MASTER PLAN 2019-2028

United Nations
Educational, Scientific and
Cultural Organization

Toya-Usu
UNESCO
Global Geopark

Master Plan
of the Toya-Usu
UNESCO Global Geopark
2019 - 2028

（Manual of Geopark Practices）

Toya-Usu UNESCO Global Geopark Council

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The Toya-Usu UNESCO Global Geopark Master Plan (hereinafter: 'the Master Plan') provides information on the Toya-Usu UNESCO Global Geopark: its basic profile, viewpoints of the action plan, the roles of stakeholders, and future goals. It is intended that all stakeholders share the information provided herein.

The Master Plan is valid for 2019 through 2028, with the provision that the Toya-Usu UNESCO Global Geopark shall promptly revise the plan in accordance with any changes in circumstances and with feedback on activities.

Spring (Mt. Usu and cherry blossoms)

Summer（Mt. Showa-Shinzan）

Autumn (Lake Toya)

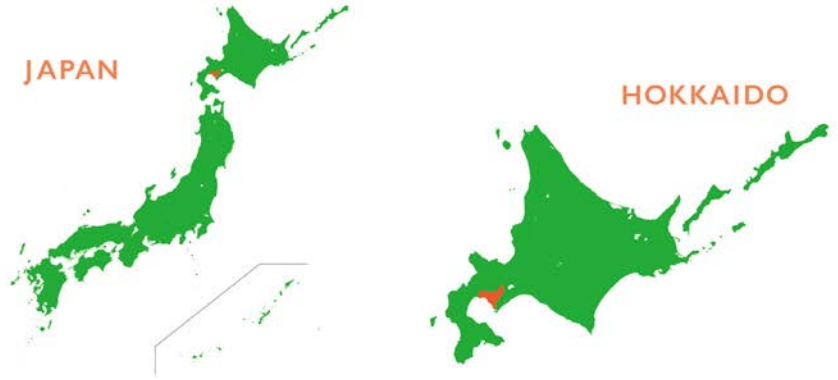
Winter（Kamui-Chashi）

01 PROFILE OF THE TOYA-USU UNESCO GLOBAL GEOPARK

01-1 Profile of the Toya-Usu UNESCO Global Geopark

The Toya-Usu UNESCO Global Geopark (hereinafter: 'the UGGp') is on the Pacific Ocean in the southwestern part of Hokkaido Prefecture, Japan. The UGGp includes the whole area of the municipalities of Date, Toyoura, Sobetsu and Toyako. The UGGp measures 1,064 km^2. With respect to climate, the UGGp is in a relatively warm part of Hokkaido, a subarctic island. Overlapping with Shikotsu-Toya National Park, the UGGp is blessed with magnificent seasonal landscapes and soothing hot springs. The Pacific Ocean to the south provides abundant marine resources; the fertile volcanic soil fosters fresh, delicious vegetables, fruits and livestock products. Such 'volcano's blessings' attract many visitors.

Yearly average temperature：7. 8 ℃
Yearly average precipitation：932 mm（Date）
Yearly snow accumulation:：50 cm - 1 m
Municipalities：
Date, Toyoura, Sobetsu, Toyako
Industries：
tourism, agriculture (strawberries, apples, cherries, potatoes, beans/peas), fishery (scallops, flatfish, salmon)



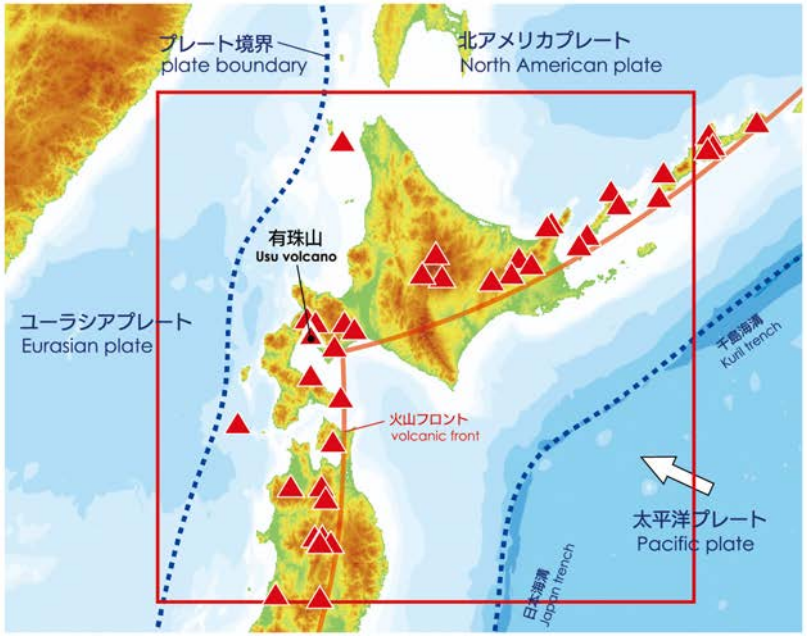
- Volcanic Activity in the Environs of Today's Lake Toya and Mount Usu –

There are many volcanoes in Japan. This geological feature relates to global-scale earth movements underneath the ground.

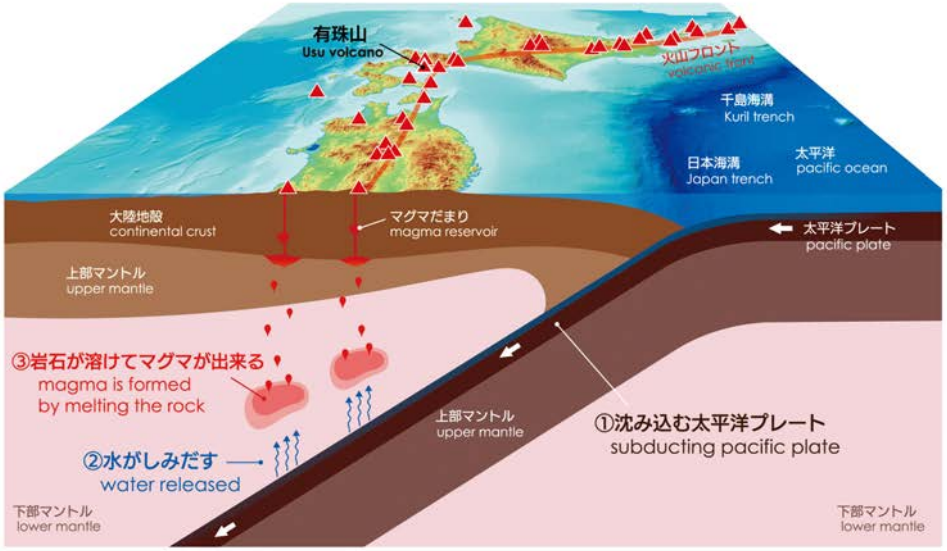
The earth's surface is covered by separate areas of bedrock called tectonic plates. Subducting oceanic plate releases water into the mantle at about a depth of 100 km. The water released into the mantle then decreases the melting point of the overlying rock (mantle). Following that, magma is formed by melting the rock. The magma rises to the surface and forms volcanoes.

Today, the Japanese archipelago is at the boundary of four plates. The Pacific Plate, which is under the Pacific Ocean, and the Philippine Sea Plate have been subducting under the crust of the Japanese archipelago, forming a trench along which earthquakes and tsunamis are likely to occur. Such subduction also generates large volumes of magma underground. The Toya caldera (Lake Toya) and Mount Usu have resulted from such subduction.

Lake Toya, the Nakajima islets and Mount Usu are the main features of the UGGp. Mount Usu has erupted several times. There is evidence of past volcanic eruptions farther from Lake Toya, such as in Toyoura and in the Otaki district of Date.



火山分布図 Location of active volcanoes



海溝でのマグマの発生 Magma genesis at subduction zone

- Geological setting of the Toya-Usu UGGp -

The topography and natural features of the UGGp were mainly formed by a massive volcanic eruption some 110,000 years ago. The eruption discharged significant volumes of magna, or pyroclastic flow, from underground. The pyroclastic flow eventually covered the area tens meters in depth. Additionally, the volcano collapsed to form a large, flat-bottomed depression called caldera. As water flowed in, it became the lake we now call Lake Toya. Approximately 50,000 years ago, volcanic activity resumed at the centre of the lake, Nakajima crypto domes were formed

Lake Toya is Japan's third-largest caldera lake, after Lake Kusshаro and Lake Shikotsu, both also in Hokkaido.

Repeated eruptions south of Lake Toya from 20,000 years ago formed Mount Usu. The eruptions during that period were characterized by lava flows. The magma was not very viscous, and the shape of the mountain was originally similar to Mount Fuji ('stratovolcano').

The summit area was collapsed 7,000 to 8,000 years ago*, and debris avalanche flowed down southwest towards Uchiura Bay in the Pacific Ocean. Eventually, many large and small hummocks were formed at the foot of the mountain. Mount Usu had been in a dormant for thousands of years after that the collapse before erupting again in 1663, and it has erupted nine times since then. The nine most recent eruptions were characterised by high viscosity magma, which is occryed pyroclastic flows and formed new lava domes. Mount Usu has erupted every few decades from different craters.

* There are various opinions regarding the dates. Discussions are under way.

- People's Lives -

After the collapse 7,000 to 8,000 years ago, Mount Usu was quiescent for thousands of years. Springs in many places around Mount Usu have provided sources of water throughout the year. Rivers which run through the area have been home to salmon, which return every autumn. The complex terrain around the mountain that originated from the debris avalanche deposit and the reefs that formed from submarine volcanic activity have fostered marine creatures. The calm sea of Uchiura Bay and the reef have made a good fishing ground. This blessed environment has supported pleasant living. People started to settle in the area during the Jomon cultural period (roughly 10,000 years ago), and ethnic Japanese from Honshu, who were often called 'Wajin', began to migrate to the area in the Meiji period (the late 1800s).

