanding from simply preserving and administering agricultural heritage. Discover a specific business to revitalize the local area by developing contents of areas which can be integrated with agricultural heritage into tourism resources.

Third, realize [Interaction/Expansion] strategy to spread the value of cultural heritage outward. Promote an advertisement marketing by expanding cultural heritage resources on local, national, and international level. To start with, spread the value of cultural heritage throughout the nation by promoting an academic exchange event connecting with related associations and group of experts and familiarization tour for urbanites. Then, establish a network to continuously promote cultural exchange, product exchange, and academic researches through cooperating with GIAHS approved countries.
3. Setting Goals for Conservation Administration of Gudeuljangnon

Action plans for the conservation management of the agricultural heritage

Currently, Wando County faces issues such as a lack of systematic management plans, lack of a dedicated administrative department, and the limitations of enforceable regulation due to the pressure for development. Therefore, to preserve the form of the traditional agricultural system of Cheongsando Island Gudeuljangnon and to protect it from outside threats, we provide the following detailed action plan.

First, establish a “Cheongsando Island Gudeuljangnon conservation and restoration strategy” to preserve the complete Cheongsando Island Gudeuljangnon as an agricultural heritage, and to continuously maintain its integrity.

Second, create a “Cheongsando Island Gudeuljangnon conservation management system establishment strategy” for administrative and financial measures (organization, finances, and cooperation).

Third, provide a “Cheongsando Island Gudeuljangnon diverse value application strategy” (research, learning, and experience), for coexistence of traditional and modern significance of the agricultural heritage.

i. Administrative systems for conservation management of the agricultural heritage (Organization)

First, a designated agricultural heritage administrative body should be established for the conservation management. The dedicated administrative body should be established as a pilot taskforce in the Environmentally Friendly Agriculture Department of Wando County, and with future reorganization, an official administrative body should be established (Department in charge: Agricultural Heritage Diver Value Creation Department [tentative name]). Furthermore, by organizing a citizens’ association for agricultural heritage, a foundation will be built for citizen-centered conservation management and application. The citizens’ association will be formed among Gudeuljangnon farmers and owners of fallow land, and will focus on human resource development through education of the public. In addition, by allowing research institutes, NPOs, and NGOs to participate and support the dedicated administrative body and the citizens’ association, the productivity of academic research will be improved.

ii. Providing systematic management guidelines for the conservation management of the agricultural heritage (System)
Since the national-level Agriculture–Fisheries Heritage Designation and Management Guidelines (Ministry of Agriculture, Food and Rural Affairs Notification 2012–285) is currently established, an agricultural heritage conservation management system applicable to the autonomous local government level is necessary. The system must convey the ability to control and be legally binding. Based on superior legislature, the “Wando County Agricultural Heritage Conservation Management Ordinance” (tentative name) must be established to provide detailed criteria for protection and conservation of the agricultural heritage.

iii. Action plan and financial support (Project initiatives)

As Cheongsando Island Gudeuljangnon was designated as the first Nationally Important Agricultural Heritage System, the financial support for the agricultural heritage conservation management and application has been provided by the national government. Therefore, a systematic management system will be established to improve the biodiversity of the rice paddies; public education programs for the agricultural heritage citizens’ association, a fallow land restoration program (landscape plants and Gudeuljangnon owner system), a Gudeuljangnon hands-on experience program, and various initiatives involving the ecology, education, restoration and tourism, will be provided.
Ⅳ. Site Action Plan Framework

Composition of the Promotion Project

In order for an integrated development of Gudeuljang Irrigated rice terraces in Cheongsando Island (which was appointed as a National Agricultural Heritage) and areas around Gudeuljangnon, we are currently pushing ahead with the 10 major projects to preserve and utilize our agricultural heritage between 2013 to 2015 for 3 years. The projects consist of 'Agricultural heritage conservation management system,' 'Restoration of agricultural activities and ecological functions,' 'Utilization of pluralistic values of the agricultural heritage.' Within these 3 major practical strategies, it will further be composed of particular projects.

i. Project to Construct the Agricultural Heritage Conservation Management Systems (3 Projects)

The conservation management system for Cheongsando Island agricultural heritage will be put to action through the establishment of the overall master plan. The master plan will consist of scientific analysis and humanities and social researches such as geological survey of the agricultural heritage, investigation of both tangible and intangible cultural assets. The current conservation condition of the agricultural heritage will be analyzed into different categories (fine, damaged, destroyed). These items which have been classified will then be recorded into a management register database hence providing a conservation management system for the management area along with areas around it.

