



unesco

Global Geoparks

Progress report 2022 - 2024

Name of UNESCO Global Geopark (UGGp):

San'in Kaigan UNESCO Global Geopark

Country: JAPAN

Person responsible for the report:

Kunio Kannuki

Chairperson, San'in Kaigan Geopark Promotion Council

A. GENERAL INFORMATION

Surface area in km ²	2,458.44 km ²
Population	350,961
Year of acceptance as UNESCO Global Geopark	2015
Year of membership in the Global Geoparks Network (before the establishment of the UGGp label in 2015)	2010
Previous revalidation date(s) and name(s) of previous evaluator(s)	Date: October 9 to 13, 2022 Names of Evaluators Sigurveinson Sigurdur (Iceland) Azmil Munif Mohd Bukhar (Malaysia)
Contact person (name, position, e-mail)	Name: Michiyo Kanaoka Position: Director
Website (please provide URL)	https://sanin-geo.jp
Social media (please provide list of all channels used)	https://www.facebook.com/saningeo https://www.instagram.com/wowgeo.sanin

B. LIST OF DOCUMENTS SUBMITTED BY THE UGGp

Progress report, (Annex 1) Members of the task force, (Annex 2) Study groups for geological material sales issues, (Annex 3) Function and roles of each core facilities, (Annex 4) Main facilities of San'in Kaigan UNESCO Global Geopark*, (Annex 5) The area of promotion of conservation in San'in Kaigan UGGp, (Annex 6) GGN Annual Report 2022, (Annex 7) Geological Heritage, (Annex 8) Natural Heritage, (Annex 9) Cultural Heritage, (Annex 10) Intangible Heritage, (Annex 11) Management system of the San'in Kaigan Geopark Promotion Council, (Annex 12) Members of Management Committee, Steering Committee and Regional and Local Governments (Annex 13) Use of Logo Mark,(Annex 14) Self Evaluation Documents A, (Annex 15) Self Evaluation A: Supporting Document, (Annex 16) Self Evaluation supporting B

*Hereafter, it is referred to as "San'in Kaigan UGGp."

C. MAP OF THE AREA

The area of San'in Kaigan UGGp includes whole administrative districts of Kyotango City (Kyoto Prefecture), Toyooka City, Kami Town, Shin'onsen Town (Hyogo Prefecture) Iwami Town (Tottori Prefecture) and the northern and western administrative district of Tottori City (Tottori Prefecture) (see Annex 5 for details).



This map is a standard UN map downloaded from the UNESCO official website and does not represent the position of the Japanese Government.



D. IMPROVEMENTS MADE ON PREVIOUS RECOMMENDATIONS

Current Status: Yellow Card

a) Stop the selling of geological material at the Genbudo Museum which is located within the territory of the San'in Kaigan UGGp. Collaborate therefore with Toyooka city who is the owner of the Genbudo geosite, and other actors as deemed necessary, and seek the support from the Japanese National Geoparks Committee and Network, the Japanese National Commission for UNESCO and the UGGp Council.

Assure a secure access to the Genbudo geosite and improve the visibility of the UGGp in further developments within the territory.

Positive Developments

[Selling of Geological Material by Genbudo Kanko Inc. (owner of Genbudo Museum)]

(1) Current situation

- Currently, the San'in Kaigan Geopark Promotion Council (hereafter referred to as the "Council") is continuously discussing with Genbudo Kanko Inc to stop selling geological materials and to develop products that will become a new source of income, such as replicas to replace fossils, and sweets.

⇒ Although securing an alternative source of income other than selling geological material is a prerequisite, a change can be seen in the mindset of Genbudo Kanko Inc. employees and employers towards marketing geological products.

A series of dialogue meetings including an on-site dialogue in November resulted in a replacement of geological products to non-geological products, such as replicas, on a trial basis.



Showcase at the shop on October 19, 2023



Showcase at the shop on November 11, 2023
(Red Area: Experimental products such as replica)

(2) Grasping the situation and actions taken

- After observing the UGGp Council online meeting on December 9, 2022, the Council immediately set up meetings with Genbudo Kanko Inc. on December 10 and 11, and then on 13 with the Japanese Geoparks Network ("JGN"), the Japan Geopark Committee ("JGC"), and the Japanese National Commission for UNESCO regarding the current status of sales of geological material by Genbudo Kanko Inc.

- To meticulously prepare for UNESCO's official announcement, a meeting was convened with constituent local governments, including Toyooka City (the owner of Genbudo Park). The purpose was to comprehensively grasp the current state of geological material sales and the organizational structure of the Council. During this meeting, measures were discussed to address anticipated recommendations.

⇒ Understanding of the issues related to the sale of geological material was enhanced within the Council and constituent local governments.

⇒ There were issues that cannot be resolved only by the constituent local governments. For instance, the constituent local governments cannot undertake measures to financially compensate a specific business enterprise for the discontinuation of sales of geological material, considering principles of equality, etc. In order to further address such issues, it was decided to establish a new committee dedicated to problem-solving.

- Following the announcement of the official results by UNESCO, a press briefing was held on May 12, 2023, and the results were shared with Genbudo Kanko Inc. and discussions were held regarding future responses. During a commemorative celebration on May 13, marking Genbudo Cave's selection as one of the First 100 IUGS Geological Heritage Sites in Toyooka City, Prof. Setsuya Nakada (JGC Chair) delivered a lecture addressing the sale of geological material. Following the lecture, a meeting was conducted between Dr. Nakada and Genbudo Kanko Inc. The meeting confirmed the commitment to ongoing dialogue with Genbudo Kanko Inc, with a focus on resolving the pertinent issues.



The First Task Force Meeting on Measures Against Sales of Geological Material

- In July 2023, the expert meeting "Task Force on Measures against Sales of Geological Material" ("Task Force") was officially launched, with the participation

of the Council, Toyooka City, JGC, JGN as members, and the Japanese National Commission for UNESCO as an observer (see Annex 1 member list, page 16 San'in Kaigan Geopark Promotion Council management structure diagram) and the following measures have been taken or are currently under consideration.

- ⇒ The Task Force established an overall policy of discontinuing the sale of geological material by Genbudo Kanko Inc. To achieve this objective, the “Roundtable Meeting” was held to seek concrete solutions through discussions with Genbudo Kanko Inc. in a smaller group and, then, have the Task Force to examine the proposals from the Roundtable Meeting and provide a report to the Council.
- ⇒ As of December 2023, four Roundtable Meetings and three Task Force meetings were held.
- ⇒ Through discussions in the Roundtable Meetings with Genbudo Kanko Inc, it became evident that the decline in revenue, resulting from discontinuing the sale of geological material, has a critical impact on the company's management.
- ⇒ The Task Force recommended various measures to the Council in order to support Genbudo Kanko Inc., encompassing assistance for developing alternative products to replace geological material, guidance on tourist attraction promotions, the introduction of management consultants, support for trial product development, and the dispatch of instructors.
- ⇒ In November 2023, the governors of the three prefectures and the mayors of 6 constituent municipalities agreed on the direction of the solution, including the development of alternative products and introduction of consultants by the Council.

(3) Future initiatives

- The Task Force will further consider solutions to solve the problems and formulate an action plan.
 - ⇒ Dialogue with Genbudo Kanko Inc. is continued at the Roundtable Meetings as well as at the Task Force meetings and its efforts such as developing products to replace geological material will be supported so that their commercial activities will be transformed into sustainable ones by the end of 2025. Also, in order to strengthen the Council's independence and enable it to collaborate with local businesses and communities under its stronger leadership, incorporation of the Council will be considered with the consent of its constituent municipalities.

(Reference: About Genbudo Kanko Inc.)

- The Council, which is the management organization of San'in Kaigan UGGp, is not involved in any way with the sale of geological material by Genbudo Kanko Inc. Genbudo Kanko Inc. and its shop are neither a member nor a partner of San'in Kaigan UGGp.
- Genbudo Museum is a private facility built by local residents in 1972 next to Genbudo Park. For about 40 years, its shop has been selling stones, minerals, and small fossils collected from overseas by purchasing them from distributors that are not illegal in Japan. Such commercial activities do not violate any Japanese laws.
- The basalt of Genbudo Cave was designated as a national natural monument in 1931 and is protected under the applicable domestic law. So, it is not sold anywhere.

[Campaign for “Earth heritage protection and conservation - Actions against selling of geological objects”]

- (1) The decision was made to install information panels or signboards outside Genbudo Cave and other major geosites on the campaign for “Earth heritage protection and conservation - Actions against selling of geological objects”. The panels are scheduled to be installed as soon as possible.
- (2) Disseminate through the San'in Kaigan UGGp website and social media on the campaign
- (3) Expand the content of courses currently offered by Geopark specialists at schools, plan and implement a special education programme on the campaign
- (4) Produce a leaflet on the campaign and distribute it through base facilities, etc.

Through the implementation of these projects, local residents and visitors will have understanding of the campaign.