The flat, cultivated lands around the volcano receive enough sunlight for various crops. Uchiura Bay is favourable for scallop farming and for other seafood. A hot spring source was discovered after the 1910 eruption, which has transformed the area to a major spa destination under the name of Toyako Onsen. The 1944 eruption created Mount Showa-Shinzan. The area was designated as Shikotsu-Toya National Park in 1949 and is a major international tourist destination.

01-2 Features of the Toya-Usu UNESCO Global Geopark

- A Geoscience Heritage: The Ever-changing Earth -

In the UGGp area, the community zone is near geosites such as the Toya caldera, the Nakajima lava domes and cryptodomes and Mount Usu. This fact attests to the UGGp's status as a geological heritage of international value.

An enormous eruption occured massive amounts of pyroclastic flows that buried the plains around the volcano to form the Toya caldera—now Lake Toya—and created a broad plateau of pyroclastic flow. This plateau became good farmland. Another eruption approximately 50,000 years ago formed the Nakajima islets, a group of more than 10 cryptodomes at the centre of the lake.

Mount Usu erupted four times in the 20th century alone. **In 1910**, it erupted at the northern foot of the mountain four days after a precursor earthquake, continued to explode for a couple of months, and eventually formed at least 45 new craters. in addition to, Mount Meiji-Shinzan was formed.

From 1944 to 1945, it erupted again at its eastern foot six months after a precursor earthquake. This time the magma uplifted farmland and residential areas to finally form a lava dome 407 m in elevation (now 398 m in elevation) above sea level. It was named Mount Showa-Shinzan.

In 1977, that mountain erupted 32 hours after a precursor earthquake. Initially, ash plumes were ejected to an altitude of 12,000 m, and the eruption continued until 1978. Earthquakes and ground upheavals continued through 1982. Consequently, the mountain's summit was pushed up by magma to form Mount Usu-Shinzan.

In 2000, it erupted at its western foot four days after a precursor earthquake. Not only did it create more than 65 new craters at the foot of Mount Nishiyama and around Mount Konpira, but it also caused magma to push up roads and buildings, creating 'Mount 2000-Shinzan'.

The volcanic faults and mudflows that resulted from these eruptions repeatedly damaged infrastructure in surrounding communities. The land deformation and subsequent damages from the eruption are preserved as 'disaster remains', one of the geoscience heritages of the UGGp. Rare assets even in global terms, these sites speak to the importance of reducing disaster risks in the future.

Communities in the area accept the harsh reality of living under the risk of volcanos, receive abundant harvests from geological activity, and strive to live in harmony with the ever-changing earth into the distant future. This never fails to inspire visitors from around the world.


1910 eruption


1944-45 eruption


1977-78 eruption


2000 eruption

- Successful Evacuation in the 1910 Eruption -

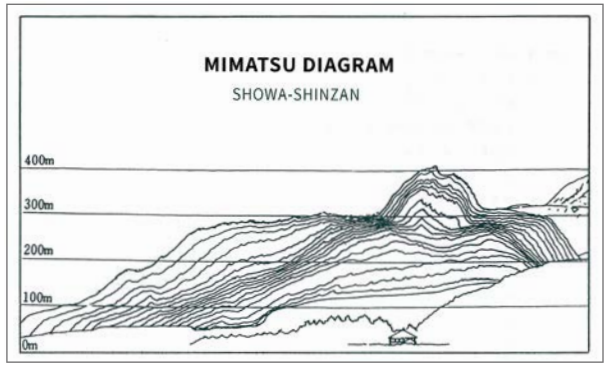
When Mount Usu erupted in 1910, Professor Omori Fusakichi of Tokyo Imperial University (the present University of Tokyo) and his team installed a pendulum seismograph on the erupting volcano. Their measurements were the world's first records of volcanic tremors of a mountain, and they significantly contributed to progress in volcanology and eruption forecast studies. Mr. Iida Seiichi, the chief of police in Muroran, persuaded local legislators to evacuate 15,000 residents from the site prior to the eruption. He made great use of knowledge learned from Professor Omori. This is believed to have been the world's first successful volcanic evacuation.

Prof. Omori Fusakichi

Iida Seiichi

1910 eruption

Mimatsu Masao



Mimatsu Diagram

- Mount Showa-Shinzan -

The eruption occurred from 1944 to 1945, causing the wheat fields and residential area east of Mount Usu to upheave, and eventually forming Mount Showa-Shinzan. Towards the end of World War II, volcanologists were unable to investigate the eruption process onsite because the Japanese army maintained a strict embargo on information. Instead, Mr. Mimatsu Masao, a local postmaster, recorded the number of earthquakes and drew a series of sketches of the rising ground while maintaining contacts with professional scientists. Mimatsu believed that this volcanic activity should not be ignored by history.

His sketches proved to be epochal data that revealed how a volcano develops. The data were compiled into what is named the Mimatsu Diagram, which gained great acclaim at the 1948 International Union of Geodesy and Geophysics in Oslo, Norway. Since then, the diagram has become well-known to geologists worldwide. The diagram is now presented in volcanology textbooks, and the original is preserved at the Mimatsu Masao Memorial Museum in Sobetsu.

Mimatsu later purchased Mount Showa-Shinzan to protect the rare lava dome and the whole formation from development and other human intervention. His action was based on the beliefs that Mount Showa-Shinzan is an ideal case study of a volcano and that it must remain undisturbed. Mount Showa-Shinzan was designated as a special natural monument of Japan in 1957. Since its inscription on the list of Global Geoparks in 2009, the mountain has been one of the primary geosites of the UGGp.

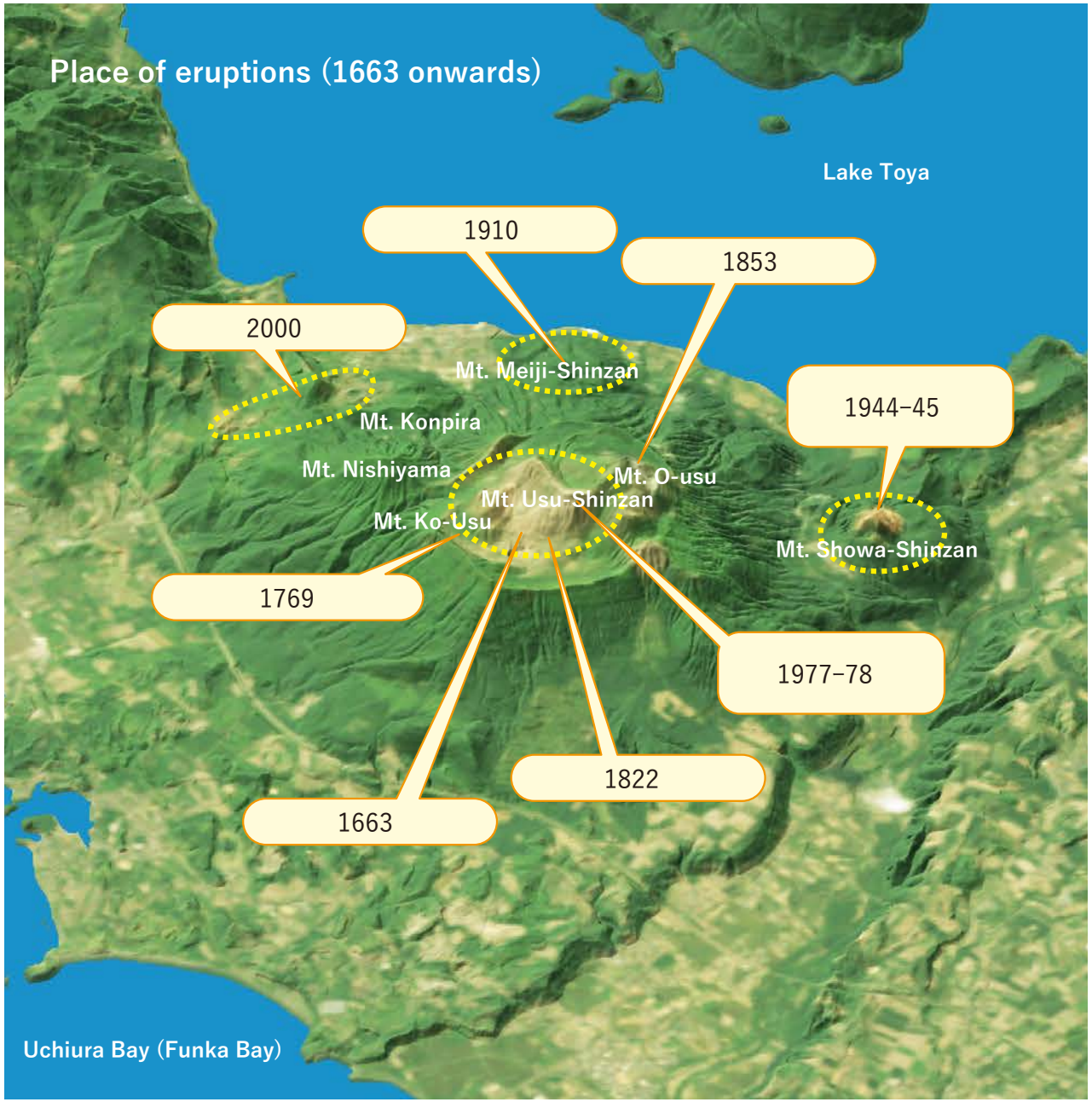
Geological activity in the area has been scientifically recorded, and the sites that have resulted from volcanic activity have been preserved to retain their value and to be used for educational purposes. Those local efforts over the past 70 years are consistent with the Global Geoparks principle that such parks shall promote sustainable community development by balancing preservation against the utilisation of geological heritages. The collaborative efforts of scientists, residents, and governments to ensure life alongside the volcano still strongly reflect the spirit of Global Geoparks.