ii. Projects to Restore Agricultural Activities and Ecological Functions (2 Projects)

In order to conserve the biological diversity in the areas around the agricultural heritage, a research on the biological diversity will be carried out together with the local residents and specialists and furthermore cultivation aid for traditional agriculture programs will be operated. The research for biological diversity will start by developing a list from the ecological research, joint research activities together with the local residents and the specialists, monitoring and research evaluation. In addition, through the supporting programs in order to reopen lands in fallow, we will implement methods which will restore ecological functions of the rice paddy and increase the ecological diversity in the whole of Cheongsando Island.

iii. Project on the Utilization of Pluralistic Values of the Agricultural Heritage (5 Projects)

The project to utilize the pluralistic values of the agricultural heritage fuses together with the diverse resource values of Gudeuljang Irrigated rice terraces in Cheongsando Island in order to push ahead the vitalization of education, tourism, research, promotional marketing in order to inherit to our future generations. The traditional agriculture will be organized into a manual which will be taught through regular training. Furthermore, explorer guide program for the agricultural heritage will be
developed hence creating it into a tourism resource targeted towards public officials and the general public. In order to promote domestically, hosting of academic events on agricultural heritage and development of design products branded with agricultural heritage. As for international promotion, we are planning to participate in GIAFIS academic events in order to exchange information internationally.
1. Preparing conservation administration system for agricultural heritage [Developing Equipment]

<table>
<thead>
<tr>
<th>Business goals</th>
<th>Main contents</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| The master plan for the agricultural heritage conservation and use | • Establish a combined master plan targeting the whole area of Cheongsando Island which was designated as the first NIAH and Gudeuljangnon congested area.  
• This plan will cover the conservation and execution business for usage and administration of agricultural heritage during the period of 3 years. | ![Step 1 Resarch the present condition](image1) ![Step 2 Resarch the main direction and business](image2) ![Step 3 Enacting and planning](image3) |
| Business goals | Main contents | Procedure |
| Contents constructing business for the agricultural system | • Establish a methodical information database by conducting geological and soil inspection, animal and plant ecology inspection, tangible and intangible agricultural culture inspection(farming techniques, religions, food). | ![Step 1 Resarch the ground, soil, irrigation](image4) ![Step 2 Resarch the biodiversity](image5) ![Step 3 Resarch the farming culture](image6) |
| Business goals | Main contents | Procedure |
| Establishing a methodical information database by conducting geological and soil inspection, animal and plant ecology inspection, tangible and intangible agricultural culture inspection(farming techniques, religions, food). | 1) Index research for Gudeuljangnon area  
2) Ecology research for Cheongsando Island Gudeuljangnon  
3) Research for the farming culture of Gudeuljangnon | ![Step 1 Resarch the ground, soil, irrigation](image7) ![Step 2 Resarch the biodiversity](image8) ![Step 3 Resarch the farming culture](image9) |
### ③ Designating Gudeuljangnon as a conservation area and the environment maintenance

<table>
<thead>
<tr>
<th>Business goals</th>
<th>Main contents</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| Create a agricultural heritage demonstration district which will be preserved and administered by the public, by purchasing contiguous fallow lands within Gudeuljangnon congested area. Also, prepare to accept experiential tourism for agricultural heritage. | 1) Producing the Gudeuljangnon management register  
- Building the database for the owner, location, area, condition  
2) Test-maintaining for the Gudeuljangnon conservation area  
- Conservation management for the concentrated area through co-investment  
3) Making a Gudeuljangnon visiting road and museum  
- Establishing the condition for publicizing and studying the agricultural heritage | ![Step 1: The first Research](image1) ![Step 2: Producing the management register](image2) ![Step 3: Restoring and maintaining](image3) |