[Capacity building for the staff, local residents and others]

(1) Participation in the JGN's "Information dissemination Working Group to reduce the collection and sales of geological material"

- Since September 2021, the Deputy Director and academic experts of the Council have been participating in the Working Group as members representing San'in Kaigan UGGp.
- The Working Group has been working on gathering and publishing information on the history and the basis for why sales of geological material at souvenir shops is prohibited in UGGp sites.
- At the Japan Geoscience Union Meeting 2023 on May 21, 2023, the report from the Working Group was introduced. In addition, at the meeting, with the support of the UGGp Council, JGC, and JGN (Working Group), the video message from the UGGp Council Chair, Dr. Guy Martini, on "Conservation of Geological Heritage and the Issues of the Purchase and Sale of Geological Material" (<https://www.youtube.com/watch?v=A4qbm57ftIY>) was delivered. By introducing and discussing case studies from each geopark, it was possible to share ideas and methods for solving problems with UGGp and aspiring geoparks of Japan.
- On October 28, 2023 at a subcommittee dealing with the issue of sales of geological material that is established under the JGN National Conference, a geopark expert of San'in Kaigan UGGp gave an oral presentation on the status of responding to the issue of sales of geological material. Discussions were held with geopark officials from around the country about the aim of UGGp, the reasons for protecting the area, regional sustainability, etc.
- On November 29, 2023, an online opinion exchange meeting concerning sales of geological material was co-hosted by Japanese Geoparks Network and Indonesian Geoparks Network. A case study was introduced, by a geopark expert from San'in Kaigan UGGp, about the challenge of discontinuing sales of geological material. Participants had a lively exchange of opinions, including the importance of seeking solutions through dialogue and cooperation across countries and regions, and shared issues of sales of geological material in each region and clues to solutions.

(2) Promotion of understanding among local residents, etc.

- Since August 2023, the Council has been holding workshops and study sessions in each constituent municipality to deepen understanding of the philosophy of UGGp and the problems of selling geological material, and share awareness of the issues widely within the area (See Annex 2).

- In September 2023, "Workshop on sales of geological material" was jointly held by the Council, JGC, and JGN to discuss why the UGGp is proceeding with the discontinuation of sales of geological material, and questions and opinions of local residents, regarding the points raised by UGGp and the impact of the points on the area, were considered and discussed with JGN and JGC members.



Workshop on selling of geological material

⇒ Comments of participants: "This problem is not someone else's problem, but something close to our heart." "As a guide, I would like to be able to explain to children why sales are bad at a level that they can understand." There were opinions that a change in awareness was observed, and not only the Council but also local residents had a deeper understanding of the issues surrounding San'in Kaigan UGGp and the philosophy of UGGp.

- In October 2023, a study session to share with the members of the Toyooka City Government Press Club (9 local media outlets) the philosophy of UGGp, issues related to sales of geological material, and the status of the Council's response, etc. was held. Once again, the media reporters' understanding of the issues of San'in Kaigan UGGp and the philosophy of UGGp were deepened.

[Improving safe access and visibility of Genbudo Geosite]

- ▶ In order to allow safe access for more people to the Genbudo Geosite, the budget discussions for the installation of wheelchair stair lifts are being held by Toyooka City, and introduction of electric wheelchairs that can move on their own over stairs and steps within the park is being considered.
- ▶ For those who cannot access the site even in a wheelchair, introducing a system that will enable virtual tours, using VR images generated from 3D measurement data and panoramic images of Genbudo, is being considered.
- ▶ In order to improve the visibility of San'in Kaigan UGGp at the Genbudo Geosite, the UGGp, GGN and APGN logos and the San'in Kaigan Geopark logo were added to the explanation board inside the geosite.

b) Ensure that the core secretariat of the Geopark management (General Manager and the three academic specialists, including two geologists) are involved in developing cohesion and coordination of Geopark activities, in cooperation with the Promotion Council.

Consider strengthening the independence of the UGGp management entity in line with the initiatives taken by neighboring Geoparks for example.

Positive Developments

(1) Analysis of issues

- Similar to the recommendation concerning selling of geological material, consideration was immediately started in response to the recommendation pointed out by UNESCO.
- Discussions were repeatedly held to exchange opinions with JGC, JGN, the Council Management Committee, constituent municipalities and Council members, etc, and particularly individual discussions were started with constituent municipalities in June, 2023. After that, the management and operational issues were analysed by presenting and comparing the Council's operating structure in an easy-to-understand manner by creating diagram based on the current situation and the results of the exchange of opinions.
- Although changes were made to the organizational structure based on the recommendations given by the JGC during the 2017 revalidation of JGC, it was concluded that problems remained unsolved.
 - ⇒ The council recognizes that: 1. The decision-making process is unclear, 2. The person responsible for decision-making is unclear, 3. The Council's management (such as understanding the activities of related parties in the area and coordinating them) is insufficient, 4. It is administration-led and problems exist including lack of independence as the UGGp Secretariat, 5. Lack of capacity building, and 6. Division of roles between the Secretariat and constituent local governments is not clear.

(2) Consideration of solution methods

1. In order to clarify the decision-making process, it should be documented in the Council's bylaws and/or approval regulations on what and to what extent decisions will be made by each entity such as the General Assembly, Executive Committee, and Management Committee.
2. In order to clarify the person responsible for decision-making, the organizational structure within the Secretariat will be reviewed, and the approval route of decisions will be clarified through approval regulations, etc.
3. In order to strengthen the management of the Council, in addition to detailed methods of sharing information between the Secretariat and geopark related parties on related projects that are being carried out within the area, specific management of the Secretariat to do business was reviewed. Further, how to reflect projects such as geopark education and environmental conservation in local government policies will be considered. Among the organizations that make up the Council, in many cases, the tourism department is the main point of contact for municipalities. So how to collaborate with other departments within municipality for environment, education, disaster risk reduction, and culture will be considered. For the strengthening of management of the Council, in addition to updating the information regarding the common style of geopark general information signboards and geosite general signboards in the area, changing the content to be easier to understand for visitors is considered, and the work formulating common format of signboard within a certain area has been already started.
4. Currently, almost all budgets depend on contributions from each local government, so it is difficult

to change current situation immediately, but in the future, the ways to increase organizational independence, including ways to reduce financial dependence on the government will be considered. In order to strengthen the organization, an incorporation of the Council as the optimal organizational form is under consideration with the consent of the constituent local governments.

5. For strengthening capacity building, although most of Council staff are dispatched by local governments and will be transferred after several years, the Council is working with the dispatching governments to stagger their terms of office, rather than all dispatched staff changing at once. This is accomplished by making adjustments and requesting the re-dispatch of past dispatched staff. For new employees, training provided by specialists and academic specialists is enhanced to strengthen their education. Additionally, from the perspective of developing staff who can connect and coordinate the entire Council and ensuring its continuity, the organization should be updated to one that can be operated mainly by staff directly employed by the Council, such as geopark experts.
6. Discussions on the respective roles of the Secretariat and constituent local governments to strengthen management of the Council will be continuously done so that the Council can support and manage the activities of each region. In addition, the role of dispatched staff as a link between the Secretariat and constituent local governments will also be considered during discussions toward incorporation of the Council.

(3) Other initiatives

- In order to confirm the awareness of those other than the constituent local governments, opinions were exchanged with the Council members. As a result, it was found that there were differences in enthusiasm among the members, with some businesses wishing to further collaborate with the Council, but others not making any particular request. For this reason, discussion will be continued with the Council members how to organize the Council to make it easier to operate, including the possibility of establishing incorporation. In addition, establishing a bottom-up management organization, such as holding regular resident participation workshops and reflecting the opinions expressed therein in Action Plans, is considered.
- In order to deepen cooperation between the base facilities in the San'in Kaigan UGGp, regular base facility information sharing meetings, such as introducing reference events of each region, are held so that staff of each facility can know about other facilities of San'in Kaigan Geopark.

c) Obtain formal partnership agreements with key stakeholders, such as the San'in Kaigan National Park to reinforce close partnership.

Positive Developments

- ▶ In order to build a closer cooperative relationship than ever with the Ministry of the Environment, which has jurisdiction over the San'in Kaigan National Park, the document regarding the appointment of Council advisor from May 2021 was exchanged. As a result, the senior officer of the Kinki Regional Environment Office was officially appointed to advisor of the Council, and since then the documents have been renewed every two years, building an ongoing collaborative relationship.
- ▶ In August 2023, formal partnership agreements with three Destination Management Organizations (DMOs) located within the geopark area was concluded with the aim of strengthening collaboration with tourism stakeholders to develop travel products for touring the San'in Kaigan UGGp.

d) Develop guidelines for the appropriate use of the UNESCO Global Geoparks logo taking into consideration of the active involvement of private businesses in the Geopark governing body. The UGGp is encouraged to seek guidance from the Japanese Geoparks Network and GGN.

Positive Developments

- ▶ In line with the UGGp logo renewal in January 2022, the geopark-related logo checklist was updated, and it was shared with all concerned parties and on our Council website. (See Annex 13)
- ▶ The usage status of the UGGp logo was re-examined in the area. As a result, the UGGp logo was found posted at the entrance to a private geopark guide center with which a shop is attached, and we removed it in October 2023. All logos are currently being used properly.

e) Finalize the development of a certification system for branding local products based on the Geopark branding strategy.

Positive Developments

- ▶ A local product branding certification system to certify the sustainable (renewable) products with a story within the San'in Kaigan UGGp area (local products using distinctive local raw materials or traditional techniques, or products imitating local landscapes, topography, rocks, etc.) as the San'in Kaigan UGGp certified products ("Geo Products") was established in February 2023. Screening criteria have been established for these Geo products, and they are re-examined annually to ensure standards suitable for the San'in Kaigan UGGp brand.
- ▶ The strategy is to start with sweets products by targeting young women who are leading the travel trends and, then, expand to other products after increasing the brand power of Geo products. As of October 2023, eight sweets products have been certified, and they are being promoted on the San'in Kaigan UGGp website and social media, as well as at geopark-related events. Business operators have commented that "We have had more interviews about certified products," and it seems that more people are interested in geopark story.