01-3 Various Heritages

- Natural Heritages -

Forests cover one-third of the UGGp. Lake Toya, Mount Usu and their environs also comprise Shikotsu-Toya National Park. Natural assets here are unique in terms of volcanic topography and geology, which consist of caldera lakes, plateaus of pyroclastic flow, lava domes and cryptodomes, craters, hummocks, hollow coves and coasts. Mount Usu is near the sea, a setting that has given it unique vegetation of seaside and alpine plants.

As new craters wrer formed by earch eruption, the vegetation succession at each place proceeded at different speeds. Some sites are relatively bare or have only short, herbaceous plants after an eruption; other sites have grown into forest in the more than a century that has passed since an eruption. We can see birds and other animals adapting to these changing environments: Woodpeckers feed on insects inside trees that died in eruptions, and bank swallows create holes in which to nest at precipices of soft hummocks.



- Cultural Heritages -

Along the coast are many archaeological sites from the Jomon culture through the modern Ainu culture (circa, 14,000-300 BCE). After the sector collapse of Mount Usu, the area remained stable and tranquil until 1663, when the mountain erupted again. People were blessed with abundant marine and land resources for thousands of years. Two archaeological sites—the Irie Takasago Shell Midden and the Kitakogane Shell Midden—attest to the lifestyle of the time. These sites are part of the 'Jomon Archaeological Sites in Hokkaido and Northern Tohoku', which aims for inscription on the list of UNESCO World Cultural Heritages. The coast of Uchiura (Funka) Bay is a notable shell midden cluster in Japan. The remains of communities, shell middens, and ritual places from the Jomon to the Ainu cultural periods suggest that rich natural blessings of the area have supported people's survival and prosperity over a long time, not to mention today. At the Kitakogane Shell Midden, which is another shell midden in the UGGp area, a number of tools made from lava have been excavated, showing the relationship between the Jomon culture and volcanos

- Intangible Heritages -

Many place names in the UGGp originate from expressions of the Ainu, an indigenous people of Hokkaido. These names suggest an Ainu perspective on nature. Ainu in the Rebunge and Abuta districts annually host prayer rituals called *Kamuinomi* (prayers to the gods) and *Icharupa* (prayers to ancestors). Traditional Japanese customs were brought by migrants from the main island of Japan during or after the end of the Edo shogunate (the mid-19th century). Some of these customs, such as the *shishimai* (lion dance), *dashi* (float) parades, and Japanese drumming, are featured at local events and festivals.

- Disaster Risk Reduction Culture, a Unique Intangible Heritage -

The UGGp area has faced many disasters and has successfully managed to avoid severe damage. We must emphasise that this is because the residents know Mount Usu well, are aware of how to prevent the loss of life from eruptions, and understand how to respond to events. We refer to the residents' awareness of eruptions and commitment to eruption risk-reduction activities as a 'disaster risk reduction culture', which is a significant intangible heritage of the UGGp.

For example, the 2000 eruption brought serious damage to the whole area, but there were no casualties because local governments and volcanologists worked together to evacuate all the residents prior to the eruption. This would not have been possible without prompt responses by the government and academic experts, as well as appropriate actions by the residents to mitigate damage. Towards building readiness for future eruptions of Mount Usu, the Toya-Usu Volcano Meister certification was launched in 2008. As of today, more than 50 Volcano Meisters are actively committed to promoting this culture of disaster risk reduction.

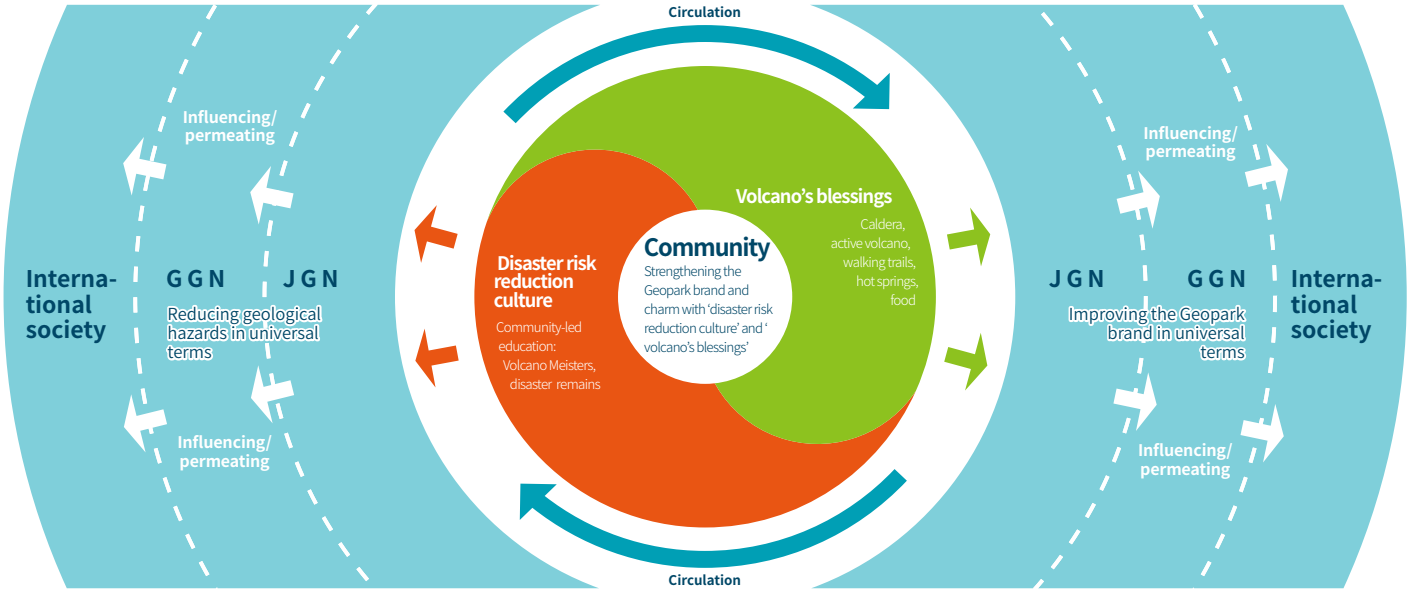
01-4 Policies for Sustainable Development

The UGGp is proud of its the volcano's blessings. The spectacular scenery of the magnificent caldera lake, the steaming lava domes and cryptodomes, and the jagged craters, as well as hot springs that comfort visitors, are all gifts of the earth. Our community development focuses on the culture of disaster risk reduction. To remain mindful of disasters, we maintain the traces of past eruptions ('disaster remains') and organise unique educational opportunities that help us to be prepared for possible future disasters.

The 'disaster risk reduction culture' and 'volcano's blessings' have laid a foundation for sustainable development policies of the Toya-Usu UGGp. See the following statements.

(1) The Toya-Usu UNESCO Global Geopark will achieve sustainable communities by reducing disaster damage through a culture of DISASTER RISK REDUCTION and by increasing the local value of VOLCANO'S BLESSINGS.

(2) The Toya-Usu UNESCO Global Geopark will contribute to global society regarding geological hazard mitigation by promoting our DISASTER RISK REDUCTION CULTURE. Well aware of the threats of the volcano and prepared for the coming disasters, the Toya-Usu UNESCO Global Geopark will contribute to the global popularity of geotourism through VOLCANO'S BLESSINGS and will achieve a sustainable global community through the Global Geoparks Network.



02 ACTION PLAN

02-1 Research and Conservation

Endorsing geo-heritages based on proven evidence; conserving and utilising the heritages for the future

02-1-1 Basic concept

The Toya-Usu UGGp is founded on many precious assets: rare earth phenomena, unique ecosystems, and tangible and intangible cultural and historical assets. They represent the 'unique value of the area' that underlies its Geopark status. We must protect these assets and keep them accessible for education and tourism.

02-1-2 Four categories of assets

Assets of the Toya-Usu UGGp fall into the following categories.

* Geosites, which emphasise geoscientific value
* Ecological sites, which emphasise biological/ecological value
* Cultural sites, which emphasise cultural and historical value
* Intangible cultural properties, which emphasise tradition through events and folklore

02-1-3 Research promotion and support

The UGGp's unique value is attested to by scientific research. The UGGp will lead investigations necessary for management by the Toya-Usu UGGp Council, will promote external collaborations on the latest topics of study, and will stock literature. The UGGp will also assist scientists whose research will contribute to our practices, and will accelerate cooperation with professional associations that independently work on the volcano, its disasters and risk reduction efforts, including meteorological observatories, geological survey organizations and universities.

02-1-4 Policy on conservation practices

To maintain the unique value of the assets, this Master Plan will determine guidelines for conservation and utilisation as follows.

(1)Regular checking and recording of geosites

The condition of each geosite shall be checked and recorded regularly. When a problem is observed, prompt action will be taken.

(2) Conservation and utilisation of disaster remains

The value of disaster remains and major landforms resulting from volcanic activity shall be assessed. Then, their utilisation purposes and conservation measures will be specified individually.

The conservation and utilisation of disaster remains

(3) Conservation of the geological heritages in the national park

Many geosites and disaster remains in the UGGp area overlap with those of Shikotsu-Toya National Park. Managed by the Japanese Ministry of the Environment (MOE), such sites are protected from exploitation under the Natural Parks Act of Japan. The UGGp shall work with the MOE to conduct conservation practices accordingly by zoning the area and clarifying the conservation targets. The two zones are described here.