### 2. Restoring Agricultural and Ecological Function of Agricultural Heritage [Improving Environment]

#### ④ The support program for the traditional Gudeuljangnon cultivation

<table>
<thead>
<tr>
<th>Business goals</th>
<th>Main contents</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| As a part of plan to use Gudeuljangnon fallow land, execute scenic agriculture through Direct Payment Program for Rural Landscape Conservation, a government system, and provide it to tourists as a landscape resource. | 1) Researching the condition of Gudeuljangnon conservation area  
- Analyzing the cultivating condition through understanding the cultivating and non-cultivating areas  
2) The support program for the traditional Gudeuljangnon cultivation  
- Starting the program by Gudeuljangnon conservation ordinance  
3) Test-operating the citizen participation program  
- Cultivating activity in the Gudeuljangnon conservation area through alternative cultivation | ![Step 1: Researching the cultivating condition](image4) ![Step 2: Cultivation support method](image5) ![Step 3: Test-operating the cultivation program](image6) |
### 5. Monitoring the biodiversity of Gudeuljangnon

**Business goals**
- Carry out and administer annual monitoring for biological diversity in which local residents, students, and ecology experts can participate. This monitoring is aimed to preserve and administer the ecological environment of Gudeuljangnon.

<table>
<thead>
<tr>
<th>Main contents</th>
<th>Business goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Developing the research list for the agricultural heritage</td>
<td>Making the check-list for biodiversity, soil, water resources</td>
</tr>
<tr>
<td>2) Conducting annual or biannual co-research by residents and experts</td>
<td>Co-conducting by farming residents, local high school students, university students and young adults, ecology experts</td>
</tr>
<tr>
<td>3) Analyzing and monitoring the ecology data</td>
<td>Reflecting the analysis results on the agricultural heritage conservation project</td>
</tr>
</tbody>
</table>

**Procedure**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning the research</td>
<td>Conducting the research</td>
<td>Starting the monitoring</td>
</tr>
</tbody>
</table>

---

### 3. Utilize pluralistic values of Agricultural Heritage [Create Values]

#### 6. The resident education program for the transmission of the traditional agriculture

**Business goals**
- Systemize the traditional agricultural technology of Gudeuljangnon to farmland composition technology, irrigation technology, agricultural techniques, agricultural equipment, and food culture. Then organize these into a knowledge-based system and use this as an educational tool for residents.

<table>
<thead>
<tr>
<th>Main contents</th>
<th>Business goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Developing a traditional farming education program</td>
<td>Developing the transmission education such as management knowhow for Gudeuljangnon, traditional food and culture</td>
</tr>
<tr>
<td>2) Test-operating the education program</td>
<td>Education and training for local residents in each part</td>
</tr>
<tr>
<td>3) Running a resident research group for the transmission of Cheongsando Island tradition</td>
<td>Running a culture research group mainly led by Gudeuljangnon local conference</td>
</tr>
</tbody>
</table>

**Procedure**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Step 2</th>
<th>Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing an education program</td>
<td>Starting the education in each part</td>
<td>Running a resident research group</td>
</tr>
<tr>
<td>Business goals</td>
<td>Main contents</td>
<td>Procedure</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| **The traditional Gudeuljangnon agriculture exchange program between city and farming village** | • Introduce an ownership system for Gudeuljangnon to support continuous cultivation of fallow land and promote a creation of income for farms. Then provide this as a agricultural education program involving interactions of urbanites. | 1) Finding a farm for the exchange program and researching the farmland in use  
- Selecting and educating Gudeuljangnon farms for the exchange program  
2) Publicizing the Gudeuljangnon exchange program  
- The Gudeuljangnon ownership system, working holiday program  
3) Starting and monitoring the exchange program  
- Reviewing the effect and improvements of the program |

**Procedure**

![Procedure images]

<table>
<thead>
<tr>
<th>Business goals</th>
<th>Main contents</th>
<th>Procedure</th>
</tr>
</thead>
</table>
| **The agricultural heritage festival for expanding the agricultural heritage value** | • Combine diverse resource value of rural area and appreciation of art works with an aim to make a tourism attraction out of NIAH. Through this combination, host an annual event in Cheongsando Island to provide art tourism experience. | 1) Planning the agricultural heritage festival  
- Developing the agricultural heritage festival with themes of agriculture, environment and culture  
2) Making and placing eco-friendly agriculture arts  
- Placing arts of tourism, education and experience  
3) Holding an agricultural heritage festival  
- Holding a Gudeuljangnon agriculture festival every fall |

**Procedure**

![Procedure images]
### The academic study and value expansion of the agricultural heritage

**Business goals**
- In order to effectively carry out conservation administration of Cheongsando Island Gudeuljangnon, install an administrative organization responsible for agricultural heritage exclusively. Also, continuously promote academic interchange of administrative organization, local residents, and experts.