San'in Kaigan UGGp website: Introduction of Geo's special products (sweets)

f) Improve the visibility of the GGN and APGN and definition of the Geopark concept at core facilities of the UGGp, consider creating dedicated spaces, "Geopark corners". Where these already exist, it is important to update outdated information.

Positive Developments

- ▶ The agreement was concluded with the base facilities to install Digital Signage based on common specifications as a unified "Geopark Corner" at the seven base facilities in the San'in Kaigan UGGp, and common content will be displayed such as the definition and philosophy of the geopark, and an introduction to the San'in Kaigan UGGp. In addition, the GGN and APGN logos are planned to be placed on the digital signage to increase awareness of the network and make it visible that San'in Kaigan UGGp is a member of these networks.
- ▶ In addition, in the previous UGGp Revalidation Mission, the information on the digital globe displayed at the San'in Kaigan Geopark Museum of the Earth and Sea had not been updated, but this year it has been updated to the latest information.
- ▶ It was decided to update the geosite explanations on information boards and other information to incorporate a unified design within the area and the latest information, and the content is now being considered.

g) Continue active engagement in the international Geopark network activities but also try to increase the level of activities in projects involving schools and other stakeholders in the UGGp communities.

- ▶ Since 2013, several San'in Kaigan UGGp related organizations have been participating in marine debris survey of the International Coastal Cleanup (ICC) in the San'in Kaigan UGGp coastal area, where a large amount of marine debris is washed ashore. Since 2021, the guide group "Synchro", Tango Ryokufu High School, and Amino Kita Elementary School have been collaborating to conduct an ICC marine debris survey on the coast of Kyotango City. After the survey, Tango Ryokufu High School connected with the Affiliated Keelung Maritime Senior High School of National Taiwan Ocean University via Zoom to exchange the results of their respective ICC marine debris surveys and shared recognition that the marine debris problem is a common issue. The school also visited Oki UGGp in 2022 and interacted with Oki High School students about the conservation and utilization of the geopark. In addition, in 2022 and 2023, with support from the San'in Kaigan UGGp, Ryokufu High School participated in the Japan Geopark National Convention, giving oral presentations on a variety of geopark activities, including the problem of marine debris and received words of praise from many people.

- ▶ In August 2023, students and teachers from Hyogo Prefectural Toyooka High School, located in the San'in Kaigan UGGp area, visited Hantangang UGGp in the Republic of Korea. In addition to touring geosites and museums in Hantangang, they also participated in a sister geopark exchange Zoom meeting between San'in Kaigan UGGp and Lesvos UGGp (Greece) from the Republic of Korea, where they introduced each other's geoparks and exchanged information.

E. VERIFICATION OF UGGp CRITERIA

E.1 TERRITORY

E.1.1 GEOLOGICAL HERITAGE AND CONSERVATION

The San'in Kaigan UGGp is mostly occupied by strata and rocks formed by spreading of back arc basin induced by the subduction of the oceanic plate and it is distributed by diverse geology and topography formed by volcanic activities, crustal movement and sea level change during the period of time when the area of Japan was a part of the Eurasian Continent to the present.

Among the geosites of the San'in Kaigan UGGp, the most significant one is Genbudo, located in Toyooka City, Hyogo Prefecture. Genbudo, formed by volcanic activity in 1.16 Ma, consists of alkali basalt. The cave of the Genbudo is made by quarrying conducted before designation of Genbudo as national natural monument in 1931. In 1929, Dr. Motonori Matuyama was the first in the world to propose a reversal of the earth's magnetic field based on his research on the basalt of Genbudo. This discovery of him greatly contributed to the development of the earth science, such as later establishment of the theories of the seafloor spreading and plate tectonics. Further, the geomagnetic reversal period (2.58-0.77 Ma) including time of the formation of the Genbudo, was named as "Matuyama Reversed Chron." Its start corresponds to the beginning of the Quaternary period, and its end corresponds to the base of the Quaternary Pleistocene Chibanian. In recognition of these contributions to earth science, Genbudo was designated as one of the First 100 IUGS Geological Heritage Sites on October 2022.

There are 58 geological sites representing each era from the time when the land of Japan was a part of the Eurasian Continent to the time when the Sea of Japan and Japanese archipelago are the same as they are now. They are summarized in Annex 7 "San'in Kaigan Geopark Geosite List". The Geoheritage sites in the area are protected by Conservation Laws (Agreement, the Natural Parks Act, the Law for the Protection of Cultural Properties, other laws and regulations).

Regarding protection and conservation activities, the Council, by establishing protection and conservation management plan, takes the lead in confirming the good status of geosites, signs, maintenance of sidewalks, access, cleaning, utilization for education, etc., and through sharing and discussing with related local governments, monitoring surveys to promote improvement are being conducted with the participation of local residents, local guides, local governments, and the Ministry of the Environment. In addition, the Council not only participates in activities of geosite cleaning and conservation conducted by local organizations, but also provides supporting subsidies (30 subsidies in 2021 and 2022).

E.1.2 BOUNDARIES

The San'in Kaigan UGGp is located surrounding the San' in Kaigan National Park and includes internationally valuable Ramsar Convention-registered wetlands and municipally designated protected areas. There is no overlap with other UNESCO certified sites, and it includes a whole of the administrative areas of Kyotango City (Kyoto Prefecture), Toyooka City, Kami Town, Shin'onsen Town (Hyogo Prefecture), Iwami Town (Tottori Prefecture), and northern and western parts of administrative area of Tottori City (Tottori Prefecture). The boundary line is clearly shown on the explanation signboard of the geosite and various tour maps.

E.1.3 VISIBILITY

The visibility is enhanced for visitors and local residents by setting up information boards and offering explanations at 7 base facilities.

- Explanation signboards were installed at 173 locations (2 of them were newly installed since the previous revalidation), of which 158 are written in foreign languages (English: 158, Chinese: 3, Korean: 69). In addition, road information boards have been installed at 150 locations.
- Improvement of visibility by base facilities is described in E.1.4.
- Printed matter, advertisement, creation of novelty and distribution, enlightenment event: are described in E.1.5
- Installation of wrapping bus (long-distance bus (Kansai-San'in), route bus (Tottori Prefecture), tour bus (Iwami town), public bus (Kyotango city, Shin'onsen town), etc.).
- Visibility as a UNESCO Global Geopark: The Council uses the UNESCO Global Geopark logo on its websites, panels, posters, brochures, flyers, banners, business cards, etc.

E.1.4 FACILITIES AND INFRASTRUTURE

There are multiple facilities within the area that are rooted in each region, and meetings between the facilities are held to share information about the base facilities to facilitate collaboration among them. In addition, we intend to install digital signage based on common specifications with common content such as the definition and philosophy of Geopark, introduction of San'in Kaigan Geopark, etc. as a unified "Geopark Corner" at the seven base facilities in the area. We are currently coordinating with the base facilities about the installation of the signage. At the same time, the visibility of UGGp is improved by adding the GGN and APGN logos on digital signage, and an effort will be made to help tourists understand that the entire area is unified. In order to improve the convenience of site visitors, an annex of the Tottori Sand Dunes Visitor Center has been established on the west side of the Tottori Sand Dunes.

E.1.4.1 EXISTING FACILITIES

Of the seven base facilities, the San'in Kaigan Geopark Center has exhibits about the philosophy of the geopark, the sister geopark Lesvos UGGp, the geology and living of the people of San'in Kaigan UGGp. Educational materials are also available for encouraging lifelong education, including learning opportunities for elementary school to university students to understand the formation of landforms. Meanwhile, the San-in Kaigan Museum of the Earth and Sea introduces the charm of the entire San'in Kaigan with various materials and videos and holds outdoor observations and nature lectures, and visiting lecture course by curators and specialists are offered. Both facilities serve as core base facilities for the San'in Kaigan Geopark. Information on the geopark, history and formation on the topography can also be obtained at other base facilities, and three facilities among them have activity bases for regional guides. The base facilities are set up and operated by the constituent local governments, etc., and are developing activities in close cooperation with the Council. Details of the base facilities are as shown in Annex 3.

In addition to the above, there are specialized facilities that delve into specific themes such as Tajima Cattle, tourist facilities such as roadside stations and local products centers, and campgrounds and outdoor activity facilities where visitors can experience the geopark through activities. They are contributing to providing geopark information and, also, to the development of tourism that utilizes local resources. Details are as shown in Annex 4.

E.1.4.2 ENHANCEMENT OF EXISTING FACILITIES

Around the same time as the revalidation mission in 2022, the following existing facility was enhanced.

- Genbudo Park was reopened after renovation in August 2022, and in addition to installing a platform, improvements such as the park path, updating the exhibits in the rest building, and the access road have been made to make the site more attractive. In addition to these physical improvements, illumination events, live concerts, and other events were held to bring tourists and involve local residents.



Genbudo Park

- In October 2022, Genbudo was selected as one of the world's "100 Geological Heritage Sites" by the International Union of Geological Sciences (IUGS). This information will be added together with UGGp, GGN, APGN logos and San'in Kaigan UGGp notation to signboards and pamphlets inside the geosite to improve visibility.

E.1.4.3 NEWLY ARRANGED FACILITY

Since the revalidation mission in 2022, the following facility has been newly arranged.

- In April 2023, the San'in Kaigan National Park Tottori Sand Dunes Field House, which is an annex of the Tottori Sand Dunes Visitor Center, was constructed as the gateway to the west side of the Tottori Sand Dunes. The facility has functions to support outdoor activities such as guided tours of the dunes, environmental education held within the dunes and volunteer activities and, also, has a function of exhibition gallery about the history and culture of the dunes. It also serves as an information center to indicate places to see around the dunes. It has been improving the attractiveness of the site and user's satisfaction.



