



# **Master Plan for Jeju Island UNESCO Global Geoparks**

## **The 3<sup>rd</sup> Jeju Island Geopark Management and Operation Plan (2018–2022)**

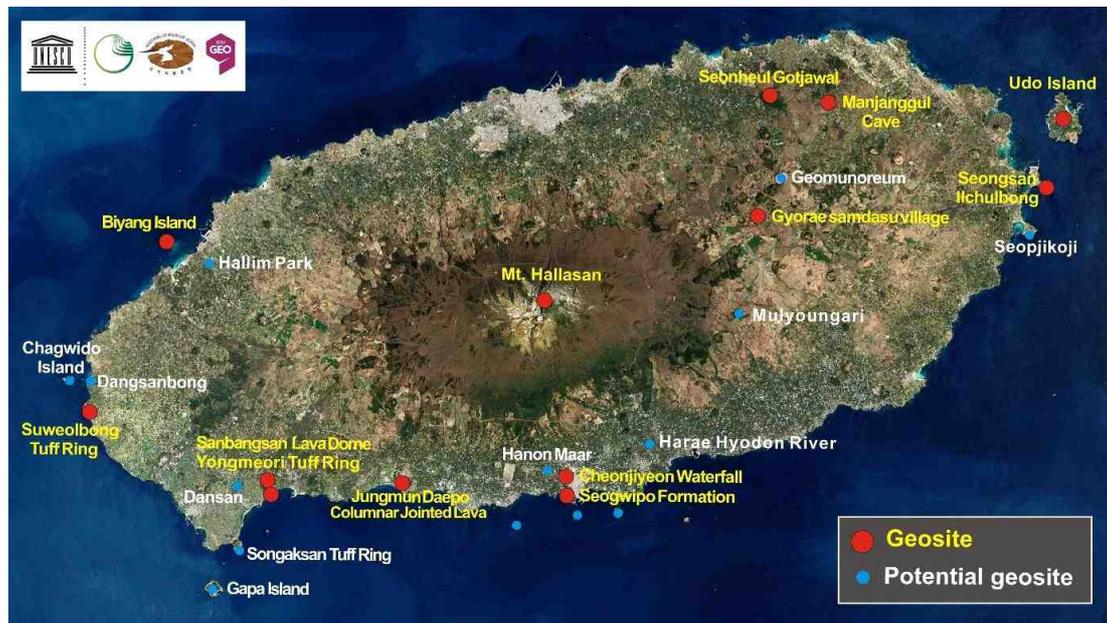
## **1. Introduction**

Jeju Island UGG (UNESCO Global Geopark) was designated as the first UNESCO Geopark in South Korea in 2010 and as the first national Geopark in 2012. Jeju Special Self-Governing Province (hereinafter referred to as "Jeju-do") established the Jeju Island Geopark Management Plan and has been working to boost the local economy through sustainable geo-tourism. Jeju Island UGG drew up the Jeju Island Geopark Management and Operation Plans in 2009 and 2013. The 2013 management plan expired in 2017, and the third Jeju Island Geopark Management and Operation plan (hereinafter referred to as "the third management plan") was developed, which is effective from 2018 until 2022. The third management plan is meaningful in that the Biosphere and Geopark Research Department of the Mt. Hallasan Research Division of Jeju-do itself analyzed previous reports and established a future plan without commissioning it to outside organizations. The third plan will not only serve as a benchmark for the management and operation of Jeju Island UGG, but as a viable management and operation plan. Experts specializing in the geology and geopark of Jeju-do were consulted and the plan was finally approved by the Geopark Subcommittee of the UNESCO Heritage Management Committee of Jeju Special Self-Governing Province.

## **2. Jeju Island Geopark**

Jeju Island earned certification as a UGG in October 2010 and was re-certified by UNESCO in 2014. In December 2012, Jeju Island Geopark along with Ulleungdo was certified as Korea's first national geoparks.

With various volcanic topography and geological heritages, the entire island of Jeju has been designated as a geopark. Among the most well-known geological wonders are Mt. Hallasan, a symbol of Jeju Island at the center of the island, Suweolbong, a hydrovolcano world-renowned for research, Sanbongsan, a volcanic lava dome, Yongmeori Beach where one can see the history of hydrovolcanic eruptions from the early days of Jeju Island formation, Jungmun Daepo Coast, Jusangjeolli Cliff displaying columnar-jointed lava or pillar rock formation, Seogwipo Formation which is the first stratum created during the formation of Jeju and shows the marine environment of about one million years ago, Cheonjiyeon Falls that show the erosion of the sedimentary layers and the formation process of valleys and waterfalls. Also, there are Seongsan Ilchulbong Peak, a best-known archetypal tuff cone where people visit to see the wonderful sunrise view of the peak, Manjangul Lava Tube, the only lava cave open to the public in the Geomunoreum Lava Tube System, Seonheul Gotjawal, the unique volcanic terrain of Jeju Island with its ecological treasures, and finally U-do and Biyang-do islets, known as an island inside an island. There are currently 13 representative geopark sites, including Gyoraе Samdasoo Village which was approved by the Geopark Subcommittee on December 21, 2017.



### 3. Management and Operation Plan

#### 3.1 The Purpose and Scope of the Management and Operation Plan

The third Jeju Island Geopark Management and Operation Plan includes almost everything about the Jeju Island UGG from 2018 until 2022. It will not only provide a standardized manual for managing and operating the Jeju Geopark, but will also play a role as a viable plan for its management and operation. Jeju Island UGG will work according to the Third Jeju Geopark Management and Operation Plan, and the plan will be revised and updated every four or five years to reflect any changes made. Furthermore, it will serve as a basis for establishing geopark plans, securing budgets, and operating programs in the future.

Spatially this plan covers the entire Jeju Island geopark and temporally it is a mid and long-term plan ranging from January 2018 until December 2022. It includes the management structure, methods to protect and manage geological heritages, infrastructure for geopark tours, geopark storytellers, geology education programs, research and survey projects, committee operation, promotion and marketing,

international exchanges, and financial strategies.

### **3.1.3. SWOT Analysis of Jeju Island Geopark**

A strengths, weaknesses, opportunities, and threats (SWOT) analysis was carried out to establish the third Jeju Island Geopark Management Plan. According to the analysis, the strength of Jeju Island Geopark has been determined by its excellent brand value with the UNESCO-Triple Crown title enduring natural and cultural heritages across the island, the well-developed tourism industry and transportation infrastructure, and various educational activities. These strengths suggest that Jeju Island Geopark across the island could contribute to reviving the local economy by identifying more geological attractions and encouraging more residents to be involved. On the other hand, there is also a risk or threat factor in that heritage can be misused due to excessive tourist inflow and commercialization and abused in inappropriate ways to be overdeveloped due to lack of relevant research data. Ongoing coastal erosion is also seen as a critical threat to heritage.