**Main contents**
1) Organizing the Gudeuljangnon expert study group
2) Holding annual or biannual seminars and workshop regularly
3) Field trip to home and foreign agricultural heritage and expert consultancy

**Procedure**
- The study for the agricultural heritage conservation, academic study, education and monitoring
- Sharing and exchanging the agricultural heritage locally and internationally
- Benchmarking the home and foreign developed place and expanding the exchange and cooperation system

---

### Monitoring the biodiversity of Gudeuljangnon

**Business goals**
- Develop an integrated brand design package to advertise Gudeuljangnon locally and abroad and apply this to variety of projects including advertisement, merchandise, and guidance system.

**Main contents**
1) Establishing the PR/marketing strategy for Gudeuljangnon
2) Developing the brand design and product for Gudeuljangnon
3) Starting PR/marketing at home and abroad

**Procedure**
- Establishing long-term strategy through cooperation of administrators, experts, residents
- Using the symbol brand of Gudeuljangnon and developing the sightseeing product
- Co-marketing with Jeju island, and other agricultural heritages and building up a website
V. Cooperative System for Agricultural Heritage

1. Outcomes of Cheongsando Island Agricultural Heritage Conservation Administration

ⅰ. Introduction of a national-level agricultural heritage system policy

The Ministry of Agriculture, Food and Rural Affairs of Korea introduced a policy in 2012 to operate a conservation management system for agricultural heritage systems at the national level. In Cheongsan-myeon, Wando County, a workshop by the local autonomous government and experts was held in November 2012.

The workshop included an exchange of opinions about the Agriculture-Fisheries Heritage Designation and Management Guidelines (Ministry of Agriculture, Food and Rural Affairs Notification 2012-285) between the administration and the experts, and a discussion about the plans for progress of the project. The Nationally Important Agricultural Heritage Systems are designated based on the following criteria: more than 100 years of tradition, national and international representativeness, possibility of conservation management, and potential applications. Areas designated as Nationally Important Agricultural Heritage Systems become the subject of “Initiative for the Diverse Use of Agricultural and Fisheries Resources” in 2013 from the Ministry of Agriculture, Food and Rural Affairs, and receive a national grant of 1.5 billion Won over 3 years. The content of the initiative includes maintenance and development of the agricultural heritage system (plan and design, research, heritage-system maintenance, and land purchase); environmental improvement (environmental maintenance, heritage-system protection, and value improvement); and value addition (additional facilities, value creation, and annual income). From 64 applications registered by the end of 2012 from various cities and counties in Korea, Cheongsando Island Gudeuljangnon and Jejudo Island Dolbatdam (stone walls) were designated in January 2013.

ⅱ. Agricultural heritages system projects of the local autonomous government
Since late 2011, Wando County has been using multiple approaches to discover the value of Cheongsando Island Gudeuljangnon as an agricultural heritage system and to find applications. The “Seminar for the Value Rediscovery and the Plans for the Application of Cheongsando Island Gudeuljangnon,” was held in November 2011, and was a turning point for the policy administration of Wando County. Wando County hosted the seminar, and invited the Ministry of Agriculture, Food and Rural Affairs, Rural Research Institute, and other relevant experts. Through this seminar, various ideas for the conservation, management, and application of Gudeuljangnon were shared.

Wando County has conducted foundational research for the conservation, management, and application of Gudeuljangnon, starting in May 2012. The main goal of the research was to assess the physical size of the Gudeuljangnon concentrated in Buheung-ri village, Yangji-ri village, and Sangseo-ri village. The research also includes plans for a citizens’ association of Gudeuljangnon farmers, and basic plans for conservation management of the Gudeuljangnon, including plans for use of fallow Gudeuljangnon paddies. Based on the results of the research, the application for the Nationally Important Agricultural Heritage System and a community exchange of ideas and opinions have been pursued.

iii. Agricultural Heritage System designation initiative in collaboration and cooperation with residents

Wando County has continued cooperation with its residents for the conservation and management of Cheongsando Island Gudeuljangnon since 2012. In the "Gudeuljangnon discussion forum" held in April 2012 for the residents of Yangji-ri village in Cheongsan-myeon, the Nationally Important Agricultural Heritage System project was introduced, and the foundation for the cooperation between the administration and public was
established. In addition, the results of the “Gudeuljangnon Agricultural Heritage Conservation Campaign,” used as a means of exchange with city residents and as a publicity tool, were shared. The funds collected through the campaign to support Gudeuljangnon cultivation were given to the households cultivating Gudeuljangnon.

