

Man and the Biosphere (MAB) Programme, UNESCO
34th session of the International Coordinating Council
13 – 17 June 2022

National Report of Japan

There are ten Biosphere Reserves (BR) in Japan: Mount Hakusan BR (1980); Shiga Highland BR (1980); Mount Odaigahara, Mount Omine & Osugidani BR (1980); Yakushima & Kuchinoerabu Jima BR (1980); Aya BR (2012), Tadami BR (2014); Minami-Alps BR (2014); Minakami BR (2017) and Sobo, Katamuki and Okue BR (2017); Kobushi BR (2018).

The above 10 BRs in Japan are taking initiatives aiming to harmonize the conservation and sustainable utilization of ecosystem through SDGs 4, 6, 13, 14, 15, etc. as model sites for Sustainable Development, taking advantage of the unique characteristics of each region and focusing on people's livelihoods and culture based on the natural environment and local resources. In addition, they are making effort to nurture the next generation who take charge of sustainable community development by linking the nature, history, culture, and current local issues with the perspective of the SDGs as global-scale issues, in collaboration with ESD and UNESCO Associated Schools, which aim to nurture people who will contribute to all SDGs goals.

This National Report of Japan reports on the representative activities of the Japanese MAB National Committee and Commission, the BRs, and relevant stakeholders, and efforts for the Celebration of MAB 50th Anniversary and the implementation of the Lima Action Plan.

A. Initiatives taken by the Japanese National Commission and Japanese National Committee for MAB

- Based on the MAB Programme, which has just celebrated its 50th anniversary, and the recent activities and international trends of Biosphere Reserves, the Japanese National Committee for MAB (hereinafter, “the National Committee”) has been reassessing and re-examining the significance and value of BRs in Japan while inspecting and confirming the situation of the BRs in accordance with the current Lima Action Plan (hereinafter, “LAP”), and holding exchanges of views on the future prospects for the BRs as part of Japan’s UNESCO activities. Based on these discussions, the National Committee has summarized the characteristics and strengths of the BR activities in Japan and proposed to domestic BR stakeholders perspectives that should be focused on and promoted in the future.
- Based on these proposals, in order to further enhance the strengths of BRs in Japan and overcome issues they are dealing with, the domestic BR stakeholders will collaborate on support measures meeting the local needs and other matters that the BRs should address

and work to further promote the MAB Programme.

The following section has been partially excerpted from the proposals by the National Committee (March 2021) on the characteristics and strengths of BRs in Japan, based on the international BR trends such as LAP and Celebration of MAB 50th Anniversary .

(1) Strengthening the quality of BRs in Japan

- Voluntary building of networks by Biosphere Reserves
 - In 2016, the Japan UNESCO Biosphere Reserves Network (JBRN), comprising all BRs in Japan, was established as an independent collaborative organization through the consensus of the registered regions, and every year it holds its annual meeting, where all the members gather to meet. In 2017, the JBRN concluded a five-year collaboration agreement with the AEON Environmental Foundation, and it is working to spread the BR activities through cooperation with private-sector companies.

(2) Promotion of open, participatory-type activities

- Governance and open, participatory-type initiatives
 - One distinctive feature of BRs in Japan is that municipalities play a central role in managing the BRs. Through this central role taken by local governments, the BRs can secure every year a fixed amount of local government funding and also receive subsidies and grants from the national government; in comparison to the examples of other countries where NPOs and charities manage the BRs, it can be said that the financial base for BRs in Japan is stable. This system is advantageous for providing information and promoting citizens' participation in BR activities through the local governments' holding of public lectures for residents, the distribution of BR publications to all households through the town newsletters and other notifications, and so on, thus making access to residents easier.
- Sustainability of BR management
 - Under this participatory-type framework, a diverse range of stakeholders, including private-sector companies, academics, etc., participate in the councils, committees, subcommittees, meetings, etc. held by all of the BRs in Japan, and they have contact with the staff of local offices of National Government.