## **3.2 Management Structure of Jeju Island Geopark**

### **3.2.1 Current Management Structure (2011-2017)**

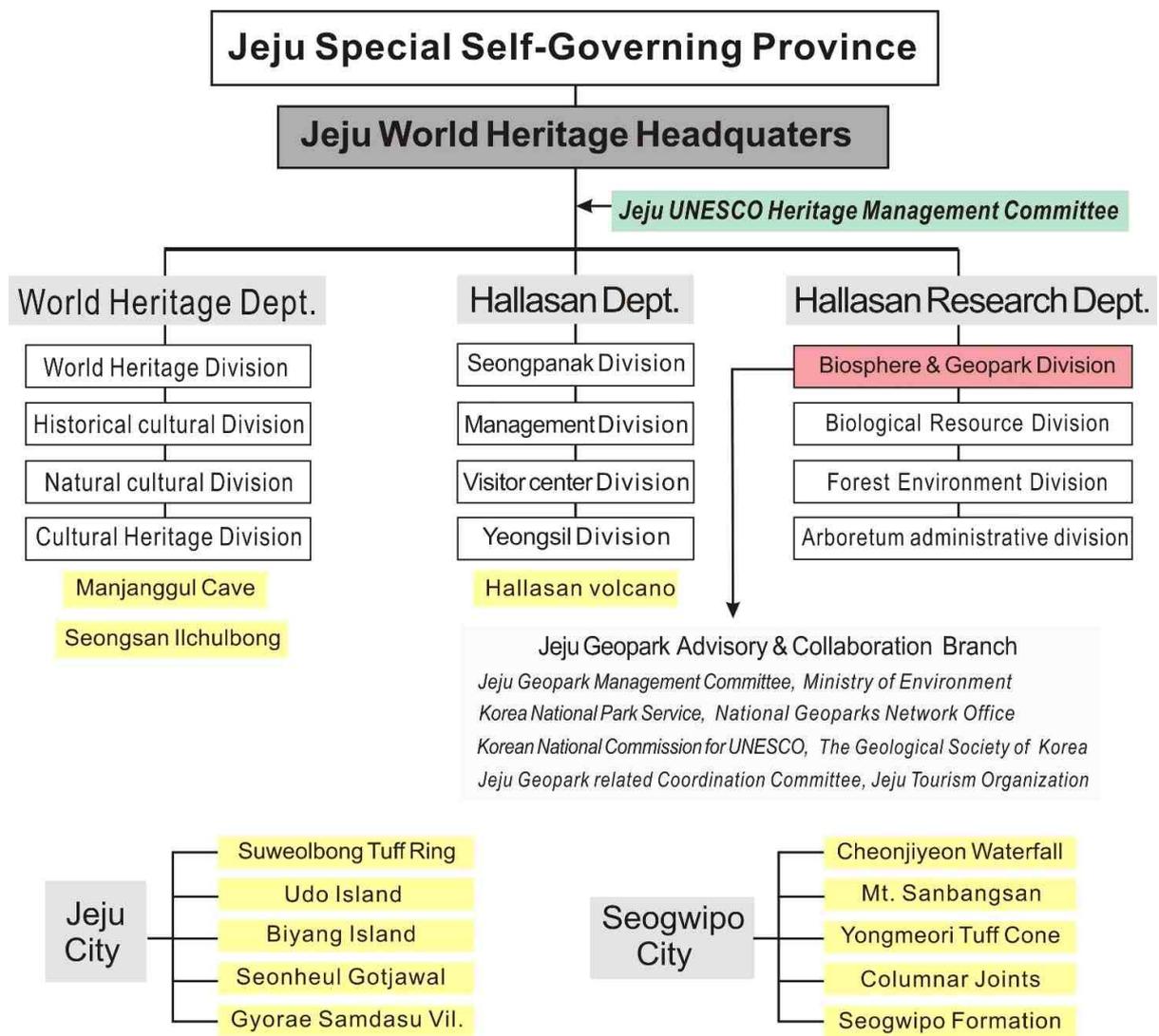
The first organization in charge of Jeju Island Geopark was the Geopark Task Force (TF) team under the Jeju Special Self-Governing Province(JSSGP) in 2009. This TF team became the Biosphere and Geopark Team of the World Natural Heritage Management Division during the 2012 organization reshuffling and then was reorganized into the Biosphere and Geopark Research Department of the World Heritage and Mt. Hallasan Research Institute in 2014 (table 1). Then in 2016 it was reorganized into the Biosphere Geopark Research Department under the Mt. Hallasan Research Division of Jeju World Heritage Headquarters. At Jeju World Heritage Headquarters, there is one geology specialist each at the Geopark Research Department, the Biological Resources

Research Department and the World Heritage Cultural Properties Policy Department, and these experts jointly conduct major geological research and monitoring.

A Mt. Hallasan National Park Office has been set up for overall management due to the huge area of the mountain and the large size of the organization in charge. In addition, considering the management characteristics such as possible designation as cultural properties, other geological attractions are managed by one organization, the World Heritage Cultural Properties Division, within which two different departments (World Heritage Cultural Properties Policy Department and Natural Cultural Properties Department) are working together. As for the management and operation of the representative geosites, Jeju City and Seogwipo City are in charge, instead of the Biosphere and Geopark Research Departments.

Table 1. Changes in the management structure of Jeju Island Geopark (2009-2017)

| <b>Date</b>  | <b>Name of Organization</b>                             | <b>Number of Staff</b> | <b>Department in Charge</b>                                 | <b>Number of Experts</b>   |
|--------------|---|------------------------|---|----------------------------|
| 2009         | Geopark TF Team, JSSGP                                  | 5                      | Geopark TF Team   | 1 geologist                |
| January 2012 | World Natural Heritage Management Division, JSSGP       | 5                      | Biosphere & Geopark Team                                    | 1 geologist                |
| August 2014  | World Heritage & Mt. Hallasan Research Institute, JSSGP | 6                      | Biosphere & Geopark Research Division                       | 3 geologist<br>1 biologist |
| July 2016    | World Heritage Headquarters JSSGP                       | 9                      | Geopark Research Division, Mt. Hallasan Research Department | 3 geologist<br>1 biologist |



### 3.2.2. Management and Operation Plan (after 2018)

As the awareness of Jeju Island Geopark has been rising and the number of park visitors has increased, the geopark-related work has been also significantly growing. In order to effectively preserve and manage the geopark, the organization needs to be further expanded and reorganized. There have been 2 plans developed, one short and one mid-term for the future management structure depending on the needs of the organization expansion and reshuffling.

### **① Short-term plan (one to three years)**

The Biosphere and Geopark Research Department has currently one geological expert and two administrators. Biosphere network personnel are supporting international exchange work, and public relations are not being sufficiently carried out. Therefore, one more geologist and one expert in publicity and ecology are needed. In addition, the establishment of a secretariat should be discussed in the long run to deal with the issues of attracting the Asia-Pacific Geopark Secretariat as well as the whole geopark-related work or international exchanges

### **② Mid-term plan (three to five years)**

It is necessary to reorganize and expand one department within the Jeju World Heritage Headquarters by establishing separate departments for the World Natural Heritage, Biosphere Reserves and Geoparks to manage the UNESCO programs. Currently, Geopark-related tasks have some features in common with the Biosphere Reserve, like the use and promotion of the Biosphere Reserve brand, but the unique characteristics of each function do not appear in the management, educational, and administrative aspects. Therefore, the Biosphere and Geopark Research Department needs to be separated into different teams, each responsible for biosphere reserves and geoparks. Meanwhile, since the administrative work of the Mt. Hallasan Research Division is currently being carried out by the Biosphere and Geopark Research Department, it is necessary to examine how to establish an administrative support department to effectively carry out the task (Diagram 1).