(a) The topographic/geologic conservation zone

In this zone, evidence of past volcanic activity is observed in the forms of the crater, the active volcanic fault, upheavals, ballistic ejecta and impact craters. Here it is permitted to cut back overgrowth as necessary to keep disaster remains and other geo-scientifically important traces from degradation.

(b) The vegetation conservation zone

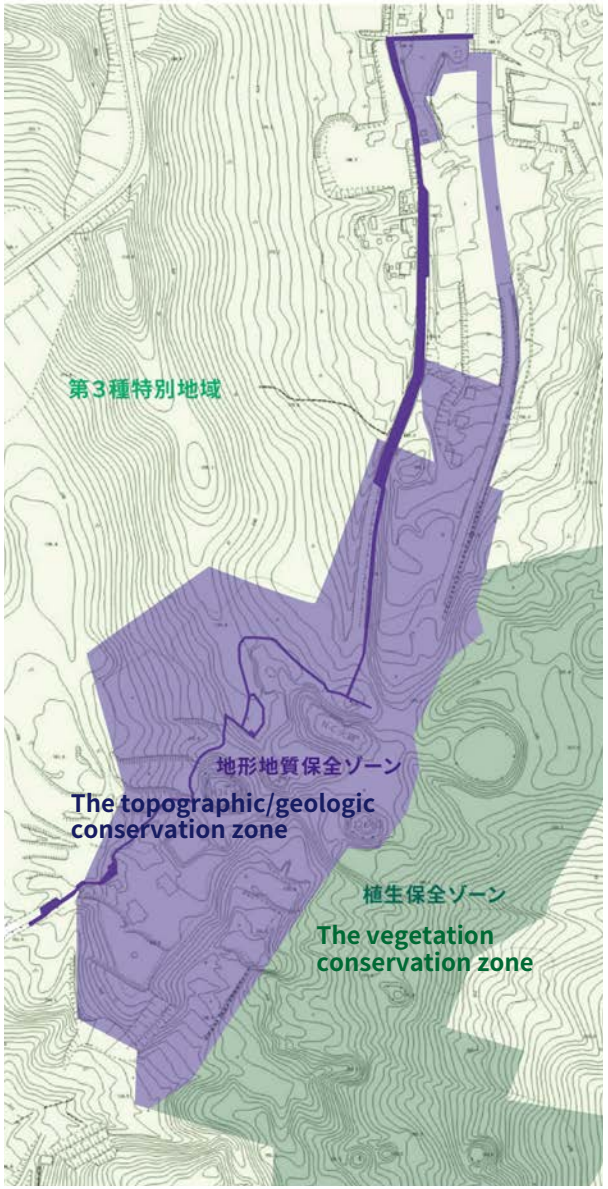
This zone is to be left as untouched as possible to allow visitors to observe the phased succession and recovery of vegetation. The point is, it is important for visitors to learn about ecological cycles of the earth and about biodiversity.

(4) Prohibition of mineral trade/sales

In response to the destruction of nature, the over-mining of geo-resources and the use of child labour, the Global Geoparks Network (‘GGN’) bans its members worldwide from trading or selling precious rocks and mineral specimens. The UGGp shall thoroughly comply with the policy. Therefore, no Toya-Usu UGGp-designated facilities or partner enterprises (refer to p. 44) shall trade or sell such minerals.

GGN Code of Ethics

Special protection area of the national park



(5) Conservation and utilisation of other sites

With regard to the conservation of ecological and cultural sites as well as intangible heritages, the UGGp shall work closely with each administrator. The UGGp will comply with related rules and regulations.

(6) Conservation and utilisation through the designation of new geosites and other sites

The UGGp will designate new geosites to protect resources of geoscientific value from destruction and to promote their sustainable use. Simultaneously, the UGGp will work to relate the new sites to ecological and cultural sites and intangible heritages from a geoscientific perspective. The procedure for designating a site is as follows.

1. Gather information on prospective new sites (as the occasion demands).
2. Examine scientific evidence of the sites' value and condition (e.g., by papers).
3. Discuss conservation and utilisation guidelines with stakeholders.
4. Obtain views from academic advisors.
5. Secure a decision for the Council to give its designation.

02-2 Disaster Risk Reduction

Learning, developing, and handing down to future generations

02-2-1 Basic concept

The disaster risk reduction culture is a best practice of the UGGp and is one in which the UGGp takes pride (see p. 27). The UGGp will further improve and sophisticate this culture in collaboration with scientists, residents' groups, related associations and the media.

02-2-2 Promotion of disaster risk reduction education

The UGGp shall promote disaster risk reduction education by providing various opportunities for such education. They include (1) lectures for knowledge-sharing on volcanos and damage mitigation, and (2) field trips headed by speakers or nature guides for the observation of craters, active volcanic faults and onsite disaster remains. Also, the UGGp shall cooperate with local governments, related associations and private groups in organising disaster risk reduction practices and shall appoint speakers for school lectures. Through these practices, the UGGp will actively lay the foundation for sustainable disaster risk reduction education. Towards this objective, the UGGp will train new speakers, geo-guides and leaders in disaster risk reduction education. Specific practices in this section will include the following.

* Dispatching lecturers/presenters to local schools
* Conducting field trips to Mount Usu, intended for local children

02-2-3 Publicising the disaster risk reduction culture

Accurate knowledge and skills will help to improve the capabilities of communities living with an active volcano. This will be a key to safe, comfortable living there. In light of this, the UGGp will publicise the disaster risk reduction culture, addressing knowledge and skills within and beyond the UGGp area. Specific practices in this section will include the following.

* Producing and publicising documents, photo books, and other books
* Undertaking publicity activities in collaboration with the media
* Appealing to educational excursion organisers looking to teach disaster risk reduction
* Enhancing exhibits at main museums, and providing timely information

02-2-4 Toya-Usu 'Volcano Meister' certification system

The UGGp certifies 'Toya-Usu Volcano Meisters'. These are residents who have accurate knowledge of volcanoes and of the history of volcanic disasters, and who take responsibility for handing down the disaster risk reduction culture to future generations. Volcano Meisters are committed to providing daily community education and to promoting the UNESCO Global Geopark programme.

The UGGp shall continue to train and certify Volcano Meisters. Concurrently, it shall promote the certification system to other parts of Japan and the world, thereby contributing to the risk-reduction practices of communities exposed to volcanoes.

Documents on the Toya-Usu Volcano Meister certification system

02-3 Education at School and in the Society

Encouraging Every Resident to Be a Toya-Usu UGGp's Main Actor

02-3-1 Basic concept

The UGGp will support children from preschool to high school, university scientists and all adults in the community by providing learning opportunities.

02-3-2 Preschool

Geopark education for preschool children will emphasise 'a healthy mind and a healthy body', 'cooperation', 'a commitment to social life', 'connection with nature and respect for life', 'verbal communication', and 'nurturing a rich sensitivity and expressiveness'. The Toya-Usu UGGp will support these children by providing opportunities for them to enjoy the Geopark. Specific practices will include the following.

* Shokuiku (dietary education) through Geopark pizza-making using local ingredients

02-3-3 Elementary school

In addition to teaching basic knowledge of disaster risk reduction, the UGGp will target sixth-graders with subjects such as science (formation and change of the land) and social studies (people's life through hunting, gathering and farming). Specific practices will include the following.

* Field learning at Mount Usu about eruptions and disasters
* Lectures and field learning that use outdoor learning textbooks ('Volcano', 'The Wisdom of Ancestors')

02-3-4 Junior high school

Disaster risk reduction education will be more elaborate than in elementary school. The focus for first graders is on science (formation and change of the land). Specific practices will include the following.

* Field learning for a deeper understanding of Mount Usu
* Lectures and field learning that use outdoor learning textbooks ('Volcano', 'The Wisdom of Ancestors')

02-3-5 High schools

The emphasis will be on research for disaster risk reduction, and for the volcano and communities, as well as on basic biology (vegetation and succession). Specific practices will include the following.

* Lectures and field learning that use outdoor learning textbooks (‘Vegetation and succession’)

02-3-6 University/college

The UGGp will conduct projects per its agreement with Hokkaido University Museum, train locally based scientists through collaboration with the Rakuno Gakuen University satellite campus, and provide a variety of support to research projects. Specific practices will include the following.

* Field work and lectures on specific themes

02-3-7 Residents

Providing Geopark education to the community means familiarising the community with the Geopark. The aim will be not merely to provide lifelong learning opportunities that enhance individual knowledge and daily life, but also to increase the number of those who take part in Geopark practices and keep them connected to community activities in education, business and disaster risk reduction. The more extensive and profound is community participation, the more effective and sustainable will be the Geopark's practices, as the community is what supports those practices. From this perspective, the UGGp will continue the following projects.

(1) Geopark Café
The Geopark Café event booth provides hands-on activities, holds talks, serves 'symbol menu' dishes (local dishes that represent the UGGp) and does other things to encourage local participants to become familiar with Geopark practices. The Geopark Café may open at the request of different locations under the name of 'Geopark Café in xxx'.

(2) Geopark lectures
Lectures will be given about the Geopark in relation to volcano and disaster preparedness, nature, history and culture, food and tourism, and more. The lectures are also designed to provide tour guides and nature guides with learning opportunities.

(3) Open events, workshops
These include family hikes of Mount Usu.

(4) Presentation of the Geopark to the community
Promotional magazines are distributed to local banks, hospitals, barbershops and hair salons for customers to read at these public spaces. Also, Geopark News articles will be included in monthly local papers and on the websites of UGGp municipalities.

02-4 Tourism and Business Cooperation

Unique Products and Experiences, People Who Make an Effort to Visit

02-4-1 Basic concept

The UGGp will contribute to the communities in seven ways.