Tottori Sand Dunes Field House

E.1.4.4 DEVELOPMENT OF HIGH STANDARD ROAD

The high-standard roads in the San-in Kaigan UGGp area, such as "San'in Expressway", "San-in Kinki Expressway", and "Kitakinki Toyooka Expressway" are called "Geopark Road", and the national government and prefectures of the Council members are continuing to be engaged for their maintenance. Of the total distance of approximately 142 km in the area, 63 km has already been opened, 33 km is under construction, and the remaining 46 km is under investigation for development.

Additionally, signboards guiding people to geosites are being installed near the exits of expressways. In the future, travel time to reach San'in Kaigan from big city areas is expected to be further shortened, which can be expected to lead to an increase in the number of tourists and smoother logistics. Furthermore, since the travel time within the geopark area will be shortened, more efficient tour within the geopark can be expected.

E.1.5 INFORMATION, EDUCATION AND RESEARCH

E.1.5.1 INFORMATION SERVICE

In 2023, "San'in Kaigan UNESCO Global Geopark (Whole Experiences) Map", which covers the whole area of San'in Kaigan UGGp and explains various themes, was revised. This map is provided in four languages (Japanese, English, Chinese, and Korean).

In addition to 27 walking model courses in the area, 7 marine courses that go around the highlights from the sea, and 6 drive courses that go around a wide area by car have been set up, so that they can be used for geotours. Maps and leaflets can be downloaded from the website, and can also be obtained at base facilities, roadside stations, and tourist information centers.

In addition to them, various tools are used to provide information.

- Website: "Entire WEB Search" that gives information on geosites etc. was implemented (2022).
- Social media: Photo contest was held using the official Instagram "wowgeo" (2022, 2023).
Posting about events related to geopark activities on the official Facebook page
Number of followers: 2,368 (as of November 2023)
- Printed matter (after 2022): "San'in Kaigan UNESCO Global Geopark (Whole Experiences) Map" 26,000 copies, Model Course Map (no printing, data revision for 6 maps, production of English version 13 maps), booklet "Picturesque Journey" 5,000 copies
- Advertisement (after 2022): Newspaper/magazine 14 times (including 13 for inside the area and 1 for outside the area), website 1, TV coverage 2, Kounotori Tajima Airport (located in the geopark area): three advertising signboards. Tottori Sand Dunes Conan Airport (located in the geopark area) 2 advertising signboards.
In August 2023, an article about a geopark-certified guide taking a walk around the Kasumi coast was posted on website of ASICS.
- Promotional giveaways: Distributed to participants at geopark-related events in the area and events in urban areas. Clearprieco (file folder made from the paper authorized by FSC (Forest Stewardship Council)) 3,000 sheets

- In Genbudo, information on phenomena difficult to understand such as the reversal of the geomagnetic field is being provided in a form that allows the visitors to visually feel using a compass and magnets.

Further, information is provided and PR activities for the San'in Kaigan Geopark are carried out through events participated by the Council and constituent prefectures and municipalities, as well as through the events of major transportation hubs.

- Geopark trail point earning walk, Kyotango Traverse Trail
- Distribution of pamphlets at international airports (In 2023: Kansai International Airport, Osaka International Airport, Yonago Kitaro Airport, etc.)
- Participation of PR Campaign (In 2023: Tourism EXPO, Tajima Cattle Festival, Railroad Exhibition in Yonago)
- Others, Education events, providing information at on-site lectures and Crean-Up Canoe, etc.

E.1.5.2 EDUCATION

(1) SCHOOL EDUCATION

In order to promote educational activities utilizing the geopark throughout the San'in Kaigan UGGp area, the following projects are being carried out mainly by the Education Committee of the Council and the partner universities with comprehensive partnership agreements.

1. "Children's Research Work Contest" was held to increase elementary school students' interest in the geopark. The winning entries will be exhibited in three prefectures, showing citizens and tourists the charm of the geopark as seen through the eyes of children.
2. The "Junior High and High School Student Policy Proposal and Practice Contest" was held to encourage junior high and high school students' efforts to revitalize the geopark. Excellent initiatives were presented at JGN national conventions, etc., and exchanges with students from other geoparks were also created.
3. We are developing common learning materials that can be used in classes at schools within the area and educational courses that schools within and outside the area can participate in. For example, sixth graders at elementary schools in Kyotango City are working on a program called "Learning the Mother Earth" where they can experience and learn about the mother earth (geological strata, rocks, faults, etc.) in the city.
4. Four schools in the area; Tottori Nishi High School, Iwami Town Iwami Kita Elementary School, Iwami Town Iwami Nishi Elementary School, and Iwami Town Iwami Minami Elementary School are members of the UNESCO Associated Schools Network (ASPnet) and are conducting their own activities related with UGGp. Among them, the elementary schools in Iwami Town are working on educational activities using the Geopark with the whole school. A part of the activities was financially supported by the National Federation of UNESCO Associations in Japan (NFUAJ) and MUFG Bank in FY2022, and at the project activity presentation, which was attended by six schools from across the country, the students introduced their hometowns with a focus on the rich sea and presented what they can do to protect the beautiful sea from SDGs perspective.
5. Experts of the Council and base facilities are serving as instructors and conduct training for teachers, lectures for children and students, and outdoor learning.
6. In order to support geopark guides and local residents in learning about the geopark, the University of Hyogo and Tottori University of the Environment offer learning programs such as Science Cafes and intensive courses.



Discussions with high school students from other Geoparks at the Japan Geopark National Convention

(2) EDUCATION FOR DISASTER RISK REDUCTION

In the past 100 years, the San'in Kaigan UGGp was struck by big earthquake three times and great damage was caused. They are the Kita-Tajima Earthquake (M6.8,1925), the Kita-Tango Earthquake (M7.0,1927), and the Tottori Earthquake (M7.0,1943). To take advantage of the lessons learnt, disaster risk reduction learning and memorial events are being held in various places. The original ground displacements are still preserved today at the Gomura Fault, caused by the Kita-Tango Earthquake and at the Shikano Fault, caused by



Learning the Mother Earth, Kyotango City

the Tottori Earthquake, and they are used for disaster risk reduction and mitigation education. In particular, in Kyotango City, sixth-grade students from all elementary schools participate in "Learning Mother Earth," and they learn about earthquakes and earthquake disasters while observing the Gomura Fault. In 2021, with the cooperation of the Disaster Prevention Science and Technology Research Institute, which has a partnership agreement with Japan Geopark, a website "NIED Quake map" was created that displays recent seismic activity occurring in the San'in Kaigan UGGp area, and is used to learn about faults and earthquakes.

E.1.5.3 RESEARCH

Various universities and research institutes, both within and outside the area, are conducting surveys and research on the San'in Kaigan UGGp. In particular, the curators of the San'in Kaigan Geopark Museum of the Earth and Sea, a core base facility, work with several research institutes, universities, and museums (e.g. The National Institute of Advanced Industrial Science and Technology, Tottori University, Wakayama Prefectural Museum of Natural History). In addition, a support project (San'in Kaigan Geopark Academic Research Encouragement Project), which provides grants for research targeting the San'in Kaigan UGGp region, is being implemented. This project was the first initiative undertaken by the San'in Kaigan UGGp in Japan, and similar initiatives are now spreading to other geoparks in the country. The support was given in ten projects between 2022 and 2023, and three papers have already been published in the major journals (Haji et al., 2022; Haji et al., 2023a; Haji et al., 2023b). Haji et al. (2023b) has led to research results investigating the sedimentary age and structure of Lower Miocene (Yoka Formation) in the central part of the San'in Kaigan Geopark. Furthermore, after the research is completed, a report on the results is submitted and a research results presentation session is held for local residents and geopark guides, so that the research results can be returned to the local residents.

E.2 OTHER HERITAGE

The list of Geoheritage sites is in Annex 7.

E.2.1 NATURAL HERITAGE (Other than Geoheritage)

Within the San'in Kaigan UGGp area, there are 2 special national natural monuments, 16 national natural monuments, 34 natural monuments of prefecture designation, and 51 natural monuments of municipality designation.

In addition, in Toyooka, the inlet on the ria coast was blocked by basalt lava of the Genbudo resulted in formation of inlet of narrow topography, and the inlet was filled with sediments, forming a wetland, where oriental white storks came to live. The lower reaches of the Maruyama River and surrounding rice fields, which are areas where geology and ecosystems interact, are registered as wetland of Ramsar convention. In addition, in Kyotango City and Tottori City, residents and cities are providing support such as installing artificial nests for Oriental White Storks. The list of natural heritage sites in the area is as shown in Annex 8.

E.2.2 CULTURAL HERITAGE

E2.2.1. TANGIBLE CULTURAL HERITAGE

Within the San'in Kaigan UGGp area, there are 120 nationally designated registered tangible cultural properties (historic sites, buildings, archaeological materials, etc.) and there are 205 registered tangible cultural properties of prefecture designation (historic sites, buildings, archaeological materials, protected cultural properties, etc.). There are 489 registered tangible cultural properties designated by municipalities. Some of these have been explained in relation to the geology of the San'in Kaigan UGGp. For example, the Onari burial mound in the Tango Peninsula is located on a coastal terrace facing to the Sea of Japan, and the materials for the stone chamber of the burial mound are made from materials produced in the surrounding area. It is made from split along columnar joint of volcanic rock produced during period of the spreading of the Sea of Japan, and it is introduced in geoguide explanations and on geosite signboards and maps. A list of cultural heritage sites in the area is shown in Annex 9.