(3) Communicating the significance and value of BRs

- Coordination with educational activities centered on ESD
 - Almost all of the BRs in Japan collaborate with UNESCO Associated Schools, and in many cases, they have built cooperative ties with universities and research institutes.
 - Particularly at UNESCO Associated Schools, activities focusing on ESD (Education for Sustainable Development), a concept proposed by Japan, are playing a prominent role, and the contents of these activities are in high accord with the dual aims of BRs to

preserve ecosystems and promote sustainable development. The fostering of the “bearers” of BRs through ESD can be said to be one of the strengths of BRs in Japan.

B. Japan’s contributions to international activities and the ASPAC region

- Japan is supporting the projects conducted by UNESCO Jakarta Office through Japan’s funds-in-trust. In addition to holding the various SeaBRnet meetings and events for fostering human resources, UNESCO Jakarta Office is also carrying out activities to share among the regions the relevant BR knowledge in Asia and Pacific region.
- In the training webinar series aiming at strengthening networks, which was held in September-October 2021 by the East Asian Biosphere Reserve Network (EABRN), from Japan, Kanazawa University Associate Professor Aida Mammadova gave a lecture on the theme of “Using Biosphere Reserves as an educational platform to achieve Sustainable Development Goals: Challenges and Opportunities,” and Hiroyuki Matsuda, a member of the National Committee, delivered a lecture on the theme of “ESD for urban students using Biosphere Reserves.”
- The 13th Southeast Asian Biosphere Reserve Network (SeaBRnet) Meeting was held on November 15-17, 2021 at Rinjani-Lombok UNESCO Global Geopark with the support of Japanese Funds-in-Trust (hereinafter, JFIT). From Japan, Kanazawa University Associate Professor Aida Mammadova shared information on her collaboration with ASEAN and universities in other countries, and Kyushu University Associate Professor Toshinori Tanaka gave a presentation on BR governance.

C. Activities and initiatives across the nation taken by the Japanese BR communities

- In Fiscal Year 2020, “the Platform for Future Co-creation of UNESCO’s Activities” (hereinafter, the Platform) project was launched with the aim of building a system for promoting integrally the strategic preparation of a domestic network of UNESCO activity bases and the overseas expansion of advanced UNESCO activities towards the vitalization of UNESCO’s activities that contribute to solving global and local issues. Commissioned to conduct the project, the Nature Conservation Society of Japan is exchanging information for periodic reviews and sharing domestic and overseas good practices obtained through the planning and holding of workshops for domestic BR working-level practitioners aiming at promoting effective BR management and operation based on international trends.

Workshops

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| July 15, 2021 | “UNESCO MAB Program for building new ties towards a future of the coexistence between man and nature” |
| August 5, 2021 | “World Heritage Sites and Biosphere Reserves” and “Present State of Yakushima & Kuchinoerabu Jima Biosphere Reserves” |

- January 18, 2022 “Minakami Town, Gunma Prefecture — Introducing utilization cases for educational trips regarding role of BRs in regional economic cycles”
- February 21, 2022 “Introducing periodic reviews of North Devon BR” and “Initiatives for preparing periodic reviews on the Minami-Alps”

50th Anniversary MAB Programme Symposium

The “50th Anniversary MAB Programme Symposium — Thinking about the future of Biosphere Reserves” was held on December 23-24, 2021.

On the first day, under the overall theme of “Progress of the MAB Programme and BRs in Japan,” the National Committee member Hiroyuki Matsuda delivered a lecture on the “Progress of the MAB Programme in Japan up to now”; Kyushu University Associate Professor Toshinori Tanaka gave a lecture on the “Present situation and future of BR activities in Japan”; and a representative from the Tadami BR introduced the “History and initiatives of Japan’s BR network.”

On the second day, under the theme of “BRs and Geoparks,” a representative from the Tadami BR, taking the role of Secretariat of JBRN, reported on the “Activities of JBRN and the Tadami BR”; a representative from the Hakusan Tedorigawa Geopark, which is currently applying to be designated as a UNESCO Global Geopark, gave an outline of geoparks in Japan and explained the ties with the Hakusan BR. During the symposium, video messages were shown from representatives from UNESCO Beijing Office, UNESCO Jakarta Office, and the Indonesian National Committee for MAB.