(1) Guaranteeing the value of local resources

The UGGp will provide scientific evidence attesting to the value of local resources by making and releasing a list of geosites and other sites within the UGGp area.

(2) Adding 'earth-based stories' to sites/local resources

The UGGp will relate existing resources, such as landscapes, hot springs, flora and fauna, history and culture and local products, to stories of land formation, thereby adding new value ('a unique story of the area') to existing local resources.

(3) Fostering trans-regional networking

Practices of the UGGp reflect transregional efforts across the municipalities of Date, Toyoura, Sobetsu and Toyako. By cooperating with similar extensive organisations, such as the Noboribetsu-Toya Tourism Zone Council, the UGGp will stimulate personal interactions and information exchanges for integrated community development.

(4) Promoting trans-disciplinary networking

Geopark practices involve stakeholders from many different fields and areas of expertise. The UGGp will promote such sector- and industry-wide collaborations.

(5) Developing information and media infrastructure

The UGGp will develop publicity media that present how best to enjoy the area, will organise teaching materials so that they are readily available for educational excursions, and will assist with local tourism promotions.

(6) Developing visitor-friendly facilities and services to increase satisfaction

To provide visitors with tour programmes that afford a high degree of satisfaction, the UGGp will support local guides and produce useful guide materials. The UGGp will improve facilities and road signs in cooperation with administrators, so that visitors are smoothly led to individual sites.

(7) Conserving sites for sustainable utilisation

The UGGp will regularly investigate each site's conditions in cooperation with site administrators to ensure that local resources are maintained and remain accessible in the future.


USUZAN

02-4-2 Tourism

There are many different tourism operators in the UGGp area: hotels, transport operators (buses, taxis, cruise ships, motorboats, ropeways), food and beverage operators, retailers, guides, and food processors. The UGGp will work with such operators, as well as with the Noboribetsu-Toya Tourism Zone Council, the five tourism associations in the UGGp municipalities and other business enterprises, to ensure that all can enjoy their UGGp visit. Specific practices will include the following.

* Recruiting Geopark partners
* Producing and distributing pamphlets and other materials
* Presenting banners and novelty goods

02-4-3 Business cooperation

Industries other than tourism are also based in the UGGp area, including agriculture, fishery and livestock farming. In agriculture, more than 300 kinds of produce are harvested, many of which owe to the area's unique geological and environmental features. In the belief that local food can encourage visitors to spend, give them pleasure, and ensure comfort during their visit, the UGGp will implement the following practices to encourage industry-wide cooperation in food.

* Recruiting Geopark partners
* Adding value to produce through stories told in books or on cards
* Installing banners to promote local products at Michi-no-ekis and other tourist spots

The Toya-Usu UGGp will consider support for enterprises and ventures willing to work together to promote the UGGp.

02-4-4 Supporting tour guides

Tour guides work hard to introduce visitors to appealing spots, local products and other charms of the area. Such tour guides can be professionals, amateurs, or volunteers; they can work full-time or part-time; they can belong to a group or can work individually. The UGGp will support these guides to ensure that they provide skilled guidance to visitors. Specific practices will include the following.

* Networking guides in the UGGp area
* Organising guiding skills workshops
* Providing information, materials and other goods

02-4-5 Educational excursions

Many schools visit the Toya-Usu UGGp area for excursions from throughout Hokkaido and elsewhere in Japan. More schools have been interested in guided tours at the UGGp since the Eastern Japan Great Earthquake of 2011, because the guided tours focus on disaster risk reduction. As demand is expected to continue to increase, the UGGp will support effective promotion to school excursion organisers. Specific practices will include the following.

* Promoting textbooks that correspond to the MEXT Japan course of study guidelines
* Designing tour programmes that correspond with the sustainable development goals (SDGs)
* Producing flyers for tourism promotion
* Participating in collaborative PR activities across tourism zones

02-4-6 Local ‘symbolic menu’ dishes

The UGGp has developed new recipes for pizzas and hot sandwiches topped with local ingredients. The UGGp will feature these dishes at more local restaurants, shops and events, towards encouraging visitors to enjoy local food and the Geopark.

(1) Geopark pizzas
Dough (representing the earth) topped with local ingredients (representing volcano’s blessings) is baked on plates made of lava from Mount Usu. These lava plates are a novel cooking method for a volcanic UGGp.

(2) Geopark hot sandwiches
Sandwiches made with local ingredients (representing volcano’s blessings) are grilled in a scallop-shaped sandwich maker. Scallops have been a seafood staple of the area for 5,000 years.

- Geopark pizza and hot sandwich certification manual


Geopark pizza


Geopark hot sandwich

02-5 Development of the Foundation for Geopark Status

Appealing to the Right Targets by Serving the Right Needs Under the Right Strategy

02-5-1 Basic concept

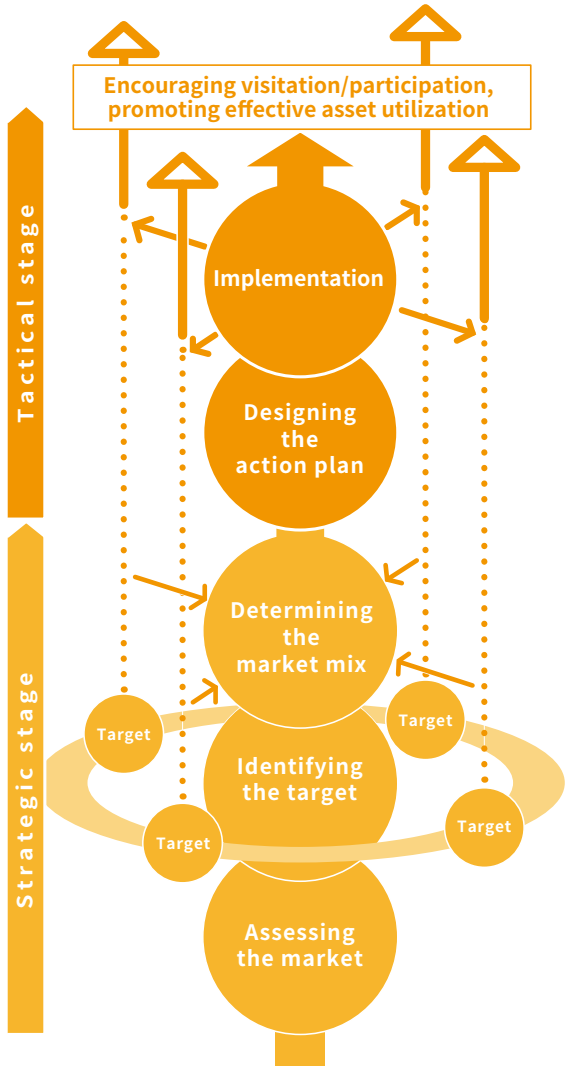
The practices of the UGGp are wide-ranging and involve many different stakeholders, but information dissemination must be consistent and unbiased.

02-5-2 Marketing strategy

A marketing viewpoint is essential to promote the UGGp effectively and provide quality service to visitors. In designing a new practice, it is vital to precisely identify the target audience and that audience's needs. This viewpoint is valid not only for tourism but also for education, for example.

02-5-3 Branding

Branding of the UGGp involves information dissemination aimed to present the unique value of the area in a clear way and to spark interest, empathy and emotion. Towards this objective, it is important to clarify the value of the UGGp. The UGGp will analyse and quantify the value of its assets, both physical and experiential, in terms of facilities, paths, geosites, participatory activities, and educational programmes. Re-assessments will be conducted as necessary.



02-5-4 Integrated brand image

To promote the image of the area, a catchphrase and a visual image will be effective. The catchphrase should be accurate and easy to understand; the visual image needs to be used in accordance with certain rules. Catchphrases are given as subtitles for each section of Part 2 in the Master Plan*. The visual image of the UGGp is presented as 'logo' and 'graphics' .

* Each catchphrase translation is tentative; the Japanese wording prevails.

(1) Official UNESCO logo

The logo attests to the value of a designated UGGp. It appears at facilities, on signage and on websites officially recognised by the Council, but the use of the logo for profit-making is not allowed.

United Nations Educational, Scientific and Cultural Organization

Toya-Usu UNESCO Global Geopark

(2) Brand image graphics

Graphics visualise the attractiveness and pleasure afforded by the UGGp area. They may appear on promotional goods such as flags, badges and polo shirts. Any local enterprise, group or individual can apply to use them without charge. For example, the graphics and a message are printed on each municipality's garbage bags (Note: Residents must use garbage bags designated by their municipality for combustibles and non-combustibles.)

02-5-5 Facilities and signage

The 22 Geopark facilities consist of 10 main museums, six information centres and six Geopark-related facilities. Signage falls into (1) welcome signs, (2) guide signs to facilities/sites, (3) signs placed at a main museum's outer wall and entrance, (4) general information panels, (5) interpretation signs, and (6) flags/banners. Each sign must meet basic criteria for installation purpose and design.

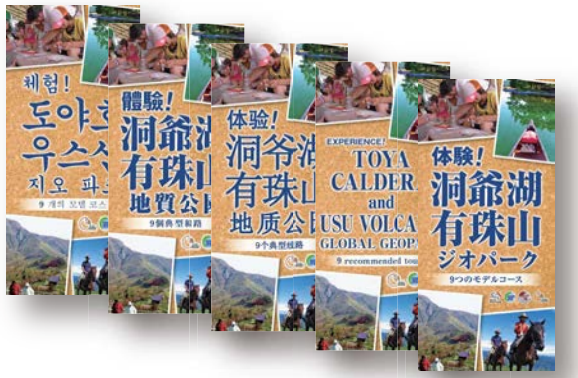
The UGGp will work with each main museum administrator to ensure that the exhibits fully present the geoscientific, natural and cultural aspects of the UGGp.