E.2.2.2 INTANGIBLE CULTURAL HERITAGE

Within the San'in Kaigan UGGp area, there are 8 nationally designated intangible cultural heritage (including Japanese national heritage), 48 intangible cultural heritage of prefectural designation, and 46 intangible cultural heritage of municipality designation. The intangible heritages in the area are as shown in Annex 10.

The diverse geological and geographical features of the San'in Kaigan UGGp with undulation and varied terrain have various impact on people's lives, history and culture of the local communities. The climate on the Sea of Japan Coast brings a large amount of snow and rain to the area, and the abundant spring water supports industries such as sake, Japanese paper, and crepe cloth, and the *Salix koriyanagi* (species of willow), which grows naturally in wetlands, supported the development of basket weaving techniques introduced from the continent to help local residents initiate a bag-making industry. These industries brought wealth to the local economy, led the region to sustainable development even during off-seasons for farming and fishing, and promoted cultural promotion. Local folk events such as theatrical play and dances, which have developed as entertainment for local residents, and festivals and rituals held to pray for good harvests and good health, are protected as intangible heritage today



Kirin Lion Dance

E.2.3 WORLD AGRICULTURAL HERITAGE SITE

Since Tajima Cattle are famous as a breeding cow for Wagyu beef, and the environmentally creative agricultural system that takes advantage of the rugged terrain of inland Tajima, the "Tajima Cattle System of the Hyogo Mikata Region" was designated as a World Agricultural Heritage Site in July 2023.

E.2.4 INVOLVEMENT IN TOPICS RELATED TO CLIMATE CHANGE AND NATURAL HAZARDS

Due to climate change caused by global warming in recent years, weather disasters such as heavy rain disasters are increasing across Japan. In the San'in Kaigan UGGp area, memorial events and disaster risk reduction drills are held every year in Toyooka City, where the Maruyama River burst its banks in 2004 due to heavy rains associated with a typhoon, and much of the city was flooded.

Seminars are being held for geopark guides to inform as many people as possible about the history of the Tottori Sand Dunes, people's lives, and climate change through the research results of the Tottori University Arid Land Research Center. Additionally, as part of efforts to combat climate change, there are businesses within the San'in Kaigan UGGp that sell charcoal and firewood made from renewable forest resources, which are used as a heat source for heating at the University of Hyogo.

At Yumura Onsen, activities that do not place a burden on the global environment, such as using the rich hot spring resources for cooking and other daily activities, are carried out, and are introduced to tourists by geopark guides. At Kannabe Highlands, an action plan to combat climate change is being considered from a tourism perspective, and efforts are underway to make the area a tourist destination with snow 100 years from now.

*Efforts against earthquakes are described in E.1.5.2.



Submerged Toyooka city center (2004)

E.3 MANAGEMENT

San'in Kaigan UGGp has formulated the Master Plan and the Action Plan. In the Master Plan, the geopark area is considered to be an area where visitors can experience the rich natural environment based on diverse geology and topography created during the period from the formation of the Sea of Japan to the present, and creatures and the lives of people, and the culture and history created based on this natural environment. Taking advantage of these characteristics, activities that lead to the

conservation of natural heritage and regional revitalization through educational activities and geotourism are being developed and implemented. The valuable local resources are continued to be passed on to the next generation, and, also, by respecting the lives, history and culture of the people living in this area the work of creating a sustainable region is continued in the future through geotourism.

Furthermore, the Action Plan defines the actions to be taken toward for realization of the Master Plan. In formulating the Action Plan, local people ideas of ideals, realities and methods for realizing their ideals collected through Round Table Meeting and opinions of local people obtained through resident briefing session and public comments are reflected.

E.3.1 MANAGEMENT SYSTEM

The management organization of San'in Kaigan UGGp is the Council. This Council is made up of 37 organizations, including all local governments in the area (9 local governments) as well as industrial tourism-related organizations and businesses that support its activities. In addition, a secretariat (Geopark Team) has been established as an internal organization of the Council, and management is carried out in accordance with the UNESCO Global Geopark Work Guidelines.

Decisions for the Council as a whole are made at the General Assembly, but managing committee has been established to consider and provide advice on specific matters related to the Council's operations from a professional perspective, and six specialized subcommittees have been established under the managing committee. **(See Annex 11)**

(1) GENERAL MANAGER

The General Manager of the Council is responsible for the management and strategic planning of the Geopark, and is responsible for promoting cooperation between regions and activity providers.

(2) SECRETARIAT (GEOPARK TEAM)

- In accordance with the UNESCO Global Geopark Work Guidelines, the Secretariat plans and coordinates general geopark activities, collects and disseminates information, and supports collaboration between base facilities and local residents.
- The Secretariat conducts the daily geopark operations and the projects decided by the General Assembly.
- Director is responsible for the operation of the Secretariat under the General Manager.
- Currently, the core of geopark management is handled by staff dispatched from local governments, but from now on, the staff hired by the Council will play the core role, and the roles of the staff dispatched from local governments will shift to provide support and to serve as a liaison with constituent local governments.

(3) MANAGEMENT COMMITTEE (ANNEX 12)

The members of the Management Committee consist of representatives of Steering Committees, administrative personnel, academic experts, and it discusses and considers overall management.

[Steering Committee]

In order to ensure sustainable and effective management of geopark activities, six groups of Steering Committees, namely Academics, Education, Tourism, Protection and Conservation, Local Industry and Guides were set up for promoting geopark activities from their respective positions.

- **Academic Group:** Consists of university instructors, researchers, museum staff, curators, and local researchers, Discussing and examining geoparks in general from an academic standpoint.
- **Education Group:** Consists of education administration staff and teachers of elementary, junior high and high school. Discuss and examine the development of scientific education, community sturdy, and experiential learning in geopark.
- **Tourism Group:** Consists of tourism organization personnel and tourism administration personnel. Discuss and consider the development of geotourism utilizing local resources
- **Protection and Conservation Group:** Consists of university faculty members, Officer of the Ministry of the Environment, and environmental administration personnel. Conduct geosite protection and conservation status survey, discussion and examination of support measures for protection and conservation activities

- **Local Industry Group:** Consists of university faculty members, financial institutions and industrial administration personnel. Discussing and examining industry creation and continuation support measures that utilize local resources.
- **Guide Group:** Consists of representatives of guide association. Hosting training and exchange meetings with the aim of promoting sustainable guide activities and improving guide skills.

(4) NINE GEOPARK SECTIONS OF PREFECTURE, TOWN AND CITY (ANNEX 12)

A contact point for the geopark has been established in the constituent prefectures and municipalities that are actually developing the project. Collaborating with the Secretariat, they are supporting management of Geopark Team through events, auxiliary projects, signage installation, guide training, and other projects. Collaboration meetings are held from time to time to ensure close cooperation between the Secretariat and constituent prefectures and municipalities.

E. 3.2 EMPLOYMENT OF STAFF (ANNEX 11)

The Geopark Team (Secretariat) consists of 13 people, including 4 people directly employed by the Council (General Manager, 2 geopark geologists, and international promotion staff) and 9 staff dispatched from local governments. Furthermore, one of the geopark geologist is a full-time staff. Further, under a partnership agreement with the University of Hyogo, three members of the Graduate School of Regional Resource Management serve as academic experts for the Geopark team, providing consultation and advice from a professional ground.

E.3.3 BUDGET AND FINANCIAL STATUS

As a sustainable and stable financial source. approximately 40,000,000 JPY (Approximately 275,000 USD) were secured through contributions from 9 local governments and membership fees from 28 members, Additionally, in FY2022, a support of 4,000,000 JPY from the Ministry of the Environment was received and used for raising awareness and considering further utilization of the Geopark Trail. Additionally, in FY2023, in order to install a geopark corner with common specifications at base facilities, an amount of approximately 3,700,000 JPY was secured as a special contribution from related municipalities and installation of them is proceeding. The table of the budget and financial status is given below.

Fiscal Year	Income	Spending	Balance
2022	57,371,693	40,606,427	16,765,266
2023	60,637,490	60,637,490	0

(JPY)

* For FY2023, it is not settled amount, only initial budget is shown. The fiscal year in Japan is from 1 April to 31 March of the following year.

E.3.4 WORK PLAN

Based on the Master Plan and Action Plan, the Council formulates a work plan together with income and expenditure budget for each year, and starts conducting projects upon approval by the General Assembly meeting. The main projects are: (1) promotion of protection and conservation activities, (2) promotion of education and survey/research, (3) promotion of industrial development and tourism, (4) promotion of information gathering and dissemination, (5) promotion of citizen participation, and (6) promotion of network activities.