- Supportive of the MAB Programme and the BR philosophy, the AEON Environmental Foundation, which was established by AEON Co, Ltd, a major domestic and overseas retailer, concluded a collaboration agreement with JBRN to: 1) preserve biodiversity, 2) promote sustainable resource utilization and development, 3) support environmental education utilizing the BRs, and 4) raise awareness about the value of BRs and spread knowledge about them. To celebrate the 50th anniversary of the MAB Programme, JBRN, with the cooperation of the AEON Environmental Foundation, prepared a promotional video (in Japanese and English) about BRs in Japan, and released it on UNESCO’s MAB Programme 50th anniversary website. This video was also provided to member countries through the EABRN and the SeaBRnet.

- On November 2, 2021, the Inter-University Network supporting Collaboration between Japan and the MAB Programme was established with the aim of realizing a sustainable future for BR registered communities by focusing on collaboration between institutions of higher education led by Kanazawa University, and including Yokohama National University, Ehime University, University of Tsukuba, Kyoto University, and Miyazaki University, and BR registered communities throughout Japan. These universities carrying out SDG-related education and research activities aiming at the co-existence of humankind and the global environment will support as far as possible under their

respective fields of responsibility the network. The aim is for the member universities to exchange information and raise the quality of education, research, and community contribution activities for achieving sustainable futures for not only universities but also the collaborating BR registered communities. In addition to BRs, the network will collaborate with UNESCO-related programs, UNESCO Global Geoparks, World Heritage Sites, and the FAO's Globally Important Agricultural Heritage Systems to contribute to the solution of problems facing each BR registered community. In the future, efforts will be made to expand this inter-university network.

- On February 5, 2022, the Shinshu ESD Consortium Presentation and Exchange Meeting, organized by the Shinshu ESD Consortium and co-sponsored by the AEON Environmental Foundation, was held online at the Faculty of Education of Shinshu University. The Shinshu ESD Consortium, which was established in 2017, has its office in the Faculty of Education of Shinshu University, and in recent years it has been striving to promote the diffusion of ESD at schools focusing on the BRs. Students and teachers from 23 schools, including UNESCO Associated Schools, participated in the meeting, and the students made presentations on the results of their ESD studies and deepened their exchanges. , a total of 14 schools and one facility from eight BRs in Japan participated, and the students made presentations on the outcomes of their projects utilizing resources come from their BR. Students from other schools also presented the results of their projects utilizing BR resources.

Details about the presentations given at the meeting are summarized on the following website:

<https://esd-nagano.org/conference2022/>

D. Others

- Even with the restrictions on activities due to the COVID-19 pandemic, BRs in Japan have been energetically holding events to promote residents' understanding and raise the visibility of the BRs. BRs in Japan have also established academic committees and are collaborating with regional universities to actively support academic activities through BRs. Some of the activities carried out by BRs in the Fiscal Year (FY) 2021 are described below.

Events and other activities

- October 16, 2021 — Aya BR

Symposium

As part of the National Cultural Festival in Miyazaki, the Aya BR held a symposium titled "Creating satoyama that connect to the future — New challenges for industry-academia-government collaboration," as well as tree planting reforestation activities as a collaboration between the AEON Environmental Foundation and local residents.

- November 25, 2021 — Aya BR

Online tour

In collaboration with the AEON Environmental Foundation, the Aya BR prepared and distributed an online BR tour, which introduced the AYA BR's environment and regional development, at EcoPro online 2021.

- November 16, 2021 — Kobushi BR

Training

With the opening of the Kobushi BR Information Center, training was held for local government staff in charge regarding the dissemination of BR information. (Training title: "Overview of Kobushi BR Information Center".)

- November 20, 2021 — Mount Hakusan BR

Lectures on Mount Hakusan BR, "Solving the mystery of Hakusan — Wonders of nature in Hakusan"

In collaboration with the Hakusan Nature Conservation Center in Ishikawa Prefecture, lectures on the Mount Hakusan BR were held for citizens in Hakusan City. Together with an introduction to the Mount Hakusan BR, the lectures introduced the rare insects that inhabit the Hakusan region and explained the erosion control and landslide countermeasures undertaken at Hakusan over many years.