02-5-6 Multi-language presentation and universal design

To serve international visitors, the UGGp provides basic information bilingually (in Japanese and English). Some popular pamphlets and safety information, as well as leaflets and road signage alerting users to site conservation, will also be translated into Chinese (traditional/simplified) and Korean.

In cooperation with facility administrators, the UGGp will examine the implementation of universal design, to ensure that all visitors can experience the UGGp regardless of mother tongue.

Workshop of universal design working groupe in JGN



02-5-7 Website and the Internet

The UGGp official website is smartphone and tablet friendly, and the content is categorised so that different users (tourists, educators, residents) can easily find the information they are looking for. The UGGp also operates a Facebook page and a smartphone app (the Geopark Burari ('strolling') app). The app allows the user to check walking paths at the UGGp onsite.

Website Facebook Instagrum

洞爺湖有珠山ジオパークのホームページを携帯やパソコン、タブレットで、ぜひご覧ください。

Toya-Usu UNESCO Global Geopark

https://www.toya-usu-geopark.org/english/

facebook もやってます！ たくさんの「いいね！」よろしくお願いします！

https://www.facebook.com/ToyaUsuGeopark/

02-5-8 Printed matter

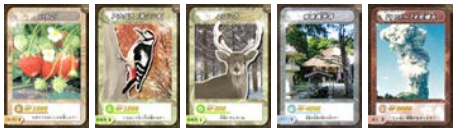
For effective printed material publication, the UGGp will decide the target readers in the planning stage.



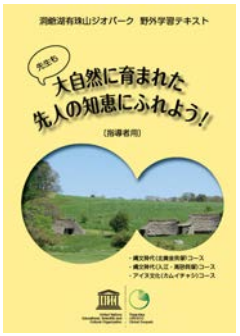










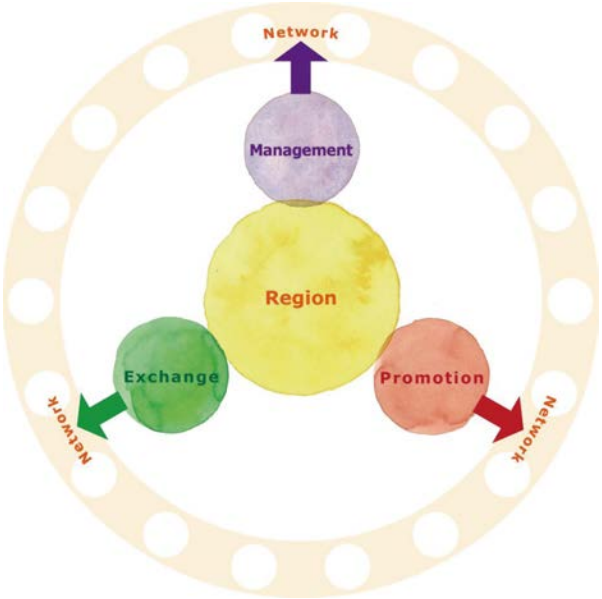



02-6 Networking

Interactions to Connect, Present, Discover and More

02-6-1 Basic concept

UNESCO Global Geoparks are distinguished by their networking practices. Since its launch in 2004, the Global Geopark programme has been developed with the close collaboration of all stakeholders. The UGGp will inherit its achievements, thereby taking advantage of networking opportunities to share ideas and to create better practices in management, advertisement and value creation. Networking is also beneficial for the UGGp to learn from other UGGps and to apply to the practices.



02-6-2 International networking

Networking activities fall into three categories according to purpose. The UGGp will engage in the following.

(1) Management

The UGGp will participate in international conferences and working group projects. The UGGp will also dispatch evaluators as requested. Our contributions in this category will include the following.

* Participating in conferences of the UNESCO Global Geopark Network and the Asian Pacific Geoparks Network (APGN)
* Contributing to GGN magazines
* Participating in working group projects in volcanology and disaster risk reduction

(2) Exchange programmes

The UGGp will meet with other UGGps and aspiring regions in the world to get to know new stakeholders and to share information. Based on the unique features of the area, the UGGp will explore opportunities to promote its expertise and skills, particularly in conservation and the utilisation of disaster remains and the Volcano Meister system. The Nevado del Ruiz region of Columbia was inspired by our practices and later launched a bid to become the first Global Geopark in Columbia. Our contributions in this category will include the following.

* Accepting overseas delegations for observation purposes under the UGGp training programme
* Geopark twinning exchanges

(3) Promotional activities

The UGGp area is an international tourist destination with over 1.3 million overnight stays from overseas annually. Taking advantage of this position, the UGGp will improve its visibility across the area to ensure that visitors recognise they are in the UGGp wherever they go. The UGGp will also join global projects in the hope of achieving a positive effect on the international prominence of Global Geoparks. Our contributions in this category will include the following.

* The presentation of Japanese UGGps at main museums, hotels and tourist information facilities
* Participating in joint promotional activities

02-6-3 Twinning with overseas UGGps

In addition to networking in the GGN and APGN frameworks, twinning with other UGGps will be instrumental for mutual learning and ongoing individual exchanges. Our contributions in this category will include the following.

* Promoting children's exchanges
* Implementing community exchanges in disaster risk reduction education
* Developing mutual sales of products related to volcano's blessings

02-6-4 Domestic networking

The UGGp will actively participate in networking with other UGGps in Japan and with other Japanese Geopark Network members. Such networking will be beneficial for the UGGp, in that volcanos are typical geo-forms in many Japanese Geoparks, so there are a lot in common. The UGGps will learn from each other through meetings and information-sharing.

Meeting with Leiqion UGGp, China, for future twinning partnership

03 GEOPARK MANAGEMENT BODY

03-1 Management Structure

03-1-1 Basic concept

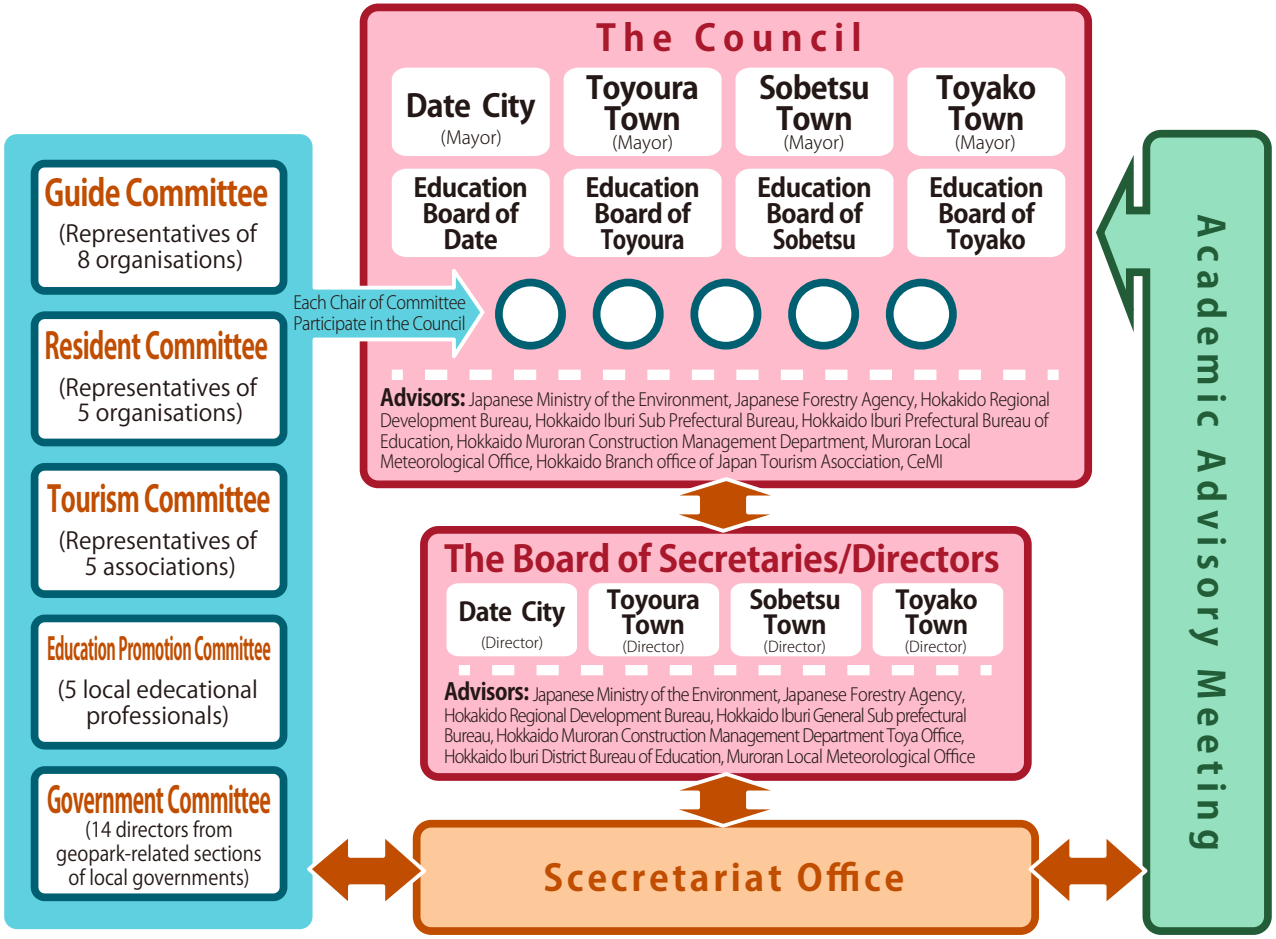
The Toya-Usu UNESCO Global Geopark Council ('the Council') is an organisation of groups from different sectors that pursue regional development through Geopark practices.