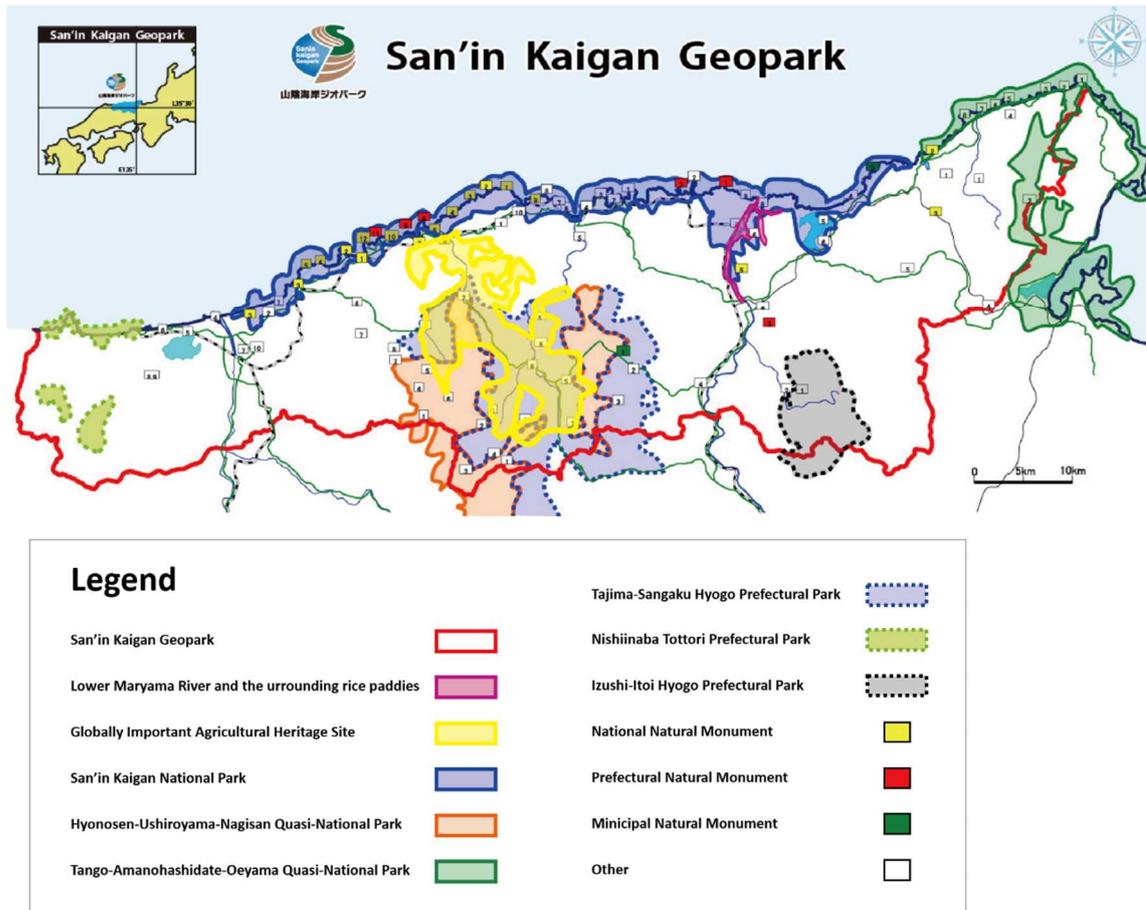
E.3.5 ROLE OF WOMEN

In FY2023, the proportion of women in the Secretariat increased from 7% to 15% as compared to FY2022 with the appointment of the first female director and the assignment of one female staff member. Also, approximately 40% of certified and registered guides in geoparks are women.

E.3.6 REPRESENTATIVES OF LOCAL COMMUNITY

In order to ensure that the opinions of local residents are reflected in management, the members of the Council are made up of representatives from local governments in the area, as well as representatives of chambers of commerce, tourism associations, inn associations, fisheries cooperatives, etc.

E.4 OVERLAPPING



The San'in Kaigan UGGp area does not overlap with other UNESCO-designated sites. The area overlaps with national designation such as national park and other legally protected areas as shown in the figure below. The San'in Kaigan UGGp defines the legally protected area that overlaps with the San'in Kaigan UGGp area as the "San'in Kaigan Geopark Conservation Promotion Area", and promotes the conservation of the site and operates the geopark by cooperating with the national government, which controls the national park which occupies most of the area and local governments, which control parks other than the national park, designated cultural properties and Ramsar convention wetland. At Hyogo Park of Oriental White Stork, which is a base facility for environmental conservation and environmental education, interpretive panels have been set up to explain Ramsar Convention Wetland and the geopark. In particular, collaboration work of promoting conservation is conducted together with two conservation offices of the Ministry of the Environment Conservation office located in the area. In addition, in 2023, "A traditional breeding system for Tajima-brand Cattle in Mikata district (Kami Town and Shin'onsen Town) in Hyogo Prefecture" was designated as a World Agricultural Heritage.

E.5 EDUCATIONAL ACTIVITIES

E.5.1 EDUCATION ACTIVITIES CONCERNING GEOHERITAGE

In Genbudo, where the sample leading to the first discovery of existence of the period when geomagnetic field was reversed was taken, visitors can learn about the volcanic activity that produced the beautiful columnar joints, the origin and reversal of the geomagnetic field, and the fact that the normal-reversal change phenomenon of the geomagnetic field is useful for determining geological periods, and contributes greatly to the development of the earth science. Geopark guides and exhibits in the renovated rest building provide explanations to the many tourists who visit every day, as well as educational activities for elementary, middle and high school students and university students. Additionally, the San'in Kaigan Geopark Center and the San'in Kaigan Museum of the Earth and Sea holds courses on geology and geoparks throughout the year for people of all ages.

E.5.2 EDUCATIONAL ACTIVITIES RELATED TO NATURE EXPERIENCES AND ENVIRONMENTAL PROTECTION

At Kotohiki Beach in Kyotango City, the “Barefoot Concert” has been held from 1994 to 2023, a forerunner of beach cleanup activities being carried out in various parts of Japan. In the Kakezu district, where Kotohiki Beach is located, environmental education is being conducted at Nakisuna Cultural Center to learn about the relationship between humans and nature, marine environmental conservation, and the SDGs, and not only school children but also citizens and tourists are learning about environmental protection. Similar environmental education activities are actively conducted mainly at Takeno Snorkeling Center, NPO Tajima Sea School, Iwami Town Nagisa Community Center, and Tottori Sand Dunes Visitor Center, and in recent years, environmental education while enjoying activities such as kayaking and diving has also been carried out.

In mountainous areas such as Kannabe Highlands, Mikata Highlands, Uwano Highlands, and Ueyama Highlands, various experience-based learning programs such as mountain climbing, trekking, cycling, snowshoe hiking, nature observation sessions, and craft experiences are held for everyone from children to the elderly. People of all ages are learning the importance of preserving the environment while experiencing the richness of nature.

E.5.3 ENVIRONMENTAL LEARNING AIMED AT COEXISTENCE WITH ORIENTAL WHITE STORKS

Toyooka City has a revitalization campaign “A city of coexisting with Oriental White Stork”. The Hyogo Park of the Oriental White Stork in Toyooka City is used as a base for children and tourists to learn about the natural environment, focusing on the ecosystem of wetlands and rice fields for promoting sustainability and developing the ability to act independently to realize a possible environmentally friendly society. In addition, in Toyooka City, children learn about the geopark and Oriental White Storks using the "Furusato (Hometown) Learning Guidebook" for seven years, from the third year of elementary school to the third year of junior high school.

E.5.4 SDGs ON-SITE LESSON USING CARD GAMES

Geopark experts have conducted on-site SDGs classes using card games, visiting at junior high schools and high schools within the geopark area, and over the past three years, the classes have been held 45 times at 21 schools, to over 1,400 students. In the second half of the class, the lecture about environmental problems is given, such as a large amount of plastic waste that washes up on the coasts of geopark areas and this problem cannot be solved unless it is considered on a global scale. Comments of the participating students are, for example, 1) I understood why the world needs the SDGs, 2) I understood that discussion and cooperation are essential to achieving the goals, and 3) Making the world "visible" changes people's consciousness., and 4) I felt that we could change the world for better or worse through our own actions.



On-site SDGs Lesson at junior high school

The feedback of students made us think that it is a meaningful class allowing the student experiencing the essence of the SDGs.

E.6 GEOTOURISM

E.6.1 TRENDS IN THE NUMBER OF TOURISTS

The number of tourists in the San'in Kaigan UGGp area had been on the rise until 2019, but decreased significantly in FY2020 due to the impact of the Covid-19 pandemic. The number of domestic tourists is on a recovery trend from FY2021, and the number of foreign tourists is also on a recovery trend from FY2022. Furthermore, from May to September 2023, the number of monthly foreign overnight stays reached a record high.

Reference 1) Tourism-related figures within the San'in Kaigan UGGp area

Fiscal Year	Number of Tourists Visiting (persons)	Number of Foreign Overnight Guests in Toyooka City (persons)	Number of Visitors to Base Facilities, etc. (persons)
FY 2018	16,287,289	54,330	1,858,581
FY 2019	17,341,693	63,648	1,939,552
FY 2020	10,835,834	10,018	979,985
FY 2021	11,440,270	523	1,182,465
FY 2022	—	6,998	1,657,435
FY 2023 As of end of September	—	40,473	1,586,005

Reference 2) Tourism consumption by fiscal year

FY 2020 97,406 million JPY

FY 2021 62,631 million JPY

E.6.2 ACTIVITIES

Taking advantage of characteristics of the region, such as the sea and mountain, the geotourism is being developed, and approximately 65 organizations provide activity experiences throughout the area. At Tottori Sand Dunes, it is possible to experience activities such as sandboarding and paragliding that take advantage of the unique topography of the sand and slopes. In the coastal areas increasing number of people enjoying geocanoes and pleasure boats and further, various activities such as stand-up paddle and snorkeling are enjoyed throughout the area. In 2022, for promotion of increasing attractiveness of marine activities from geopark perspective, classroom lectures on the geology of the San'in Kaigan UGGp for marine activity operators were held and practical guide textbooks incorporating the opinions of guides and participants were prepared. Sea taxis and excursion boats operated by fishermen are in operation and that allows visitors to tour scenic spots such as the Kasumi Coast, Tajima Mihonoura, and Uradome Coast, enabling visitors go through sea caves that are difficult to access by large boats.