### **3.3. Methods for Protection and Management of Geological attractions in Geopark**

#### **3.3.1. Legal Grounds for Geopark**

Nine out of thirteen representative geosites in Jeju Island UGG have been designated and protected as natural monuments or natural protected areas. In particular, Mt. Halla, Manjanggul Lava Tube and Seongsan Ilchulbong Peak are designated as World Natural Heritage. Some representative geosites have overlapped legal grounds for conservation, while in the case of Seonheul Gotjawal, U-do islet, Biyang-do islet and Samdasu village, legal protection applies only to limited areas. Therefore, establishing legal grounds for the rest of these areas is an important issue that needs tackling in the future.

Jeju Island enacted the Ordinance on the Management of UNESCO-Registered Heritages in Jeju Special Self-Governing Province in 2012 and stipulated the integrated management and conservation of geoparks in the ordinance. The ordinance contains ways to pursue the reasonable and systematic preservation, management and utilization of geoparks, stating that any development projects should be environmentally friendly so that they do not damage the ecosystem or natural environment.

Jeju Island is expected to be able to protect geological attractions through Jeju Special Laws and ordinances. For example, Seonheul Gotjawal has been designated and protected as a Ramsar site and a wetland protection area. It has also been protected by the ordinance on the Management of Jeju Island Conservation Areas and the ordinance on the Preservation and Management of Gotjawal. Through these ordinances, it is possible for Biyang-do islet and Gyorae Samdasoo village as well as Seonheul Gotjawal to receive legal protection. In the case of Samdasoo village in Gyorae, the Natural Environment Ordinance of Jeju Special Self-governing Province, which was revised in 2016, includes the Samdasu Forest Trail and the Gyorae Recreational Forest, thus providing legal grounds to protect the area from being

overdeveloped. Also, if the ordinance on the landscape of Jeju Special Self-governing Province is amended, it will greatly contribute to the protection and management of geological attractions. These ordinances are safeguards to protect most geological attractions. As the ordinances on conservation of resources distributed in Jeju Island are revised from time to time, it is planned to make every effort with a keen interest to include representative geosites in the scope of ordinances.

Table 2. Geological Attractions and Protected Areas in Jeju National Geopark

| Geosites                        | World Heritage | MAB       | Natural Cultural Assets (State-designated Heritage) | Other protections                       | Buffer Zone |
|---------------------------------|----------------|-----------|---|---|-------------|
| <b>Mt. Hallasan</b>             | ○              | ○         | 182   | National park<br>Scenic Site(No.90, 91) | ○           |
| <b>Manjangul Cave</b>           | ○              | ×         | 98  |   | ○           |
| <b>Cheonjiyeon Fall</b>         | ×              | ×         | 43, 378, 379  |   | ○           |
| <b>Jungmun Columnar Joints</b>  | ×              | ×         | 443   | Public Waters                           | ○           |
| <b>Seogwipo Foundation</b>      | ×              | ×         | 195   | Public Waters                           | ○           |
| <b>Seongsan Ilchulbong Peak</b> | ○              | ×         | 420   | Natural Protected Area                  |             |
| <b>Sanbongsan</b>               | ×              | ×         | 376   | Scenic Site(No.77)                      | ○           |
| <b>Yongmeori</b>                | ×              | ×         | 526   | Public Waters                           | ○           |
| <b>Suweolbong Peak</b>          | ×              | ×         | 513   | Public Waters                           | ○           |
| <b>Seonheul Gotjawal</b>        | ×              | ×         | Natural Protected Area                              | Ramsar Wetland<br>Jeju Monument         | ○           |
| <b>U-do Islet</b>               | ×              | ×         | Part (438)  | Rhodolith Beach                         | ○           |
| <b>Biyangdo Islet</b>           | ×              | ×         | Part (439)  | Hornito,<br>Oreocnide Fruticosa         | ○           |
| <b>Gyoraesamdasoo Vil.</b>      | ×              | part<br>○ | Part (263)  | Sangeumburi                             |             |

### **3.3.2. Management and Operation Plan for Geosites**

It is of the utmost importance to establish a sustainable management and operation plan for effectively protecting and managing the representative geosites. As for the current protection and management plan for geological attractions, Mt. Hallasan, Seongsan Ilchulbong Peak, and Manjanggul Lava Tube, which are also World Heritage Sites, and several geosites which are also designated natural monuments already have their management plans established. The future goal is to develop a protection and management plan for all the representative geosites. In particular, it is imperative to introduce a management plan for Cheonjiyeon Waterfall, Seogwipo Formation, and Yongmeori Beach in Seogwipo city as soon as possible. To this end, we plan to work closely with the departments responsible for cultural assets and spare no efforts to support the establishment of a management plan.

Table 3. A history of management plans for geological attractions of Jeju Island Geopark and future plans

| Geopark Site                | Writing Frequency,<br>Governing Law  | Management<br>Plan<br>established | Management<br>Plan<br>expected | Other Monitoring &<br>Research                                    |
|-----------------------------|--|-----------------------------------|--------------------------------|---|
| Mt. Hallasan                | Every five years,<br>Natural Park Act<br>Periodic Survey of Cultural<br>Assets every five years            | 2008, 2014                        | 2019                           | Tour Route Safety<br>Check in 2016                                |
| Manjangul Cave              | Every 10 years, Natural Cave<br>Management Guide<br>Periodic Survey of Cultural<br>Assets every five years | 2015                              | 2025                           | Safety Check<br>in 2008, 2009, 2015                               |
| Cheonjiyeon Falls           | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2022                           | Research Report by<br>Cultural Heritage<br>Administration in 2008 |
| Columnar Joints             | Periodic Survey of Cultural<br>Assets every five years   | 2017                              | 2022                           |   |
| Seogwipo<br>Formation       | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2022                           | Monitoring Survey by<br>CHA in 2011                               |
| Seongsan<br>Ilchulbong Peak | Periodic Survey of Cultural<br>Assets every five years   | 2008                              | 2020                           | Safety Check<br>in 2014, 2015,<br>Tourists management<br>in 2014  |
| Sanbangsan                  | Periodic Survey of Cultural<br>Assets every five years   | 2013                              | 2022                           | Vegetation Research in<br>2004,<br>Safety Check in 2013           |
| Yongmeori                   | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2022                           |   |
| Suweolbong<br>Peak          | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2020                           | Safety Check in 2017  |
| S e o n h e u l<br>Gotjawal | Wetland Preservation &<br>Management Plan  | 2011                              | 2021                           |   |
| U-do Islet                  | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2018                           | Maintenance Plan for<br>Rhodolith beach<br>in 2016, 2011          |
| Biyangdo Islet              | Periodic Survey of Cultural<br>Assets every five years   |                                   | 2022                           | hornito   |
| Gyora<br>Samdasoo           |  |                                   | -                              |   |

### **3.3.3. Addition of Representative Geosites**

When Jeju-do applied to become a World Geopark in 2010, it presented 14 places worthy of representative attractions as general attractions. Jeju-do designated U-do islet, Biyang-do islet and Seonheul Gotjawal as representative geosites in 2014 after carrying out academic research and commissioning studies on management methods in order to expand more representative sites.