- December 11-12, 2021 — Mount Hakusan BR

Community development discussion and exchange meeting

Residents involved in community activities from the various areas of the Mount Hakusan BR gathered for an exchange meeting in Katsuyama City in Fukui Prefecture. After a lecture by Kanazawa University Associate Professor Aoki, a member of the academic council, opportunities were provided for more deeply knowing the various regions, including a pot luck dinner, where foods from the different areas were introduced.

- December 11-12, 2021 — Shiga Highland BR and Minakami BR

Joint BR Fair

The fair, held at the AEON Mall Makuhari New City, featured panels explaining BRs, specialty products for sale, tourism promotion information, and workshops to raise awareness of BRs and introduce the alluring attractiveness of both BRs. Opportunities were also provided for visitors to gain firsthand experience coming into contact and learning about nature in the BRs.

- January 22-23, 2022 — Yakushima BR, Sobo/Katamuki BR, Aya BR

BR Fair

Held at the AEON Mall Fukuoka, the BR Fair featured pamphlets, posters, and videos introducing the three BRs in Kyushu and describing the activities undertaken at the BRs.

- February 26, 2022 — Minami-Alps BR

Raicho (Japanese Rock Ptarmigan) study meeting (online)

Targeting the Minami-Alps Raicho Supporters and the Nagano Prefecture Raicho Supporters,

the raicho study meeting was held online as a follow-up for providing the latest information about the Japanese rock ptarmigans; 53 members participated.

○ March 5, 2022 — Sobo-Katamuki-Okue BR

Information exchange meeting for community groups

An information exchange meeting was held for local community groups to share information about their activities and further develop them by creating exchanges. An online exchange of views was held to discuss how raising awareness of BRs through outdoor activities, which have attracted attention during the COVID-19 pandemic, and environmental preservation and utilization can be linked.

○ March 20, 2022 — Aya BR

Establishing a permanent exhibition

The Aya BR prepared walking routes and maps for the “Aya Town AEON Forest,” a tree planting project conducted in cooperation with the AEON Environmental Foundation, and a permanent exhibition corner (illustrated information boards, explanatory touch screen panels, video monitors, etc.) was set up in the AEON store in the AEON Mall Miyazaki for learning about the efforts and tree planting activities in the AYA BR.

○ March 29, 2022 — Kobushi BR

Kobushi BR publicity video

A PR video was prepared and uploaded to the Kobushi BR website with the aim of promoting tourism by showing the nature, traditional arts, cultural assets, and other attractions of the Kobushi BR as well as promoting industry utilizing the region’s resources by the rediscovery of the value of the region.

○ Others — Odaigahara-Omine-Osugidani BR

Since the extension of the Odaigahara-Omine-Osugidani BR registration in 2016, the municipalities and towns making up the BR council have been making their own respective efforts for promoting the BR. A supplementary reader of social studies was prepared by Odaigahara Town in Mie Prefecture, and BRs are featured in it.

Academic activities

○ Aya BR: Industry-Academia-Government collaboration efforts

A project on creating natural gardens aiming at the sustainable management of gardens was launched with the collaboration of local citizens, the Tokyo University of Agriculture, and Minami Kyushu University.

○ Aya BR: Presentation of the BR initiatives at the 10th International Congress on Advanced Applied Information (IIAI-AAI) (July 11-16, 2021)

Yuriko Yamamoto (Graduate School of Social Systems Science Chiba Institute of Technology, Japan) and Akira Yamazaki (Graduate School of Social Systems Science Chiba Institute of Technology, Japan) introduced an initiative titled “Construction of Environmental Education

Program Utilizing Project & Program Management Framework.”