Kasumi Sea Taxi

E.6.3 GEOPARK GUIDE

At the beginning of 2014, there were 14 registered organizations and 95 geopark guides, but as of September 2023, there are 27 registered organizations and 143 geopark guides, and there are some increases both in number of guide organization and geopark guide compared with the situation at the beginning. In order to ensure the quality of geopark guides, the Council sets the certification period for geopark guides to three years, and re-certifies them on the condition that they improve their knowledge and skills through guiding and participating in projects. To improve their skills, Geopark guides increase their geological knowledge by participating in the San'in Kaigan Geopark Forum and Geopark courses, as well as improve their ability to deal with foreigners through training for inbound visitors given by Coordinator for International Relations as instructors. In addition, for guide to improve their skills, guides are supported subsidy system for guides' own self-improvement and skill development



Geopark guide

The Council has established a guide subcommittee in the Steering Committee, made up of 27 registered organizations, which works with guides to improve their skills and quality for promotion of the use of geoguides in geotourism.

*Collaboration work of guides and the Arid Land Research Center, Tottori University is given in E.2.4

E.6.4 IMPROVEMENT AND UTILIZATION OF GEOPARK TRAILS

The San'in Kaigan Geopark Trail was completed in February 2020, with 27 courses and a total length of 230 km. An improvement is, currently, being given to the trail to be an attractive content for return-to-nature tourism and experiences that have gained attention during the Covid-19 pandemic. Particularly, aiming to revitalize local economy through consumption of local products and lodging by trail users and in collaboration with 77 companies, "Point Earning Walk", through which participants can earn points equivalent to cash by walk, is currently being conducted.

In 2022, in collaboration with the Ministry of the Environment, guide stakes were installed on trail courses and pamphlets were prepared, and they were in media such as newspapers and magazines. As Geopark supporters, facilities along the trail route aim to develop as places for dissemination and exchange trail information, such as displaying and arranging route maps and presenting appropriate information to trail users.

In addition, a local guide group wondered if it was possible to do a guided tour to raise awareness of the region and the geopark and they, in collaboration with the Kyotango City Tourism Association and travel agencies, created the "Kyotango Transverse Trail," which utilizes the San'in Kaigan Geopark Trail routes. About 1,000 people participated in the tour in 2021 and 2022.

E.6.5 GEOPARK AND ART

Believing that art is an important means of helping the general public to understand global activities, in collaboration with the theater company "Bird Theater" of Shikano Town, Tottori City, the San'in Kaigan UGGp Forum "Eh! Theater and Geo?" was held in December 2022. In addition to performances of plays related to geoparks, a panel discussion featuring representatives of the Bird Theater and the former president of the Council was held to raise awareness of the similarities between theater and geoparks in terms of imagination. Further, in 2022, Genbudo Park, a representative geosite of the San'in Kaigan UGGp, was one of the venues for the Toyooka Theater Festival, which is representative theater festival of Asia, and in 2023, Genbudo Park together with Kasumi Coast was one of the venues. It was good opportunity to introduce geopark to different customer group who are interested in art.

E.7 SUSTAINABLE DEVELOPMENT & PARTNERSHIPS

E.7.1 SUSTAINABLE DEVELOPMENT POLICY

Based on the Master Plan and the Action Plan, the Council has been conducting operation by adding the perspective of the SDGs, which has a common keyword with geoparks such as sustainability, and has been working together with the members of the Council and the network members within the San'in Kaigan UGGp. Additionally, starting in May 2022, every quarter, through the public relations of the six constituent local governments, efforts were made to publish articles sharing the philosophy of geopark activities and understanding of the SDGs with local residents.

Since 2013, the business creation support project has been conducted to revitalize the local economy by utilizing the diverse resources of the geopark, and 55 projects have been supported by 2023. The supported projects include sustainable business plan such as combined sightseeing tour of activities such as geo-canoeing and food experiences, geotours using bicycles.

Furthermore, collaboration will be strengthened with local actors by building partnerships through approaches such as developing attractive, high-value-added products and services that are linked to the geopark's story.

E.7.2 PARTNERSHIPS

The San'in Kaigan UGGp has collaborated with higher education institutions such as the Tottori University of Environmental Studies and the University of Hyogo to utilize the unique local resources, human resources, and intellectual property within the San'in Kaigan UGGp area and concluded a

comprehensive partnership agreement to contribute to the creation and development of a sustainable and vibrant region, and we have been working as a partner in utilizing geoparks for education and research.

In November 2021, partnership agreements were concluded with three local tourism businesses that are passionate about geopark activities. In addition, in order to promote tourism in the San'in Kaigan UGGp area, from December 2020, a meeting four times a year to share information with the three tourism community development corporations DMOs located within the San'in Kaigan UGGp area. In August 2023, the partnership agreement was concluded with the three DMOs to specifically develop and sell tourism products aimed at attracting inbound tourists, and the work on planning tours for inbound tourists is being conducted.

We are also making arrangements to conclude an agreement with the Professional College of Arts and Culture to advance the understanding of geoscientific phenomena using art.

E.7.2.1 COLLABORATION WITH LOCAL COMPANIES, ETC.

Projects in collaboration with local companies, such as developing products using local ingredients, beach cleans and volunteer weeding in the Tottori Sand Dunes are being continuously conducted. In September 2022, in collaboration with the Professional College of Arts and Tourism, which was recently opened in Toyooka City, a local bus company, and Toyooka City, we took on the challenge of expanding interest in geopark activities from a new perspective, "Art", at the Toyooka Theater Festival.

Even when we explained to general tourists about the geomagnetic reversal story related to Genbudo Park, they often did not take much interest. Therefore, an audio play was created for people to listen to on the bus heading to Genbudo. The audio drama uses fiction to humorously depict the phenomena that occur when magnetic field of the earth is reversed. Those who listened to this audio drama started to show interest in the reversal of the geomagnetic field.

Further, through the "Business Creation Support Project Subsidy", which supports part of the business expenses for developing new products and services by utilizing local resources, in 2022, two projects of "Health Promotion Project at Arayu Drinking Springs" by Yumura Onsen Tourism Association and "Exhibition of Blessings of the Geopark" by Hiyoriyama Tourism, received subsidy for vitalization of local economy. In 2023, with collaboration of local chambers of commerce and financial institutions the Council working on two projects of "Hand fin snorkeling experience project" of Tottori Prefecture Nature Experience School and "A project to create a way to enjoy the San'in Coast Geopark using a cruise ship" of San'in Matsushima Yuran Co., Ltd.'s for development of sustainable new projects.

E.7.2.2 COOPERATIVE RELATIONSHIP WITH THE GOVERNMENT 【MINISTRY OF THE ENVIRONMENT】

In order to build a close cooperative relationship with the Ministry of the Environment, which has jurisdiction over San'in Kaigan National Park, the Nature Conservation Planning Officer of the Ministry of the Environment's Kinki Regional Office has been appointed as a consultant for the Council. Two officers, one from Takeno Nature Conservation Office and the other from Uradome Nature Conservation office of the Ministry of the Environment, are participating in Protection and Conservation Group of the Steering Committee and cooperating with various project. The San'in Kaigan UGGp, on the other hand, attends the San'in Kaigan National Park Liaison Council Meeting, which is hosted by the Ministry of the Environment, as a member along with prefectures and municipalities within the geopark, tourist associations, DMOs, and others.

In addition, since 2018, under the auspices of the Ministry of the Environment, the Council, local residents, and others have worked together to organize issues for conserving and utilizing natural resources, and formulation of "Increase Attractiveness Plan" that summarizes specific improvement efforts for each district, was started. As the results, "Increase Attractiveness Plan" for four districts, 1) Minato district of Kyotango City, 2) Yuhigaura district of Kyotango City, 3) the Tai-Keinohama district of Toyooka City, and 4) the Shin-Onsen Town district, were formulated. In 2022, the event was held in Kami Town, leading to strengthen collaboration between active organizations (Tajima Fisheries Cooperative and Tajima Sea School).

E.7.2.3 COOPERATION WITH LOCAL RESIDENTS

In Toyooka City, residents and government work together to reintroduce Oriental White Storks to the wild, and in Kyotango City, residents conduct cleanups for 15 beaches every year (more than 250 times a year, with more than 2,000 participants, and approximately 200 ton of collected garbage) and protection of Singing Sand Beach. Activities in collaboration with local residents are taking root in San'in Kaigan UGGp. In addition, the area of Kotohiki Beach, known for its singing sand, accepts educational tours from overseas on the theme of singing sand and coastal conservation.

Through the protection and conservation activity support project, conducted with local resident, the Council provided support for 154 activities over the 10 years from 2013 to 2022 to protect and conserve valuable local landscapes and historic sites. Geopark activities are promoted in collaboration with local residents, such as jointly developing geopproducts with the Local Area Revitalization Cooperation Team.

E.7.2.4 COOPERATION WITH GUIDES

The Council has established the Guide Group under the geopark Steering Committee, made up of 27 guide organizations, which works with guides to train and improve their quality, and promotes sustainable activities of geoguides in geotourism. Subsidized projects such as "Guide Attraction Improvement Support Project" carried out by the Council have led to efforts by guide groups to attract more tourists and to the establishment of the activity business. Guide exchange meetings are held for geopark guides to interact with each other, exchange information and opinions, improve guide skills, and build networks with guide organizations of other areas.

At guide exchange meeting of May 2022, a guide group from Kyotango City conducted a guided tour, exchanging opinions with participants and improving guide skills. In March 2023, skill improvement is implemented by participating in online tours of other geoparks and attending a course given by the president of the Japan Geotourism Association. In addition, guide organizations reported on the results of "Guide Attraction Improvement Support Project" and guides shared information with each other.