The general geopark sites that were included in the Geopark Preservation and Utilization Plan in 2011 and 2013 had several restrictions, including such areas as were legally prohibited from human access, the areas where there were no inhabitants, the areas that had no protection and management system, and the areas where academic value was not sufficiently proven. Therefore, existing general attractions were reviewed and 12 sites were presented (Table 4). A general attraction is a place worthy of being designated as a representative attraction. Even if it is not included as a general attraction, it can be qualified to be applied for a representative attraction, as long as the local people's willingness is high and its academic value is proven.

Table 4. General attractions and representative attractions of Jeju Island Geoparks (newly added, as of 2018)

| General Attractions             | Statutory Management Status     | Protection | Topography & Geology         | Ecosystem                  | Others                     | Plan to expand |
|---------------------------------|---------------------------------|------------|------------------------------|----------------------------|----------------------------|----------------|
| <b>Geomun Oreum</b>             | World Heritage Natural Monument | A          | cinder cone, <i>gotjawal</i> | trekking                   | Jeju World Heritage Center | 2018-2020      |
| <b>Harye Hyodoncheon Stream</b> | MAB                             | A          | valley, waterfall            | eco-tourism                |                            | 2018-2020      |
| <b>Chagwido</b>                 | Natural Protected Area          | A          | cinder cone, tuff cone       | soft coral                 | Geo-trail                  | 2018-2020      |
| <b>Dansanbong</b>               |                                 | B          | tuff ring, cinder cone       |                            | Geo-trail                  | 2018-2020      |
| <b>Hanon</b>                    |                                 | B          | maar, wetland                | wetland plants             | WCC Agenda                 | after 2022     |
| <b>Songaksan</b>                |                                 | B          | tuff ring, cinder cone       |                            | cave encampment            | after 2022     |
| <b>Sangumburi</b>               | Natural Monument                | A          | pit crater                   | terrestrial animals/plants |                            | after 2022     |
| <b>Hallim Park</b>              | Natural Monument                | A          | lava tube                    |                            | botanical garden           | after 2022     |
| <b>Mulyeong-ari</b>             |                                 | B          | cinder cone, wetland         | wetland plants             |                            | after 2022     |
| <b>Seopjikoji</b>               |                                 | A          | cinder cone                  |                            |                            | after 2022     |
| <b>Gapado</b>                   |                                 | B          | lava plateau                 |                            | shell mound/dolmen         | after 2022     |
| <b>Dansan</b>                   |                                 | B          | tuff cone                    |                            | Daejeong Confucian school  | after 2022     |

#### **3.3.4. Procedures for Adding More Representative Geosites**

Recently, as the awareness of Jeju Island Geoparks has been raised, there has been a growing demand from residents to designate their villages as geopark attractions. However, if a specific area is designated as a representative geosite, it is evident that the number of visitors will increase and subsequently the natural environment can be damaged. So a legal safeguard should be prepared beforehand.

For an application, several key steps must be taken, such as demonstrating sufficient academic value to be designated as a representative geosite, establishing a conservation and management plan, and obtaining the consent of the residents. And the application process should be a bottom-up method which is not a one-sided designation by government offices but rather one which allows the local residents to be involved with the entire process of designation. Therefore, in order for a general geosite to be designated as a representative geosite, an application must be submitted to prove it according to the procedure. In the process, the Jeju World Heritage Headquarters will conduct a site assessment by experts, collect various opinions, and then push forward to get the additional designation after the Geopark Subcommittee of the UNESCO-Registered Heritage Management Committee deliberates (Table 5).

Table 5. Designation work flow for representative geosites

| Procedure  | Details   |
|--|---|
| 1. Collect opinions of citizens and agree  | to collect opinions through town hall meetings, etc.<br>to compile related data   |
| 2. Fill in the application form to be added on the representative site list and submit it                              | to fill in one application form<br>- background, current state and size of the area<br>- academic value, geological tour routes, ways to protect it, etc. |
| 3. Biosphere & Geopark Research Department (receive and review)  | to conduct internal inspections and have experts review them<br>to get consultations from related organizations   |
| 4. Site assessment   | to have two experts conduct a site assessment<br>to hand in a report to the subcommittee if a site passes inspection                                      |
| 5. Submit to the Geopark subcommittee  | to make presentations and have a question-and-answer session at the subcommittee  |
| 6. Make a decision at the subcommittee   | to report the result to the governor, if passed<br>to make adjustments to the application form, if not passed   |
| 7. Notify representative Geopark sites   | to notify sites in the official gazette and designate them as representative sites  |
| 8. Add new sites to the Geopark guidebook  | to reflect the new additions in the promotional material<br>to get the newsletter of UNESCO to add them, etc.   |
| * When reevaluating global Geoparks and national Geoparks, additional representative sites are reflected in the report |   |

### **3.3.5. Geopark Monitoring and Future Plans**

Jeju-do regularly monitors geoparks in order to protect and manage them. Monitoring is carried out either every month or as needed. Monthly monitoring is performed by two Jeju World Heritage Headquarters geologists who visit the sites to investigate their overall situation by looking at different factors such as geology and terrain, facility safety, activities of storytellers and the flow of visitors.

Monthly monitoring reports made by the geologists are published each year as official reports. Beginning in 2011, monitoring reports were published annually until 2017.

Any changes in geoparks can be most easily identified through filming and surveys using drones. Until recently, drones have been used as the primary tool to take photos or videos of geoparks to identify any changes there. In 2017, all the geoparks of Jeju-do were photographed using drones. However, since drone filming cannot accurately monitor erosion in the area or measure changes, drone surveys along with drone filming will be used in a 2 to 4 year cycle.

The monitoring system utilizing the cutting-edge technology (IT monitoring) being promoted at the Jeju World Heritage Headquarters was carried out in 2018 at the Geomun Oreum Lava Tube System. As a result, a system was established in which the measured data such as the atmospheric environment (temperature, humidity, the concentration of CO<sub>2</sub> and radon) inside caves and the degree of stability (cracking, vibration) were recorded and transferred automatically to the Jeju World Heritage Center control room. This monitoring system will be extended to major tourist attractions all over Jeju-do and geoparks will be monitored in real time using advanced techniques.