- Aya BR: Presentation at the Ecological Society of Japan (March 15, 2022)

A poster presentation on a decade of progress at the Aya BR was given at the general lecture poster presentation session at the 69th Annual Meeting of the Ecological Society of Japan.
- Aya BR: Annual report meeting on collaboration projects with universities (March 16, 2022)

The FY 2021 report meeting was held on the results of surveys and research conducted in collaboration with regional universities. A total of seven projects were covered, five with Miyazaki University and two with Minami Kyushu University.
- Minami-Alps BR: Science Committee meetings (Online: March 17, May 19 2022)

Meetings of the science committee (8 members) were held to receive scientific advice on inquiries to the Central Japan Railway Company, which is moving ahead with preparations for a Chuo Shinkansen Line that will cut through the Minami-Alps BR, regarding environmental protection. The committee has affirmed that it will have similar opportunities to monitor the progress of the construction, confirm the protection of the environment, and ensure better environmental protection measures.
- Mount Hakusan BR: Provision of materials to training program

The Mount Hakusan BR secretariat provided slides and other materials for use in a training program conducted by Kanazawa University on the theme of “Biocultural diversity learned from BRs.”
- Mount Hakusan BR: Contributions to university education (November 29 to December 3, 2021)

Ten international students from the University of Tsukuba visited the Mount Hakusan BR as part of a “World Heritage Exercise.” As a regular course at the university, students study about environmental preservation activities and traditional culture while visiting settlements in the Mount Hakusan BR. All of the members of the BR secretariat participated and cooperated in the exercise, which included explanations in English on the BR activities, and deepened exchanges with the students.
- Mount Hakusan BR: Holding of academic subcommittee meeting (February 22, 2022)

The Mount Hakusan BR Council established an academic subcommittee comprising nine experts from inside and outside the region as an advisory body, and the subcommittee is holding periodic meetings. At the most recent meeting, members assessed the achievement of goals during the past year set forth in the management and operation plan for the BR and discussed improvements for the future.
- Mount Hakusan BR: Mount Hakusan BR Council academic research presentation meeting (May 16, 2022)

The Mount Hakusan BR Council is providing research grants for research on the preservation of the natural environment within the BR area and the protection of the regional culture. At the report meeting held at the time of the Council, the research results of four grant research projects conducted up to the present were reported.

○ Mount Odaigahara, Mount Omine & Osugidani BR : Provision of materials for training program

A video and other materials were provided for use in a training program conducted by Kanazawa University on the theme of “Biocultural diversity learned from BRs.”

○ Mount Odaigahara, Mount Omine & Osugidani BR : Monitoring survey of forest dynamics

A monitoring survey of the forest dynamics and a camera trap investigation of wildlife in the core *Abies veitchii* forest in Mt. Misen (Tenkawa-mura) and the mixed needleleaf and broadleaf forest in Shimokitayama-mura Zenki were carried out with the cooperation of parties in Nara Prefecture, particularly Nara University of Education. The results were included in papers published in academic journals.

○ Shiga Highland BR: Collaboration with Shinshu University Faculty of Education

Based on a comprehensive collaboration agreement between Yamanouchi Town in Nagano Prefecture, one of the towns in the Shiga Highland BR council, and the Faculty of Education of Shinshu University, the Institute of Nature Education in Shiga Heights, Shinshu University, has been providing specialist assistance for academic surveys and the management and operation of the natural environment in the area and providing support for ESD activities to educational institutions. The Institute’s research on the BR covers wildlife monitoring surveys, basic surveys on the conservation and protection of native species, monitoring of forest ecosystems, and so on, and some of the results of this research are published in the *Bulletin of the Institute of Nature Education in Shiga Heights, Shinshu University*. In 2021, one related research paper was published (in FY 2021, 2 were published [March 2022]).

○ Sobo, Katamuki and Okue BR : Natural environment scientific survey

A scientific survey on the natural environment of the quasi-national park area, including the core and buffer zones, on the Oita Prefecture side, was conducted during the period FY2017-FY2019. The survey confirmed after a hiatus of dozens of years the situation of insects and vascular plants and uncovered new knowledge about their distribution. The survey results became basic materials for the revision of the *2022 Oita Prefecture Red Data Book*.