In December 2012, the administration–public cooperation system was established, to extend the goal from national–level recognition to the designation for Globally Important Agricultural Heritage Systems (GIAHS). In this event, called “Community Opinion Exchange for the Designation of Cheongsando Island Gudeuljangnon as a Globally Important Agricultural Heritage Systems (GIAHS),” Wando County introduced the Globally Important Agricultural Heritage Systems (GIAHS) initiative to the community, and explained the necessity for organization. A public consensus was built for the importance of an agricultural cooperative system memorandum of understanding (MOU) for Gudeuljangnon farmers, providing the foundation for a citizens’ association for agricultural heritage system.

iv. Initiatives in cooperation with local autonomous government and experts

Cheongsan Nonghyup, a local organization on Cheongsando Island, has been collaborating with the Wando County agricultural heritage project since 2012. Cheongsan Nonghyup supported the foundational research and surveys conducted starting in May 2012, using its capacity for practical on-site work. In addition, it assisted in executing the “Gudeuljangnon Agricultural Heritage Conservation Campaign.” At the Cheongsando Island expatriate reunion meeting held in May 2012, Cheongsan Nonghyup promoted the Gudeuljangnon Conservation Campaign and supported administration of the fundraising account program. It also distributed and shipped pickled garlic (September) and Gudeuljangnon rice (November), which came as a benefit for participating in the Gudeuljangnon Agricultural Heritage Conservation Campaign.
The academic collaborators for the conservation management of Cheongsando Island Gudeuljangnon include the Korea Daranginon Research Society. This society is a union of experts in agriculture, landscape, and urban research and has been independently conducting foundational research regarding Gudeuljangnon since 2011. In 2012, the society published an article titled “A study of the distribution of Cheongsando Island Gudeuljangnon and the physical structure” in an academic journal for rural planning, providing an academic base for the study of Cheongsando Island Gudeuljangnon. In addition, the society has served as a consultant for conservation management initiatives in collaboration with the public.

v. Introduction of support systems for environmentally friendly organic farming on Cheongsando Island

Due to the ageing of the population and the increase of fisheries and tourism–services industry, the Gudeuljangnon has lost its function as arable land and the proportion of fallow land has been increasing. Therefore, Wando County has introduced new measures to preserve the cultivation of Gudeuljangnon and promote its brand of environmentally friendly agriculture. In July 2012, the “Declaration of the Cheongsando Organic Farming Zone” initiated the development of Gudeuljangnon as an environmentally friendly organic farming zone, and a policy has been implemented to support the practice.

This initiative involves 5 villages in which Gudeuljangnon farming households are concentrated: Yangji-ri village, Buheung-ri village, Jungheung-ri village, Chunggye-ri village, and Sangseo-ri village. In the 70 ha of agricultural land, chemical fertilizers are not used, and the crops are grown organically. Wando County provides environmentally friendly agricultural material. The organic produce cultivated by the farmers, such as rice, garlic, beans, peppers, spring cabbage,
and fern, are sold under a certified environmentally friendly brand at the Wando County e-shop and Nonghyup. Through this initiative, Gudeuljangnon are maintained, the surrounding ecosystem is conserved, and local food is produced.

**vi. Continuous growth in capacity of Cheongsando Island residents**

Cheongsando Island was designated as the first Slow City in Asia, in 2007. The residents’ capacity in the hospitality, tourism, and regional foods industries has been developed through policy initiatives (The Island I want to Visit initiative, Slow City project). A resident tour-guide organization, “Cheongsan Ae (Cheongsan Love),” composed of approximately 10 tour guides who have received specialized training about the history, culture, and ecology of Cheongsando Island, has played an active role.

Citizens’ associations in the food industry include the “Slow Food Operation Organization,” managed by the Slow City Agricultural Cooperation Association. The members have received training in the development of local food menus using environmentally friendly ingredients produced on Cheongsando Island. Currently, the association runs a social enterprise selling slow foods and boxed lunches in the Slow Food Experience Center in Yangji-ri.