Table 6. Monitoring of Geological Attractions of Jeju Island Geoparks and Future Plans

| Geopark Sites            | Periodic Monitoring | LIDAR Survey/Year |                 | Drone Filming/Year | Others   |
|--------------------------|---------------------|-------------------|-----------------|--------------------|--|
| Mt. Hallasan             | ○                   | ○                 | /2010, 2017     | △/2017             | IT monitoring methods to be applied more extensively in 2019 |
| Manjanggul Cave          | ○                   | ○                 | /2011           | Not available      | IT monitoring methods to be applied more extensively in 2018 |
| Cheonjiyeon Fall         | ○                   |                   | 2020(scheduled) | △/2017             |  |
| Jungmun Columnar Joints  | ○                   |                   | 2020(scheduled) | △/2017             |  |
| Seogwipo Formation       | ○                   |                   | 2018(scheduled) | △/2017             |  |
| Seongsan Ilchulbong Peak | ○                   | ○                 | /2010           | △/2017             | IT monitoring methods to be applied more extensively in 2019 |
| Sanbongsan               | ○                   |                   | 2021(scheduled) | △/2017             | IT monitoring methods to be applied more extensively in 2021 |
| Yongmeori                | ○                   |                   | 2021(scheduled) | 2018(scheduled)    |  |
| Suweolbong               | ○                   | ○                 | /2014           | ○/2017             | IT monitoring methods to be applied more extensively in 2021 |
| Seonheul Gotjawal        | ○                   |                   | 2022(scheduled) | △/2017             |  |
| U-do Islet               | △                   |                   | 2018(scheduled) | Not available      |  |
| Biyangdo Islet           | ○                   | ○                 | /2017           | ○/2017             |  |
| Gyoraesamdasu Vil.       | ×                   |                   | Not decided     | Not decided        |  |

### 3.4. Geopark Tour Infrastructure Maintenance

There are aging tourist information centers in geoparks that need to be replaced or rebuilt. All signs will be marked with a UNESCO geopark logo so that they can be managed in a consistent way. A management journal will be used to record the increase or decrease of the number of signs and general management. In the long term, it is necessary to prepare for the expansion of parking lots due to the expected increase in the number of visitors. Table 7 shows the tour infrastructure maintenance within geoparks.

| Geopark Sites            | Tour Information Exhibition / Promotion | Parking Lot  | Toilets                  | Sign Boards            |
|--------------------------|---|--|--------------------------|------------------------|
| Mt. Hallasan             | -                                       | -  | -                        | -                      |
| Manjanggul Cave          | to be replaced in 2020                  | to be maintained in 2018   | -                        | to be replaced in 2019 |
| Cheonjiyeon Fall         | remodeled in 2017                       | -  | remodeled in 2017        | -                      |
| Seogwipo Formation       | to be built in 2018                     | -  | -                        | to be replaced in 2020 |
| Jungmun Columnar Joints  | to be remodeled in 2018                 | to be maintained, small-sized and large-sized lots to be built in 2018 | to be maintained in 2018 | to be replaced in 2018 |
| Seongsan Ilchulbong Peak | -                                       | -  | -                        | to be replaced in 2018 |
| Sanbongsan               | needs to be built                       | -  | -                        | to be replaced in 2018 |
| Yongmeori                | to be remodeled in 2018                 | -  | -                        | to be replaced in 2019 |
| Suweolbong               | to be replaced in 2019                  | 2020   | 2020                     | to be replaced in 2018 |
| Seonheul Gotjawal        | -                                       | -  | -                        | to be replaced in 2021 |
| U-do Islet               | -                                       | -  | -                        | to be replaced in 2020 |
| Biyangdo Islet           | to be built in 2020                     | -  | 2018                     | to be replaced in 2020 |
| Gyoraesamdasoo Village   | to be added in 2019                     | -  | 2020                     | to be replaced in 2018 |

### 3.5. Geopark Storytellers

#### 3.5.1. Plans to Deploy and Use Storytellers

Representative geosites in Jeju Island Geoparks have storytellers for geoparks, natural heritage sites, cultural tours, natural places and forests. The number of storytellers increased by 29 from 74 in 2012 to 103 in 2017. Storytellers have been trained professionally since 2013. By 2017, a total of 30 were certified, 26 of whom are currently active. As Jeju-do is planning to extend representative geosites, more storytellers will be hired and trained. (Table 8)

The storytellers complete intensive training twice a year and are sometimes given an opportunity to visit a geological park overseas. In the future, they are supposed to take one intensive course in Jeju and a course either outside Jeju-do or at a geological park overseas. In order to offer a systematic and professional education to storytellers, the plan is to revise our standard textbooks and invite experts from different fields (Table 9).

Table 8. Proposed number of storytellers by geosite (2018-2022)

|                        | Existing | 2018 | 2019 | 2020 | 2021 | 2022 | Total |
|------------------------|----------|------|------|------|------|------|-------|
| Suweolbong             | 8        | 1    | 1    |      | 1    | 1    | 12    |
| Yongmeori              | 8        | 1    | 1    | 1    |      | 1    | 12    |
| Columnar Joints        | 4        |      |      | 1    |      | 1    | 6     |
| Dongbaek Dongsan       | 4        | 1    |      | 1    |      | 1    | 7     |
| Biyangdo Islet         | 2        | 1    | 1    |      | 1    |      | 5     |
| Seogwipo Formation     |          | 2    | 1    | 1    |      |      | 4     |
| Gyoraesamdasoo Village |          | 2    | 1    | 1    | 1    |      | 5     |
| Additional sites       |          |      |      |      | 2    | 1    | 3     |

Table 9. List of Training Materials for Storytellers by Year (2018-2022)

|      | Training Materials for Storytellers   | Intensive Training   | Others |
|------|---|--|--------|
| 2018 | - Publish advanced textbooks for storytellers of Sanbongsan Yongmeori Coastal Geopark | - visit sister city geoparks<br>- host a national workshop |        |
| 2019 | - Publish advanced textbooks for storytellers of Biyangdo Islet                       | - host two national workshops                              |        |
| 2020 | - Publish advanced textbooks for storytellers of Gimnyeong - Weoljeong Geopark        | - visit sister city geoparks<br>- host a national workshop |        |
| 2021 | - Publish advanced textbooks for storytellers of Seongsan - Ojo Geopark               | - host two national workshops                              |        |
| 2022 | - Publish specialized textbooks for Jeju Island Geopark storytellers                  | - visit sister city geoparks<br>- host a national workshop |        |

### 3.6. Educational Programs for Visitors

#### 3.6.1. Directions and Plans

##### (1) Publication of Geopark Education Materials

The Jeju Island Geopark develops and publishes guidebooks and brochures every year so that visitors can better appreciate the value of geoparks. In 2018, animations will be produced showing how representative geosites formed and how valuable they are. By taking advantage of the popularity of smart phones and advanced IT technologies, we will create new educational materials containing information on geoparks. To this end, Jeju-do will develop animations in 2018, e-books for each geosite in 2019, VR programs for virtual experiences for geological attractions in 2020, and applications for IT information on geoparks in 2021. In 2022, a virtual experience center equipped with the aforementioned IT materials will be installed inside the Geopark Promotion Hall.

## (2) Geopark Education

As part of regular educational programming for Jeju Island Geoparks, classes for local residents were held three times a year in 2016 and 2017, under the title "Let's Visit Our Village Geopark". From 2018, professional educational institutions will be commissioned to provide regular educational opportunities on geoparks. Experts in the areas of geology, ecology, and history from professional educational institutions will visit local schools to conduct theoretical education and perform field trips to the sites as needed. This educational program, which will be held regularly from 2018, will be undertaken by representatives from entrusted educational institutions who will visit the elementary schools, junior high schools and high schools in the villages near the representative geosites.