○ Tadami BR: “Mother Nature Capital, Tadami” research grant project

Tadami Town provided grants (publicly-offered academic research support; continuing since FY2012) to researchers conducting research surveys on the natural environment, biodiversity, folklore, culture, and so on in the town. In FY2021, of the seven proposals, three were selected for grants. Results of the research were presented by video online due to COVID-19 pandemic restrictions in February-March.

- Tadami BR: Numanotaira comprehensive survey

In order to study management measures (for environmental preservation, protection, utilization) in Numanotaira (buffer zone), which is situated in the northeastern part of Mt. Asakusa in the northwestern area of the Tadami BR, for a four-year plan from 2017, a comprehensive scientific survey (organized by Tadami Town) was conducted on the natural environment, biota, and ecosystems in the region. In 2021, a supplementary survey was conducted, and the draft of a report on the results was prepared. The report was issued in May 2022. A meeting with relevant organizations on the report results is scheduled to be held sometime in 2022, and decision will be made on management guidelines based on the results of the survey.
- Tadami BR: Survey on native iwana mountain trout distribution

A specified survey of habitat rivers was conducted on the native whitespotted iwana trout, which has become endangered because of the shrinkage of its habitat due to river discharge projects in the past, with the aim of conserving and protecting the iwana's population and habitat.
- Tadami BR: Survey on opening of Route 289 "Hachijuuri-Goe"

Regarding the Route 289 "Hachijuuri-Goe" section, which passes through the buffer zone in the northwestern part of the Tadami BR, cooperation was sought to the Fukushima Prefecture Minami Aizu Construction Office, the main entity for the construction, to ensure that the opening of the route would conform to the principles and aims of the BR. To complement the self-assessment survey conducted by the Minami Aizu Construction Office, Tadami Town conducted an independent survey (survey on Golden Eagle, Mountain Hawk Eagle large birds of prey, survey on road crossing by rare amphibians) with the cooperation of the Tadami BR coordinating committee. The results of the surveys were shared with the Minami Aizu Construction Office and are used for the study of countermeasures.
- Tadami BR: Activities of Tadami Beech Center

The Tadami Beech Center, which is a BR promotional organization run by Tadami Town, manages and operates the Tadami Beech and River Museum (natural history museum) and the Furusato-kan Tagokura (folk museum on settlements submerged by dam reservoir). In FY2021, four special exhibitions (spring plants, Lilium rubellum, insects in beech forests, birds of prey) were held at the museum. Lectures and observation tours are also held at the museum and center.
- Tadami BR: Tadami BR Coordinating Committee meeting (online: January 25, 2022)

A meeting of the Tadami BR coordinating committee (17 members), an advisory body for the Tadami Biosphere Reserve Governance Board, was held to seek scientific advice regarding issues related to the opening of the Route 289 "Hachijuuri-Goe" section, which passes through the buffer zone in the northwestern part of the Tadami BR, and the handling of dam sedimentation.
- Tadami BR: Folk art implements storage project (Tadami Mono to Kurashi Museum)

A storage facility was constructed to house and preserve 2,333 items from the “Collections of Production Tools and Working Clothes,” nationally designated tangible folk cultural properties. In addition, in July 2022 the Tadami Mono to Kurashi Museum is scheduled to open through the integrated preparation with the Aizu Tadami Archaeological Museum.

○ Yakushima & Kuchinoerabu Jima BR : Society of Yakushimaology Conference (December 4-6, 2021)

Sponsored by the Society of Yakushimaology and co-sponsored by the Yakushima Environment and Cultural Village Center and the Kyoto University Wildlife Research Center, the 9th Society of Yakushimaology Conference was held online and at two local sites for public viewing. The conference included two theme sessions (presentations on 11 topics with comments by three specialists), a satellite forum, presentations by students from the Yakushima High School environment course (9 topics), general oral presentations (8 topics), and excursions.

○ Yakushima & Kuchinoerabu Jima BR : Scientific activities report (Society of Yakushimaology No. 8)

Based on presentations at the Society of Yakushimaology Conference in 2020, *Society of Yakushimaology No. 8* includes reports on presentations at two theme sessions (7 topics in total and two topics the general discussion), presentations by students at Yakushima High School (6 topics), and a general oral presentation (1 topic).