Other bottom-up activities, conducted to foster awareness of the geopark, for local guides and activity operator are given below.

- March 2022: Addition to creating a textbook that deepens understanding of the topography, geology, and creatures of the Igumi Coast by incorporating a guide's perspective, lectures were given for activity operators and others.
- February 2023: A joint training session was held for three geoparks: San'in Kaigan UGGp, Oki UGGp and Shimane Peninsula, and Shinji Lake Nakaumi Geopark, and participants exchanged opinions with guides from other geoparks to improve their skills and exchange information.
- July 2023: In collaboration with a local railway company, guides were provided on a sightseeing train that runs along the San'in Kaigan UGGp and it was well received.
- September 2023: "Workshop on Sales of Geological Materials" was held attended by 30 geopark guides and attendants could deepen their understanding of the sale of geological material.

E.7.2.5 COLLABORATION OF PRODUCT DEVELOPMENT AND BRANDING

A confectionary inspired by the Genbudo geosite, "Matsuyama Geomagnetic Reversal Cookie," was developed in May 2023 (see photograph). In November 2023, Scoria Brownie was produced in collaboration with a pastry chef (one the member of local revitalization cooperation team) living in Toyooka City. San'in Kaigan UGGp is trying to get people familiar with the geopark through food.

Regarding branding, the Council attaches a logo to products to emphasize that they are safe and delicious products made with ingredients produced in the geopark area, and San'in Kaigan UGGp is promoting local branding of products in the geopark, and at the same time promoting the geopark through product sales. As of September 2023, the geopark logo has been given to 80 products. In addition, in order to promote and disseminate local products in an integrated manner, we have started to launch campaign "GeoSpecial Item", which focuses on sweets, in February 2023. A system to certify products as "GeoSweets" that meet certification criteria, such as using raw materials produced within the San'in Kaigan UGGp area, reminding some of local resources, and improving awareness and image of the geopark, has been established. As of September 2023, 6 items have been certified as

"GeoSweets". The number of certified products is planned to be increased for promotion of local products.

Rebuilding the certification system will be considered in line with the future review of the Master Plan.



Matsuyama Geomagnetic Reversal Cookie



Scoria of Kannabe Highlands (right) and Scoria Sweets (left)



Certified Products with Logo

E.7.2.6 COOPERATION WITH DMOs

Since 2020, the Council has been regularly holding collaborative meetings with three DMOs covering the San'in Kaigan UGGp area for the purpose of promoting tourism. Three DMOs are:

Kyoto Prefecture: Northern Kyoto Prefecture Regional Cooperation, Urban Area Promotion Company

Hyogo Prefecture: Toyooka Tourism Innovation

Tottori Prefecture: Kirin Lion Town Tourism Bureau

Since 2021, Northern Kyoto Prefecture Regional Cooperation, has been implementing the Kyotango Trail Tour using the San'in Kaigan Geopark Trail Course. In 2022, DMO started to sell sightseeing route tour products for domestic tourists, and in 2023, it has a plan to sell sightseeing route tour products for foreign tourists. In order to further promote this kind of geotourism, "Partnership Agreement for the Promotion of San'in Kaigan Geopark Activities" was concluded in August 2023 to further strengthen cooperation.

E.7.2.7 COLLABORATION WITH SCHOOLS

In collaboration with Hyogo Prefectural Kasumi High School, which has a marine science course and owns a large training ship, San'in Kaigan Geopark experience cruise has been being implemented since 2022. The cruising, which was possible with the cooperation of many Kasumi high school students learning navigation techniques, allowed 50 participants from all over Hyogo Prefecture to enjoy the voyage and the scenery of the geopark that can only be seen from the boat, while geopark experts guided them explaining the geology, geography and lives of people of the San'in Kaigan.

E.7.2.8 OTHER COLLABORATIONS

Kyotango City is actively conducting initiatives trying to encourage tourists to participate in coastal conservation activities through initiatives such as the "TSUNAGU (connecting each other) Project," in which tourists clean up the coast, and the "One Hand Beach," in which beachgoers pick up trash within a 2-meter radius.

E.7.3 FULL AND EFFECTIVE PARTICIPATION OF LOCAL COMMUNITIES AND (INDIGENOUS PEOPLES)

A total of 17 forums and roundtable discussions related to the geopark, such as "Let's all talk about the San'in Kaigan Geopark" (co-sponsored by Tottori Prefecture, Tottori University, and the Council) and "Everyone's Presentation" (co-sponsored by the University of Hyogo and the Council) were held with a total of 453 participants. These meetings were conducted with people such as geopark activity providers, students and local residents, with the goal of sharing information about the geopark and exchanging opinions on issues, and discussing what the San'in Kaigan UGGp should aim for in the future.

Geopark guides, local government officials, and others participated in the "Workshop on Sales of Geological Material" held in September 2023 to deepen their understanding of the sale of geological Materials. In a survey conducted among participants after the workshop, out of 27 respondents, 26 answered "Yes/Yes indeed" when asked, "Did you learn anything from the workshop?". Regarding the

question of “Have you got any change in the perception of sales of geological materials?”, 19 people answered “Yes indeed/Yes”. The results of the workshop have changed the perceptions of the participants.

E.8 NETWORKING

E.8.1 STATUS OF CONTRIBUTIONS TO THE UGGp NETWORK

The Director and other staff of the Council office participate in international conferences such as GGN and APGN. Academic expert belonging to San'in Kaigan UGGp is participating in many GGN evaluation/revalidation on-site inspection missions from 2021 to 2023. The Council staff participate in various online meetings and training sessions to share information and interact with other geoparks.

Participated in the following events:

- GGN International Conference: 2021 (Jeju Island, South Korea) 3 participants (online)
- GGN International Conference 2023 (Marrakech, Morocco) 3 participants (in-person)
- APGN Symposium: 2022 (Satun, Thailand) 3 participants (online)
- “APGN online exchange meeting “Let’s Do It” (online): 2021, 2022, 2023
- Geotourism Fest 2021 (Indonesia) Online participation, exhibiting videos and images at virtual booth

E.8.2 EXCHANGE PROJECT BETWEEN TOYOOKA HIGH SCHOOL AND KOREAN HANTANGANG UGGp

Toyooka Prefectural High School, located in the San'in Kaigan UGGp area, visited Hantangang UGGp for three days from August 20, 2023. Exchanges were held with Hantangang UGGp and local high schools, and Toyooka High School students gave presentations about Toyooka City, Toyooka High School, and San'in Kaigan UGGp.

E.8.3 LESVOS SISTER GEOPARK EXCHANGE PROJECT

A permanent website page dedicated to the Lesvos Island UGGp has been set up on the San'in Kaigan UGGp website, and a section dedicated to the Lesvos Island UGGp has been set up at the base facility to display Lesvos' petrified wood and local products.

- June 19, 2023: An online meeting with Lesvos Island UGGp was held for the first time since the outbreak of the Covid-19 pandemic, and opinions were exchanged on the current status of both geoparks. Both parties agreed to publish each other's efforts in newsletters, to promote personnel exchanges at the Secretariat level, and to share experiences and measures in geological conservation, including measures against the sale of geological material.
- August 21, 2023: An online meeting was held between Lesvos Island UGGp, and Toyooka High School, and they introduced each other's geoparks.
- October 2023: The San'in Kaigan UGGp arranged to introduce Lesvos UGGp at the Tourism EXPO held in Osaka.
- December 16-17, 2023: The director of the Council, Geopark experts, and academic experts visited Lesvos Island UGGp. At the Lesvos UGGp Secretariat in Mitilini, discussions and exchanges of opinions were held regarding joint academic research, school education, and tourism exchanges between Lesvos Island UGGp, the University of Hyogo and the San'in Kaigan UGGp. In particular, in response to the recommendations pointed out to the San'in Kaigan UGGp, in addition to the existing efforts, new ideas were obtained, such as creating signboards and leaflets against the sale of geological material. We also learned a lot about geological heritage conservation, management, education, and sustainable development methods at the Aegean University and the Natural History Museum and Park of the Lesvos Petrified Forest.

E.9 SELLING OF GEOLOGICAL MATERIAL

Regarding the sale of geological material related to Genbudo in San'in Kaigan UGGp, please refer to “**D. IMPROVEMENTS MADE ON PREVIOUS RECOMMENDATIONS**”. The Council is earnestly working to stop the selling of geological material and take conservation measures for San'in Kaigan UGGp as a whole.

F. CONCLUSION

The Council revised its Master Plan and Action Plan in 2019 in order to deepen understanding of the SDGs and improve the level of geopark activities. In revising them, opportunities for learning and dialogue with various stakeholders in the area were created, and the efforts were made to broadly share the direction of activities.

As an example of a specific initiative, in order to secure employment for guides, activity operators, etc. and maintain tourism consumption, events and campaigns that utilize the San'in Kaigan Geopark Trail, which was fully opened in 2020, were held. Through this initiative, cooperation between regions has deepened through sponsorship from the local community. In addition, tours were created using this trail. At the same time, efforts were made to promote the use of geosites, maintain and manage nature trails, etc., raise the profile of San'in Kaigan UGGp, and foster awareness of environmental protection. In addition, by responding to the recommendation given through the revalidation process, not only has the understanding of the issues related to sales of geological material been improved, but also the unity of the entire area has increased, and networks in Japan, Asia and the Pacific, and the world have been strengthened.

By steadily implementing the Action Plan while appropriately reviewing it, we will continue to develop geopark activities with the aim of creating a region where people want to come and live and will continue to live.