Table 10. Plans for Education Programs Related to Jeju Island Geopark

| Year | Commission specialized education organizations  | Managed by Biosphere Geopark Department  |
|------|---|--|
| 2018 | - Geo School Education Programs<br>target: 10 elementary schools near geopark sites<br>number: 10 to 15 4th and 6th graders each time<br>content: visit geopark sites, offer basic education on geology | - outdoor education at geosites for elementary schools                                     |
| 2019 | A continuation of the Geo School Program from 2018<br>- Plan to encourage more students to participate with increased budget and hours  | - outdoor education at geosites for elementary schools<br>- Geopark education for teachers |
| 2020 | same as above   | same as above  |
| 2012 | same as above   | same as above  |
| 2022 | same above  | same as above  |

### 3.7. Geopark Research Projects

#### 3.7.1. Directions and Plans for Geopark Research Projects

Academic surveys of geosites are conducted by the Geopark Research Department every year. Studies on Suweolbong geopark and the Sanbongsan-Yongmeori coast were conducted in 2015 and 2017, respectively. Academic surveys on the Geo-trail of Biyang-do and Gimnyeong-Weoljeong and hydrovolcanoes of Jeju-do are scheduled for 2018 and 2019, respectively. After 2020, there will be studies on the Seongsan-Ojo Geo-trail and Jungmun Daepo Coast Columnar Joints (Table 11).

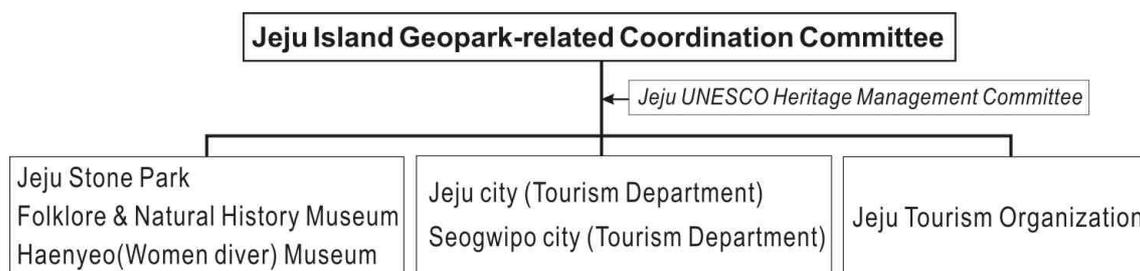
The Mt. Hallasan Research Department has been conducting geological surveys for Mt. Hallasan from 2011 to 2019, and three academic papers have been published. In the field of ecology, various studies are conducted, in particular studies on the Korean fir of Mt. Hallasan are actively being carried out.

| Year | Research on Geoparks (Scheduled)   | Budget        |
|------|--|---------------|
| 2018 | - Geological survey of Biyang Islet Geopark trail to identify its value<br>- Research on magma formation and volcanic activity of Jeju-do hydrovolcanoes (first year)                        | 5 million KRW |
| 2019 | - Research on Gimnyeong-Weoljeong Geotrail and ways to take full advantage of its tour routes<br>- Research on magma formation and volcanic activity of Jeju-do hydrovolcanoes (second year) | 6 million KRW |
| 2020 | - Research on Seongsan-Ojo Geotrail and ways to take full advantage of its tour routes   | 6 million KRW |
| 2021 | - Jungmun Daepo Columnar Joints and Coastal Geotrail   | 7 million KRW |
| 2022 | - Feasibility study on a Geotrail near Hyodon Cheon Stream in Harye-ri   | 7 million KRW |

### 3.8. Operation of Consultative Council of the Geopark Subcommittee and Related Organizations

#### 3.8.1 Plans for the Geopark Subcommittee and Directions for Consultative Council

In accordance with the Ordinance on the Management of UNESCO-Registered Heritages of Jeju Special Self-governing Province, the Jeju Island Geopark has organized and operated a Geopark subcommittee since 2011 to accomplish tasks based on professional and reasonable policy decisions. In November 2017, Jeju-do founded a consultative council in which representatives from museums and related organizations were involved to promote the geoparks in Jeju-do (Table 12). The establishment of this organization was included in the recommendations in 2014 when the Global Geopark was re-certified. This council formed as a network to share information and work together to identify the natural, cultural, historical and ecological worth of Jeju-do by understanding not only the geological characteristics of the geopark but also the history, ecology and cultural resources of the geopark..



Organizational Chart of the Consultative Council of Jeju Island Geopark

Currently, the Geopark subcommittee meeting is held twice a year, but, in the future, will be held regularly in February and December every year to make more rational policy decisions.

Meanwhile, the consultative council for Geoparks will hold regular

meetings in the first half of the year and the second half of the year. In particular, as the Geopark Trail is held every year in the first and second half of the year in order to promote the geoparks, the council members will gather while preparing the event to discuss ways to support the Geotrail events. Therefore, a Geopark consultative council meeting will be held during the Geo Trail event.

### **3.9. Promotion and Marketing Strategies for Geopark**

#### **3.9.1 Promotion Strategies**

Until now, Jeju Island Geoparks have been promoted mainly through leaflets, various promotional materials, signs, on the web, and with publicity videos. In spite of these various publicity efforts, when a survey on the recognition of geological parks was conducted in 2015 by the National Geopark Secretariat Office, only 57% of survey participants were aware of Jeju Island Geopark (with a national average of 32%). Consequently, various methods for raising awareness of Jeju Island Geoparks should be devised.

##### **(1) Broadcast Media**

Until now, the most effective publicity method was to promote geological parks through the broadcast media. For example, after a geosite was introduced in a TV entertainment show, the number of visitors to the geosite increased dramatically. In light of past successes in attracting a number of visitors to geological attractions, promotion through broadcasting should be continued.

##### **(2) Internet & Social Networking**

The second way to raise the awareness of Jeju Island Geoparks is to promote them through the Internet and Social Networking Sites (SNS). The Internet (especially blogs) and SNS have huge impacts in that they have many users daily. The number of SNS users is also on the rise.

There is a strong need to put more weight on promoting geological parks using the Internet and SNS.

### (3) Newspapers

The third way is to use newspapers. Newspapers, a traditional means of promotion, are most commonly used. For example, a survey on the trail in the Suweolbong Geopark in 2017 showed that the majority of respondents reported that they took part in the geotrail event because they heard about it through media reports. Promoting geological parks through newspapers should be continued.

### (4) Promotion through People

The promotional efforts of tour guides and storytellers also play an important role. Tour guides lead visitors to geological attractions and explain their significance. Acknowledging how valuable the tour guides are, Jeju Island Geopark provided two geopark training sessions for members of the Jeju-do Travel Interpreters' Association in 2017. Regular training courses for tour guides are scheduled for the future.

### (5) Smartphone Applications

IT-based tour programs to Jeju Island Geoparks will be developed. In 2015, a Jeju Geopark application was developed but did not draw much public attention. Jeju-do will analyze why it was unpopular and develop an application that includes related materials on every trail in the park and can be linked to with Google maps. Augmented Reality (AR) technology will be implemented in this app, allowing indirect experience of geological attractions.

### (6) Brochures and Leaflets

Brochures and leaflets are important tools that are readily available and help visitors decide where to go based on the information they contain.

More materials will be produced utilizing all available media. And, both the promotional materials and current news section of the geological park homepage will be updated regularly so that visitors can get up-to-date information about the park in advance.

#### (7) Limited Edition Souvenirs

Lastly, souvenirs that can be purchased only at the representative geosites should be made and sold. At present, souvenirs sold at geographical attractions are not very popular because they are not diverse. Souvenirs only sold at geosites will be a great help in promoting geological parks.