In addition, a citizens’ organization has been formed to develop the “Cheongsan Vacation” brand of homestay, and to train and educate the residents in hospitality services. An architectural school program has also been introduced to pass down the traditional construction techniques of Cheongsando Island stone walls, in order to build a foundation for the improvement and maintenance of Cheongsando Island architecture.
vii. Gudeuljangnon Agricultural Heritage Conservation Campaign: An exchange program with city residents and promotion of support for cultivation

The “Gudeuljangnon Agricultural Heritage Conservation Campaign” began in 2012 from the cooperation of Gudeuljangnon farmers, Cheongsan Nonghyup, and the Korea Darangi Research Society. This campaign began in March 2012 with a publicity campaign using posters, news media, and participation in local festivities. Gudeuljangnon Heritage Campaign Accounts of 50,000 Won per account were promoted to members of the Cheongsando Island expatriate reunion organization and to city residents. Supporters who registered for accounts receive a newsletter about the conservation efforts of Cheongsando Island Gudeuljangnon, discounts, and agricultural products from the Gudeuljangnon. During the Slow Walk Festival of April 2012, a Gudeuljangnon discussion forum was held in which the value and conservation of Gudeuljangnon was promoted to visitors and to local residents. Thus, 108 accounts were registered in 2012, and the supporters received pickled garlic and rice cultivated in Gudeuljangnon. The Gudeuljangnon Agricultural Heritage Conservation Campaign is planned to continue in 2013. Participating Gudeuljangnon farming households are planned to expand to Yangji-ri village, Buheung-ri village, and Sangseo-ri village, and a hands-on agricultural experience program for the agricultural heritage is planned as a means of exchange with city residents.

viii. Gudeuljangnon experience programs: Commercialization of experience-based tourism for agricultural heritage

In addition to the agricultural heritage conservation, a hands-on experience program has been in operation at the Gudeuljangnon Experience Center established in 2011 in Yangji-ri village in Cheongsan-myeon. The experience center has exhibits, signs explaining Gudeuljangnon agricultural techniques, and the learning experience facility.
A pilot Gudeuljangnon hands-on experience program has been in operation as since 2011, during the autumn festival of Cheongsando Island, “Cheongsan Vacation Get-together.” This festival, to which families that live in the city are invited, provides experiential programs such as making scarecrows and a Gudeuljangnon rubbing-inscription experience program. In association with the “Gudeuljangnon Agricultural Heritage Conservation Campaign” planned for 2013, planning is in place for the experience programs to be expanded to include seedling transplantation and harvest experiences.

In October 2013, an experiential education program for local youth was executed to share the heritage value of Gudeuljangnon. This program was aimed to provide interactions between local students and residents on agricultural system of Gudeuljangnon, which was recently designated as NIAH. For this experiential program, farmer of Gudeuljangnon had participated as a one–day instructor and students from Cheongsan elementary school and middle school experienced traditional farming technique with instructors and shared function of biological diversity around Gudeuljangnon.
2. Establishing Cooperative System for Conservation Administration of Gudeuljangnon

i. Administrative Support System of Wando County

Currently, Wando County is equipped with a systematic administrative management system in order to systematically manage the conservation of the Cheongsando Island agricultural heritage. The Deputy County Governor of Wando County is currently handling and inspecting all the progress of the projects hence taking full charge on executing operations on projects for environmentally-friendly agriculture. Cheongsan Office is currently supporting the environmentally-friendly agriculture through the execution of projects and monitoring. The internal organization within Wando County supporting the agricultural heritage conservation management system consists of Technical Support Team, Advertisement Support Team, Business Support Team and Conservation Administration Team.

ii. Members of Resident Committee

In order to provide a conservation management system for resident initiative agricultural heritage in Cheongsando Island a resident council has been organized. The farmhouses of Gudeuljangnon declared a environmentally-friendly organic farming on July 2012, hence creating a council centered around the organic farming participants. Currently there are 113 farmhouses from 5 different villages participating and the 5 heads of village have been appointed as the member of the committee. Since March 2013, in order to register their council on to GIAHS, they have concluded a Wando County – Resident Council memorandum of understanding and since been maintaining the cooperative relations.
3. Main stakeholders (Recording of the main stakeholders, public/private partners list and organizations)