03-1-2 The Council

Members of the Council are mayors and superintendents of municipalities in the Toya-Usu UGGp, chairs of council committees (see 03-1-4), and representatives of affiliated organisations with advisory roles. For example, affiliated organisations make suggestions regarding the development of a foundation for Geopark status (see 02-5). The Council decides the directions of infrastructure development based on the opinions of those affiliated organisations.

03-1-3 Academic Advisory Meeting

Academic advisors are scientists and researchers who share scientific perspectives and suggestions regarding practices of the UGGp. Currently, the creation of a senior advisor or consultant position is being considered. If this comes to pass, the appointed person will make suggestions on the entire action plan.



03-1-4 Council Committee

There is a tourism committee, a guide committee, a resident committee, an education promotion committee and a government committee. Consisting of representatives from community groups and affiliated expert groups, each committee designs and coordinates individual projects in its field. Chairs of these committees constitute the Council and have voting rights at the Council's general meeting.

03-1-5 Board of Secretaries/Directors, Secretariat Office

The Board of Secretaries/Directors ('the Board') consists of the directors of the four UGGp municipalities. The Board is responsible for discussing and implementing the management of the Council, as well as liaising between stakeholders. The Secretariat Office consists of full-time staff and academic specialists. They are in charge of daily and administrative management. They also liaise with UNESCO, other Japanese organisations and other Geoparks.

03-1-6 Bottom-up approach

In realizing local ideas, a bottom-up approach works best. This is very significant for promoting the Geopark principle. On this basis, Toya-Usu UGGp projects are organised by a team of specialists who are chosen by the recommendation of Council committee member groups. The Secretariat Office plays a supporting role.

03-1-7 Close collaboration with local stakeholders

Similarly, collaboration with local communities and affiliated organisations is vital to promoting the Geopark principle. When special cooperation is required, the UGGp will conclude an agreement with appropriate stakeholders to assure and stimulate collaboration. The UGGp will also make an agreement when assigning Council members, including advisors and committee members. The agreement will specify the role and term of each assigned person.

Mutual cooperation agreement with Hokkaido University Museum

03-1-8 Finance

The Council's budget is funded by contributions from Toya-Usu UGGp municipalities and from grants from the Japanese government and the Hokkaido government. Income also comes from other subsidies and from book sales. Expenses of the UGGp are mainly for promotion and management. Salaries of Secretariat Office staff are paid by the UGGp municipalities.

03-2 Evaluation

03-2-1 Basic concept

For the design of more strategic plans, evaluation is essential. Particularly for better understanding and cooperation among the stakeholders, it is necessary to make seamless evaluations and to share the outcomes of practices. Evaluation involves different methods and parties. For example, revalidation by UNESCO and the Japan Geopark Committee (JGC) is an excellent method of external UGGp assessment.

03-2-2 Self-evaluation by the Council

The Council will present an annual report of Toya-Usu UGGp management and practices at the general meeting. The report will be available online, too. The Council will also survey the Council and committee member groups by questionnaire as necessary. The survey results will be used to improve practices.

03-2-3 Revalidation by UNESCO/JGC

UNESCO Global Geoparks and the JGC will make the following revalidation processes.

1) Annual report

Practices of a full year will be summarised in English in two A4-sized pages. The report initially will be submitted to the JGC secretariat office, examined by the JGC and Japanese ministries of education, foreign affairs and environment, and then presented to UNESCO. It will be a reference for revalidation. This involves different aspects of evaluation.

2) UGGp revalidation, conducted once every four years

Evaluation documents and appendixes will be submitted in English on approximately 100 A4-sized pages. This will summarise the practices of the UGGp over four years. The submitted documents will be processed by the JGC secretariat office, examined by the JGC and Japanese government agencies, and presented to UNESCO. The documents will be the basis for the revalidation process. Revalidation will be followed by a decision and recommendations. Recommendations must be addressed and acted on by the next revalidation year.

GGN revalidation mission (2013)

3) Annual survey of the Japanese Geopark Network (JGN)

This hundred-question survey is designed to look into the current status of Geopark practices. The results will be used as a reference for the JGC revalidation process.

4) JGC revalidation conducted one year prior to UGGp revalidation

A report written in Japanese with a style and content in accordance with the criteria for the UGGp revalidation will be submitted to the JGC. The report will be the basis for revalidation which grants Japanese Geopark certification. After revalidation, the decision and recommendations will be presented. Recommendations must be addressed within one, two or four years, and an action plan will need to be submitted.

03-2-4 Evaluation by local stakeholders

The UGGp will use the following methods regularly to evaluate the UGGp's local presence and the familiarity of the stakeholders with UGGp practices.

1. Questionnaire
2. Analysis of achievement reports and statistical data (e.g., number of publications distributed)

03-2-5 Evaluation of customers

The UGGp will use the following methods regularly to evaluate the UGGp's recognition among the changing needs and categories of coming customers.

1. Questionnaire
2. Analysis of achievement reports and statistical data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04 OUTLOOK OF TOYA-USU UGGp

04-1 Role of a UNESCO Global Geopark

04-1-1 Crireria for UNESCO Global Geopark

The criteria for UNESCO Global Geopark certification are as follows.

Statutes and Operational Guidelines of the UNESCO Global Geoparks

(i) UNESCO Global Geoparks must be single, unified geographical areas where sites and landscapes of international geological significance are managed with a holistic concept of protection, education, research and sustainable development. A UNESCO Global Geopark must have a clearly defined border, be of adequate size to fulfil its functions and contain geological heritage of international significance as independently verified by scientific professionals.

(ii) UNESCO Global Geoparks should use that heritage, in connection with all other aspects of that area' s natural and cultural heritage, to promote awareness of key issues facing society in the context of the dynamic planet we all live on, including but not limited to increasing knowledge and understanding of: geoprocesses; geohazards; climate change; the need for the sustainable use of Earth' s natural resources; the evolution of life and the empowerment of indigenous peoples.

(iii) UNESCO Global Geoparks should be areas with a management body having legal existence recognized under national legislation. The management bodies should be appropriately equipped to adequately address the area of the UNESCO Global Geopark in its entirety.

(iv) In the case where an applying area overlaps with another UNESCO designated site, such as a World Heritage Site or Biosphere Reserve, the request must be clearly justified and evidence must be provided for how UNESCO Global Geopark status will add value by being both independently branded and in synergy with the other designations.

(v) UNESCO Global Geoparks should actively involve local communities and indigenous peoples as key stakeholders in the Geopark. In partnership with local communities, a co-management plan needs to be drafted and implemented that provides for the social and economic needs of local populations, protects the landscape in which they live and conserves their cultural identity. It is recommended that all relevant local and regional actors and authorities be represented in the management of a UNESCO Global Geopark. Local and indigenous knowledge, practice and management systems should be included, alongside science, in the planning and management of the area.

(vi) UNESCO Global Geoparks are encouraged to share their experience and advice and to undertake joint projects within the GGN. Membership of GGN is obligatory.

(vii) A UNESCO Global Geopark must respect local and national laws relating to the protection of geological heritage. The defining geological heritage sites within a UNESCO Global Geopark must be legally protected in advance of any application. At the same time, a UNESCO Global Geopark should be used as leverage for promoting 38 C/14 Annex II – page 3 the protection of geological heritage locally and nationally. The management body must not participate directly in the sale of geological objects such as fossils, minerals, polished rocks and ornamental rocks of the type normally found in so-called “rockshops” within the UNESCO Global

Geopark (regardless of their origin) and should actively discourage unsustainable trade in geological materials as a whole. Where clearly justified as a responsible activity and as part of delivering the most effective and sustainable means of site management, it may permit sustainable collecting of geological materials for scientific and educational purposes from naturally renewable sites within the UNESCO Global Geopark. Trade of geological materials based on such a system may be tolerated in exceptional circumstances, provided it is clearly and publicly explained, justified and monitored as the best option for the Global Geopark in relation to local circumstances. Such circumstances will be subject to approval by the UNESCO Global Geoparks Council on a case by case basis.

(viii) These criteria are verified through checklists for evaluation and revalidation.

8th International Conference on UNESCO Global Geoparks at the Adamello-Brenta UGGp

04-2 Sustainable Development Goals (SDGs)

04-2-1 What are SDGs?

Sustainable Development Goals (SDGs) are action guidelines proposed by the United Nations. There are 17 goals and 169 targets. Geoparks are strongly recommended to work in line with the SDGs, as the Geopark programme is under UNESCO.

04-2-2 Targets that Toya-Usu UGGp [ACTION = Toya-Usu UGGp actions, either ongoing or planned]

NO POVERTY

End poverty in all its forms everywhere

1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

ACTION: Disaster risk reduction education

QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

ACTION: Education for Sustainable development (ESD)

DECENT WORK AND ECONOMIC GROWTH

Promote inclusive and sustainable economic growth, employment and decent work for all

8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms

ACTION: Compliance with the GGN guidelines (prohibition of trading and selling rare rocks/minerals)

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

ACTION: Strategic, sustainable tourism can be introduced.

REDUCED INEQUALITIES

Reduce inequality within and among countries

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

ACTION: Women's empowerment and Ainu culture promotion can be considered.

10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

ACTION: Stakeholders from various sectors can be committed.

SUSTAINABLE CITIES AND COMMUNITIES

Make cities inclusive, safe, resilient and sustainable

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

ACTION: Disaster risk reduction culture contributes the most to the accomplishment.

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

ACTION: Universal design can be introduced.

11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

ACTION: Cooperation with local governments

RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

ACTION: Japanese rural lifestyle can be promoted; ESD can be combined into the action.

12.B Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

ACTION: Strategic, sustainable tourism can be introduced.