### **3.9.2 Marketing Strategies**

Marketing strategies range from promoting geological parks and attracting visitors to selling products. It is necessary to focus on developing strategies to sell the products. A variety of products have been developed with the aim of revitalizing the geological park, but a sales strategy has not been fully established. Currently, it is imperative to establish a publicity strategy using Geo-gifts and Geo-characters developed with the motive of geological and ecological characteristics of Jeju Island Geoparks.

Some products developed by Jeju Tourism Organization's Geo-Branding Project can be purchased at representative geosites and Geo-shops, but they are not easy to purchase because of the limited sales network. Therefore, we plan to establish a strategy for the geo-branded products to be sold at the tourist information centers or at retail stores in representative geosites.

Strategic cooperation with the Jeju Tourism Organization and the Jeju Tourism Association is needed to revitalize tourism marketing for geological parks. In addition to the one-time events held in Jeju-do, the plan is to actively support marketing efforts for the Geo-brand business,

which can continuously promote the Geoparks. To this end, Jeju Island Geoparks and the Jeju Tourism Organization will continue to develop leaflets for promotional purposes, as well as operate promotional booths and distribute promotional materials for tourist products of Jeju Island Geoparks.

Message boards will be installed to encourage local residents to communicate any questions or suggestions they have about the park.

### **3.10. Exchange Activities among Geoparks**

#### **3.10.1. National Geopark Network and Domestic Geology-related Projects and Plans**

Jeju-do is a member of the Global Geopark Network and National Geopark Network. Jeju-do took a leading role among the members of the National Geopark Network from 2014 to 2016 after our Geoparks were designated as national geoparks in 2012. Jeju Island Geopark provides key information on UNESCO Global Geopark (UGG) certification procedures and other regulations. As the demand for information related to the designation of geoparks is increasing, Jeju-do will upload and share related materials online that can be used by anyone. In addition to this, Jeju-do will host a workshop for managers of national geological parks to help them better understand the parks.

In Jeju-do, an academic conference hosted by the Geological Society of Korea is held regularly every two years. Jeju-do will support the conference attendees by having storytellers accompany them on their trip to geoparks, and disseminate educational materials about geoparks. And Jeju-do will continue to support any other geology-related academic conferences held in Jeju, as well.

#### **3.10.2 Direction and Plans of International Exchanges.**

Jeju-do needs to develop basic principles for establishing sisterhood ties to make relationships more effective and lasting. The first criterion is

that any potential site should have at least two UNESCO programs. The reason for this is that Jeju-do has been managing three UNESCO brands under the supervision of the Jeju World Heritage Headquarters, so if two or more brands are linked, mutual cooperation will be easy and the relationship is likely to be good. Secondly, even if it does not have a UNESCO brand, the characteristics of the potential site's heritage should be similar to that of Jeju Island. Thirdly, forging sisterhood relationships should be diversified across continents rather than concentrated in one country. However, China and Japan can be exceptions, where there are many geological parks and sites designated as World Heritage Sites and volcanic eruptions occur. If any sisterhood relationship is established or a Memorandum of Understanding (MOU) is signed without following these principles, the ongoing cooperation may be difficult to maintain and the trust of international exchanges pushed forward by Jeju-do may be reduced. Therefore, it is necessary to actively promote international exchanges, but in the case of international exchanges such as sisterhood relationships in which sustainability is the key, the following principles as shown in <Table 13> are essential.

Table 13. Conditions for Sisterhood Relationship of Jeju Island Geoparks

| Conditions  | Brand  |
|---|--|
| 1. should be certified as a global geopark and run a UNESCO program other than that   | World Heritage or Biosphere Reserve                |
| 2. if an area has been certified as a global geopark, it must have very similar geological characteristics to Jeju  | volcanologic similarity<br>similarity as an island |
| 3. if an area has been certified as a global geopark, a government head has a strong intention to push forward and a sustainable relationship is expected to continue | similarity in management<br>and operation          |
| 4. for sister cities not to be concentrated on one continent  | diversification of<br>international exchanges      |

Jeju-do should continue to increase international exchanges, which was recommended during the certification of the 2014 UNESCO World

Geoparks. The following table shows the destinations for international exchanges and detailed plans by year (Table 14).

Table 14. International Exchanges Plans for Jeju Island Geoparks

| Year | International Exchanges                                    | Sister Cities, etc  |
|------|--|---|
| 2018 | attend the 8th Global Geopark Conference (Italy)           | - select a sister city candidate in Europe Geoparks and build a sister city relationship<br>- for storytellers to visit a sister city for education |
| 2019 | attend the 6th Asia Pacific Geopark Conference (Indonesia) | - try to build a sister city relationship with a volcanic region in Indonesia<br>- for storytellers to visit a sister city for education            |
| 2020 | attend the 9th Global Geopark Conference                   | - try to build a sister city relationship with a volcanic area on the African continent<br>- for storytellers to visit a sister city for education  |
| 2021 | attend the 7th Asia Pacific Geopark Conference             | - try to build a sister city relationship with a volcanic area in China<br>- for storytellers to visit a sister city for education                  |
| 2022 | attend the 10th Global Geopark Conference                  | - try to build a sister city relationship with a volcanic area in Japan<br>- for storytellers to visit a sister city for education                  |

**3.11. Financial Strategies**

**3.11.1. Financial Plans**

Constant budgetary support is vital for the development of Jeju Geoparks. The Jeju Geoparks are currently being funded by the central and local governments and their budget is increasing each year. Managers of Jeju Island Geoparks plan to assign monies from the budget for geopark operation, geopark storytellers operation, academic research on geoparks, international exchanges including re-certification of UNESCO Geoparks, a bid to host the Global Geopark Conference in Jeju and the re-certification of national geoparks. Table 15 shows the budget execution plan for the next five years, and according to the plan, more

monies will be spent on future geopark education projects and training of storytellers. And the hosting of the Global Geopark Conference in 2020 or 2022 is classified as a long-sought after project for the future.

Table 15. Budget Execution of Jeju Island Geopark for the period of 2018-2022 (unit: 1,000 won)