<table>
<thead>
<tr>
<th>Level</th>
<th>Stakeholders (list)</th>
<th>Tasks</th>
</tr>
</thead>
</table>
| National | Ministry of Agriculture, Food and Rural Affairs (MAFRA) | • Appointing as a National Important Agricultural Heritage and institutional support from the national level  
• Support to be registered into GIAHS (Globally Important Agricultural Heritage Systems) |
| | Rural Development Administration (RDA)  
Rural Research Institute (RRI)  
Korea Rural Community Corporation (KRCC) | • Carrying out researches on necessary policies and supporting the appointment as a National Important Agricultural Heritage and conservation management  
• Construction of solidarity specialists support system and appointment of national agricultural heritage areas |
| | Korea Rural Agricultural Heritage Academy (KRHA)  
FAO GIAHS registration preparatory committee | • Carrying out academic research on the traditional knowledge of National Important Agricultural Heritage, ecological diversity  
• Specialist consultation support for areas preparing to become a National Important Agricultural Heritage |
| Local | Jeolla Namdo Provincial Office  
Wando County (Chungsan office) | • Administrative and promotion support towards National Important Agricultural Heritage execution projects  
• Providing a support system and establishing of an overall master plan for National Agricultural Heritage |
| | Wando Culture Center (WCC)  
Institution for Marine and Island Cultures (IMIC)  
Myeongso IMC | • Carrying out researches on traditional knowledge, farming culture, cultural landscape, ecological environment in Cheongsando Island Gudeuljangnon  
• Carrying out systematic academic researches on the conservation and utilization of Gudeuljangnon |
| Community | Cheongsan Nonghyup | • Supporting the farmhouses of Gudeuljangnon (distribution, sales, promotion of agricultural production)  
• Support on researches and excavation of resources related to Gudeuljangnon |
| | Cheongsando Island Gudeuljangnon resident council | • Practicing organic ecological agriculture for the development of the cultivation environment and the conservation of the ecological environment in Gudeuljangnon  
• Operating of the agricultural heritage utilization program and supporting the research/investigation activities towards the conservation management of Gudeuljangnon |
| | Cheongsanae | • Interpretation on tourism and major resources in the whole of Cheongsando Island including Gudeuljangnon |
4. Co-operation structure (Explanation of the national cooperative structure and implementation structure)

Through the operation guidelines by the Ministry of Agriculture on the National Important Agricultural Heritage system in Wando County, it supports the residents in the area of distribution from Cheongsando Island Gudeuljangnon, and provides preparations to receive the modified policies and systems through seminars and workshops. Furthermore through the construction of cooperative research systems between government run policy research institutes and other private research institutes, multilateral academic research and consultations are put into practice for the conservation and utilization of sustainable Gudeuljangnon.

Especially in Wando county, regarding Gudeuljangnon, in order for the local residents to be able to cultivate and develop their heritage area through National Heritage Policy, the local residents' are actively induced to participate in the national policy project in order to install 「Voluntary Regional Revitalization Project」. Supportive projects closely connected with the National Agricultural Policy which could contribute to the substantive living environment, the improvement of quality of life and increase in income are being planned in different levels through the collection of long term and midterm plans.
5. Financial management

Wando County, Cheongsando Island Gudeuljangnon which is the first to be appointed by the National Important Agricultural Heritage has received project funds from the central government hence carrying out the agricultural conservation management and utilization projects from 2013 until 2016. The total amount of project funds funded by the central government is 1.5 billion KRW over the course of 3 years and from this fund, 30% will be allotted to regional funds by Wando County. Currently Wando County has allocated a budget for the 10 projects under 3 main categories which are the conservation management and utilization project of National Important Agricultural Heritage and establishing a basic plan to deduct from the overall master plan.

The project composition consists of the establishment of an overall master plan in order for a systematic conservation management of the traditional Agricultural Heritage, and other diverse program operations which will be participated by the local residents, tourists, specialists. After the establishment of the basic plan, damaged agricultural heritage from 2014 will go through maintenance and restoration furthermore reopening of the fallow lands for agricultural activity and exchange activities with urban dwellers will commence. Currently it is planned for the project to be carried out by the related specialists and administrative support will be the premise and the operation of the program will be a self-supporting operation structure led by the local residents.