CLIMATE ACTION

Take urgent action to combat climate change and its impacts

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

ACTION: Responses to volcanic disasters foster community resilience against natural disasters. ESD will also help accomplish the target.

LIFE ON LAND

Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

ACTION: Conservation efforts in collaboration with MOE

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

ACTION: Teaching of the ecosystem of Mt. Usu forests

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

ACTION: Clearing of naturalized plants

PARTNERSHIPS FOR THE GOALS

Revitalize the global partnership for sustainable development

17.3 Mobilize additional financial resources for developing countries from multiple sources

ACTION: GGN membership dues (UNESCO contributions) are appropriated to accomplish the target

17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries

ACTION: GGN practices

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

ACTION: Community partnership

04-3 Future Visions

4-3-1 Practices to date

The inception of the UGGp dates back to 2000, when the municipalities' reconstruction measures included an 'eco-museum' concept after Mount Usu erupted in March of that year. This concept led to the Global Geopark status in 2009. Over the past decade, the UGGp has taken the following historical path.

2000	**Mount Usu erupts** with no casualties. 23 billion JPY economic loss.
2001	The Organising Committee for the Lake Toya Area Eco-museum*1 is established within the Laketopia 21 framework*21.
2004	Global Geopark Network (GGN) is established with the support of UNESCO
2006	Laketopia 21 is dissolved to form the Lake Toya Area Eco-museum Council.
2007	The Japan Geopark Liaison Council is established.
2008	The Toya Caldera and Usu Volcano Geopark scientific validation committee is established under the Lake Toya Area Ecomuseum Council.
	September: JGC Evalution is made.
	December: Authorization as the first Japanese Geopark is given.
2009	The Japan Geopark Liaison Council is restructured into the Japanese Geoparks Network (JGN).
	July: Global Geoparks Network (GGN) Evaluation is made
	22 August: Authorisation as **a member of Global Geoparks Netowork** is given.
2010	The Toya Caldera and Usu Volcano Geopark Council is established in February.
2012	JGN revalidation is made. → 'Green Card for Japanese Geopark status'
2013	GGN revalidation is made. → '**Green Card**'
2015	The Geopark becomes an official UNESCO programme.
2016	JGN revalidation is made. → 'Green Card for Japanese Geopark status'
2017	UGGp revalidation is made. → '**Yellow Card**'
2018	JGN revalidation is made. → 'Green Card for Japanese Geopark status'
2019	**UGGp Revalidation will be made.**

*1 **Laketopia 21**

An organization of six municipalities located around Lake Toya, established in 1983. The purposes were to examine local resource availability and effective utilisation and to lobby prefectural/national governments for community development.

*2 **Eco museum**

A community-oriented regional development project. Under the eco-museum concept, the whole community is defined as 'roof-free museum', and local nature, culture and lifestyle are defined as 'exhibits'.

04-3-2 Strengths and Weaknesses of the current management institution

The UGGp is managed by the four municipalities that cover the UGGp area. Given that the Geopark programme serves the public, the four municipalities assign secretariat staff and cover most of the management costs. The UGGp management does not earn money from the admission fees or guided tour fees that are commonly levied at overseas Geoparks. Under these circumstances, the Strengths and Weaknesses of the UGGp management are as follows.

Strengths:

Collaboration among municipalities works excellently, achieving resilient management. It's practices are public and trustworthy, so it is easy to obtain the understanding and cooperation of third parties. The UGGp status enables a rich selection of public projects and programmes in education and disaster risk reduction.

Weaknesses:

Without the express use of a bottom-up approach, practices are likely to be entirely government-oriented. Mostly financed by municipalities, the practices always need to demonstrate public benefit, which may limit the potential of the practices. Also, it makes it difficult to earn profits from projects that may compete with private enterprise.

04-3-3 Toya-Usu UGGp in 2030: Overview and specific goals (geology, landscape protection, tourism, primary industries, etc.)

By 2030, the final year of the SDGs, the UGGp wants to be a place where everyday life is fulfilling and rewarding. The Master Plan gives an overview of the UGGp in 2030 and the actions to be taken.

- Research and Conservation -

Overview Scientific findings are applied to better prepare people for volcanic eruptions and to scientifically elucidate the geological system that ensures bountiful harvests. Geosites are tourist spots and fields for learning by communities. They are frequented by many visitors.

➡ ***Action*** Domestic and international scientists and students, Volcano Meisters and other residents will continue their research. The public, private and academic sectors will work together to promote the findings to ensure that the value of the UGGp is accurately assessed. The UGGp will establish a system that allows the scholarly significance of the Toya-Usu UGGp and its sustainable conservation guidelines to be shared among local people and outside visitors.

- Disaster Risk Reduction -

Overview Under the principle that the area shall remain well-prepared for eruptions with no casualties, the UGGp continues efforts to ensure that each resident lives safely and comfortably near Mount Usu. Know-how of the UGGp is widely shared with other volcanic regions of the world, which motivates active interactions. If Mount Usu erupts, the UGGp area will engage in practices to mitigate damages significantly.

➡ ***Action*** The UGGp will continue to sophisticate the disaster risk reduction culture in the area. Its efforts will include fostering more leaders in disaster preparedness (e.g., Volcano Meisters) and achieving a safe, volcano-resilient society through the collaboration of the public, private, academic and media sectors.

- Education at School and in the Society -

Overview Local children are the best presenters of the area, and they know best about its local charms.

➡ ***Action*** The UGGp will foster an environment where children learn from an early age about volcanic threats and benefits, and where they become familiar with local harvests of land and sea, so that they are interested in the relationship between the volcano and the yields from the volcano. In this way they will come to cherish their hometowns. Also, the UGGp will promote extended-stay field trip tours to encourage interactions between local children and visiting counterparts.

- Geotourism -

Overview There is stable tourist traffic all across the year. Some tourists are attracted by the unique value of the UGGp and return on repeat visits, while others have not experienced volcanic disasters at home but are attracted by the area as a destination where they can feel the earth changing all the time, and so they come to see it. Extended-stay geotourism is popular among people who like to stay long-term for sightseeing in the UGGp and its environs.

➡***Action*** The UGGp will remain responsive to the trends of the time and will design various activities and tours that capitalise on the attractions of the area. Also, the UGGp will continue to train tour guides and improve their skills so that visitors will be properly served. The UGGp will also develop resources for new and revised programmes, including improvements to extended-stay field trip routes.

- Business Cooperation and Local Revitalisation -

Overview Geopark practices motivate local businesses to secure new customers and to engage in stable, productive business. This makes for a vibrant community whose residents are proud of it.

➡***Action*** Local people in all the municipalities will collaborate to promote the appeal of local specialities and other attractions of the UGGp.

- Networking -

Overview The UGGp has earned high name recognition, and there are many fans outside the area. The UGGp enjoys benefits from networking with many different UGGps. There is an increasing number of Geoparks in Hokkaido, too. Networking has given us stimulating new discoveries and an objective viewpoint to review the advantages of the UGGp. This has led to attractive community-building, with all locals connected in loving hometowns.

➡***Action*** The UGGp will actively promote the attractiveness of the area, thereby enhancing domestic and international networks in terms of volcanos and Geoparks. The UGGp will share all its practices and issues with network members, and it will capitalise on and introduce those shared ideas into new practice and other business.

04-4 Priority Projects

04-4-1 Projects from 2019 to 2022

(Note: This section will be renewed every four years following the UGGp revalidation. The terms of the projects will begin in the year of revalidation.)

Towards our goals in the UGGp Sustainable Development Policies (see p. 28), the Toya-Usu UGGp will continue to pursue existing programmes that have been effective in practice and reputation, while introducing the following priority projects between 2019 and 2022.

Disaster Risk Reduction Education Empowerment (DRR-E) Project

This project aims to familiarise every school in the UGGp area with education on Geoparks and volcanic disaster risk reduction. The UGGp will enhance and enrich activities available to local schools by creating outdoor learning textbooks and Volcano Meister lectures.

Disaster Risk Reduction Culture Global (DRR-G) Project

The disaster risk reduction culture and the Volcano Meister system, two best practices of the UGGp, will be introduced and promoted globally, in cooperation with the DRR working groups in GGN and APGN.

Total Destination Development (TDD) Project

This project is designed to develop tour routes and activities that cover the whole of the Toya-Usu UGGp by reorganising existing information on nature, history, and tangible and intangible culture, as well as geoscientific information on the area before the birth of Lake Toya. Geosites/related sites, transport to those sites (public transport, rental cars, bicycles) and activities will be reintegrated, and these will be promoted online and in multilingual brochures.

UGGp-brand Inbound Promotion (BIP) Project

Leveraging the status of the area as an international tourist destination, the project is intended to promote the UNESCO Global Geopark brand and value to overseas tourists. Existing promotional materials, tools and other media will be used more effectively in branding campaigns of UGGps in the world.

In Japan, there are many Geoparks featuring the changing earth, including earthquakes or volcanic eruptions. We can say that, with a history of nine volcanic eruptions over the past 350 years, the Toya-Usu UNESCO Global Geopark is a leader of these Japanese Geoparks. In practice, the Toya-Usu UGGp firmly holds the principles to embrace and maximize the volcano's blessings, and to realize the 'coexistence of the community with the volcano' through communicating past experiences and staying well-prepared for possible disasters in the future.

Under the belief that the Toya-Usu UGGp is one of the most leading figures of all UGGps in 147 regions of 41 countries in fostering the coexistence with active volcanoes, I would sincerely appreciate the continued understanding and cooperation of local communities for our practices.

March 2019

Toya-Usu UNESCO Global Geopark Council Chairperson

真屋敏春

◆ Photo provided
Hikaru Yokoyama（P76）
Minatsu Masao Memorial Museum（P20，P21 and P22）
Takatomi Yota（P18）

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