| Sector  | Project   | Plan by year |         |           |         |         | Fund (%) |       |
|---|---|--------------|---------|-----------|---------|---------|----------|-------|
|   |   | 2018         | 2019    | 2020      | 2021    | 2022    | National | Local |
| Total   | 11  | 549,770      | 557,000 | 1,091,000 | 625,000 | 719,000 | 50       | 50    |
| G e o p a r k<br>Operation  | Geopark<br>promotion                            | 60,000       | 60,000  | 60,000    | 60,000  | 60,000  | 50       | 50    |
|   | Geopark<br>education                            | 12,000       | 15,000  | 18,000    | 21,000  | 24,000  | 50       | 50    |
|   | Geo-trail<br>operation                          | 200,000      | 200,000 | 200,000   | 200,000 | 200,000 | -        | 100   |
|   | Subcommittee<br>operation                       | 4,000        | 4,000   | 4,000     | 4,000   | 4,000   | -        | 100   |
|   | General &<br>administrative<br>expenses         | 5,000        | 5,000   | 5,000     | 5,000   | 5,000   | -        | 100   |
| G e o p a r k<br>Storyteller<br>Operation   | Storyteller<br>deployment<br>and operation      | 134,320      | 180,000 | 210,000   | 240,000 | 270,000 | 50       | 50    |
|   | Tour<br>information<br>operation                | 18,150       | 20,000  | 20,000    | 20,000  | 20,000  | 50       | 50    |
|   | Information<br>facilities<br>maintenance        | 30,000       | 30,000  | 30,000    | 30,000  | 30,000  | -        | 100   |
| A c a d e m i c<br>Research on<br>Geopark   | Academic<br>survey on<br>geosites               | 6,300        | 7,000   | 7,000     | 7,000   | 7,000   | -        | 100   |
| Re-certificati<br>on as a<br>Geopark,<br>International<br>Exchanges                   | International<br>exchanges                      | 35,000       | 36,000  | 37,000    | 38,000  | 39,000  | 50       | 50    |
|   | Preparation for<br>re-certification             | 45,000       | -       | -         | -       | 60,000  | 50       | 50    |
| Attraction of<br>G e o p a r k<br>Conference,<br>Re-certificati<br>on as a<br>Geopark | Re-certification<br>as a Geopark                |              | -       | 50,000    | -       | -       | 50       | 50    |
|   | Attraction of a<br>Global Geopark<br>conference |              |         | 450,000   |         |         | 50       | 50    |

**4. Projects for Activating Geoparks**

**4.1. Geo-trails**

Jeju-do has been developing tour routes and tour programs for visitors to see and learn about the geological parks. In addition to the Suweolbong Geo-trail, which was established in 2011, there are trails at Sanbangsan - Yongmeori, Gimnyeong - Weoljeong and Seongsan - Ojo. Because geo-trails have gotten the public interested in Jeju Geoparks, they need to be further developed in the future. For that, Jeju-do plans to hold a Geo Trail Walk event twice a year starting in 2018.

Geo-trail events should be held regularly to improve the overall condition of the trail, to maximize the effectiveness of the promotion, and to prevent ageing of the infrastructure. In addition to the four areas mentioned above, the hosting venues will be extended to include Biyang-do islet and Seonheul Gotjawal.

Table 16. Geo Trail Walk Events

| Year | Venues for Trail Events (2 places a year) |                               | Others         |
|------|---|-------------------------------|----------------|
| 2018 | Around Suweolbong                         | Around Sanbangsan -Yongmeori  | Spring, Autumn |
| 2019 | Around Suweolbong                         | Around Gimnyeong -Weoljeong   | Same as above  |
| 2020 | Around Suweolbong                         | Around Seongsan - Ojo         | Same as above  |
| 2021 | Around Suweolbong                         | Around Sanbangsan - Yongmeori | Same as above  |
| 2022 | Around Suweolbong                         | Around Gimnyeong - Weoljeong  | Same as above  |

**4.2. A Project to Revitalize Core Villages of Jeju Island Geopark**

**4.2.1 Status and Accomplishments of the Project to Revitalize Core Villages of Jeju Island Geopark**

From 2012, to boost Jeju Geoparks, Seogwipo City, Jeju City and the Jeju Tourism Organization worked together for the UNESCO Global Geopark Core Village Revitalization Project. This project helped develop

various geo-brands and eventually got the award for Creative Tourism on the Korea Tourism Awards in 2015 and the award for Creative and Inclusive Tourism of the National Brand Awards in 2016.

#### **4.2.2 Follow-ups to the UNESCO Global Geopark Core Village Revitalization Project**

Following the completion of the project to revitalize the core villages of the UNESCO Global Geopark in 2015, the Jeju Tourism Organization commissioned a "Consulting to Boost Village Tourism Using Local Characteristics" in 2017 to look at the sites and identify problems with the project. According to the report, the residents who participated in the project said that the purpose and contents of the project were excellent, but due to the lack of communication and joint efforts to promote different brands, the anticipated synergy between the brands were not fully realized. The reports pointed out that it was necessary to establish a consultative organization for accomplishing the purpose of the project and for its sustainability, and it was also suggested that research, for periodical educational and capacity building efforts should be implemented to revitalize the village tourism and distributional marketing. Therefore, even if the core village revitalization project was terminated, continued interest and cooperation is required to maintain the Geo-brand.

Jeju-do began conducting an on-site inspection in 2017 with the Jeju Tourism Organization to prepare for follow-up measures. Even if the project is finished, a consultative body must be formed of related agencies to ensure systematic management and ongoing discussion for the project. However, it is impossible to support the existing project as a whole, so the plan is to support active projects.

### **5. Conclusion and Summary**

Jeju-do's Geopark was designated as a UNESCO Global Geopark in 2010

and National Geopark in 2012. Jeju-do has established a Jeju Island Geopark Management and Operation Plan to revitalize the local villages through sustainable Geo-tourism and has been working according to this plan.

Jeju-do created Geopark Management and Operation Plans in 2009 and 2013. After completing the 2013 management plan in 2017, we developed a third based on previous information, to be applied from 2018 to 2022.

A SWOT analysis was introduced in the third plan. Our analysis found that Jeju-do has excellent brand value, numerous heritage sites, a well-developed tourism industry and transportation system, and various educational activities. Based on this, it will be possible to locate more diverse attractions, encourage participation of more local residents, and ultimately contribute to regional revitalization. Possible threats include abusing natural heritage sites and overdevelopment due to an excessive inflow of tourists and commercialization.

As the number of visitors has increased sharply, so have the tasks geological parks must perform. Therefore, short and mid-term plans were proposed. In particular, it was proposed that an administrative support team be newly established at the Mt. Hallasan Research Department, and the Biosphere and Geopark Research Department be divided into a Biosphere Reserve Research Department and a Geopark Research Department.

Support will be provided so that geological attractions in Jeju-do can be protected by Jeju Special Laws and Ordinances, not as state-designated cultural properties. A management and operation plan for each geosite will be drawn up as well.

As for the Geoparks, twelve geosites have been identified again, and the procedures for expanding representative geosites have been specified. Geological attractions are protected through advanced and periodic monitoring with cutting-edge technologies as well as general monitoring

on a monthly basis.

A plan to maintain the infrastructure for Geopark tours and to create one logo for all geosites will be established in co-operation with related organizations. Information boards will be consistent and brochures that are easy to understand will be available for visitors.

Additional storytellers will be deployed to work on geosites and a variety of educational materials will be developed to enhance awareness of geological heritage. Specifically, a detailed plan for Geo Academies has been presented where education can be provided at village schools near the geosites about geological parks. In addition, research projects have been established each year to learn more about the geological heritage sites.

Detailed promotion, marketing, and international exchange strategies have been set up to promote the geological parks and raise awareness about them and all concerned will work according to these strategies.

A plan to hold a regular meeting between the Geopark Subcommittee and a consultative council made up of related organizations to determine main policies for Geoparks has been proposed and a budget plan for the next five years has been prepared.

In addition, we have presented a plan to expand the geo-trail event, which has been held mainly at Suweolbong in the past, to other sites. Among the Geo-brands resulting from the Geopark Core Village Revitalization project, we will work on plans for Geo-house, Geo-food and Geo-character.

We will keep working in accordance with the third Jeju Island Geopark Management and Operation Plan, and if there are any changes or problems found during the process, it will be revised after deliberation by the Geopark Subcommittee.