<table>
<thead>
<tr>
<th>Type</th>
<th>Detailed Project Name</th>
<th>Project Fund (1 mil. KRW)</th>
<th>Annual Investment Plan (1 mil. KRW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2013</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1,500</td>
<td>750</td>
</tr>
<tr>
<td></td>
<td>A systems for conservation of the agricultural heritage</td>
<td>700</td>
<td>485</td>
</tr>
<tr>
<td></td>
<td>Repair of Agricultural and ecological functioning of the agricultural heritage</td>
<td>380</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Use of multivaluedness of the agricultural heritage</td>
<td>420</td>
<td>215</td>
</tr>
</tbody>
</table>

※ Currently there are plans to expand the support business for future conservation operations by obtaining additional budget from Wando county apart from the current budget.
6. Cooperation Plan Wando County (Cheongsando Gudeuljangnon Agricultural Heritage) and Jeju Island (Field Wall Agricultural Heritage)

In order to systematically conserve and manage Wando County’s Cheongsando Gudeuljangnon and Jeju Island Field Walls, these four cooperative plans will be carried out.

First, to expand the agricultural heritage values they will be carrying out a joint promotional marketing.

- By developing a joint agricultural heritage brand, it will improve the image of both areas and promote sales of agricultural products
- Hosting joint events in order to increase the support for the cultivation of the agricultural heritage and promoting exchanges between cities and farming villages
- Carrying out joint marketing with corporations in order to increase the values of agricultural heritage.

Second, joint academic seminar regarding the conservation of agricultural heritage will be held.

- Sharing methods on conserving agricultural heritage and the results through regular academic seminar.
- Promoting cooperative exchanges of agricultural heritage related specialists and manpower between two areas.

Third, aims to have cooperative exchange with the main body of operations currently carrying out conservation and management on agricultural heritage.

- Operating a regular research society between the two autonomous community in charge of agricultural heritage
- Exchange of information and sharing conservation awareness through mutual exchange visits between the agricultural heritage community association from both areas.

Fourth, interchange cooperation with GIAHS for the international solidarity of agricultural heritage conservation

- Plans to hold GIAHS global forum and local seminar immediately after registering as a Globally Important Agricultural Heritage
- Hosting seminars on GIAHS’s diverse practices and the monitoring by inviting global experts and plans to pursue close cooperative business with FAO GIAHS executive office.
VI. Monitoring and Knowledge Management and Learnings for dynamic conservation of GIAHS

1. Operation Management and Monitoring on National Important Agriculture Heritage

In order for the conservation management activity of Cheongsando Island Gudeuljangnon to be continuously managed by the residents, Wando County is currently carrying out a plan to conclude the 'Self-governing of Agricultural Heritage Agreement.' Before the agreement can be concluded, the conservation management and basic utilization plan for Gudeuljangnon will be established in 2014, after it has been established, Cheongsando Island Gudeuljangnon resident committee come to an agreement on the conservation management ground rules and a promise to continuously manage the agricultural heritage. The agreement which will be signed together with Wando County will consist of these components. Through this, it provides the local residents to self-led management operations for their own agricultural heritage.

The main agent behind the conservation management and monitoring of the agricultural heritage is categorized into the central government and self-governing body. The Ministry of Agriculture and Forestry will be evaluating the consistency and the validity of the agricultural heritage conservation management projects through regular site inspections and every 2 years, they will carry out a general inspection hence in which post management such as providing incentives or revoking of the appointment will be granted. Wando County will be cooperating together with Cheongsan office and furthermore frequently inspect the conditions and effects of the project operations, it will then be used project enforcement evaluation based on the basic plan hence establishing a agricultural heritage reorganization plan every 5 years.

2. Plans for Cooperative Exchanges with Global Agricultural Heritage

Similar to the Gudeuljangnon located in Wando County, related to the Darangyi Rice Field (Terraced Paddy Field), construction of 「Research Society (Organization) and Mutual Cooperation Systems related to the Domestic and International Darangyi Rice Field Distribution Areas」. Through research results from different regional studies and utilization programs, there are plans to provide a plan for continuous conservation management and development method of the Gudeuljangnon.

Furthermore, Wando County will host periodical academic seminars and workshops on agricultural heritage with Japan, China, Taiwan and other nations in order to gather opinions from domestic and international specialists on Gudeuljangnon. In detail, there are
plans to gradually adjust the conservation management systems and support system suitable to the regional conditions through joint heritage studies together with related nations. For this to happen, the Ministry of Agriculture and Forestry and related research institutes/organizations will cooperate together preparing for the 「Construction of GIAHS East Asia Cooperative Network」. In the long-run for a pluralistic value utilization and domestic and the expansion of agricultural heritage network, there are plans to participate and share the importance of Gudeuljangnon through international GIAHS forums and other wide range of programs held by FAO GIAHS.