

Cultural and Biodiversity Conservation of Urban Protected Areas in Japan

~Collaborative Management of the Central Government, Local authorities and Ordinary Citizens ~

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I Definition of Urban Protected Areas by IUCN

According to the IUCN Urban Specialist Group's definition, Urban Protected Areas are protected areas situated in or at the edge of larger population centers managed by governments at national, state or provincial, or local levels, or by NGO's, businesses, and some are collaborative efforts. The IUCN also describes the characteristics of Urban protected areas as follows (Claremont 2014):

1. Receive large numbers of visitors, including frequent and daily visitors. Those visitors are also very diverse ethnically and economically.
2. Relate to numerous acting bodies in the urban arena, including government decision-makers, communications media, opinion leaders, and key educational and cultural institutions.
3. Are threatened by urban sprawl and intensification of urban development.
4. Are disproportionately affected by crime, vandalism, littering, dumping, and light and noise pollution.
5. Are subject to such urban edge effects as more frequent and more severe fires, air and water pollution, and introduction of invasive alien species.

Urban protected areas are very important because they provide ecosystem services, protecting species, and contributing to the local economy with income from tourism. They indeed provide good opportunities for large numbers of urban people to experience nature, including many who may not be able to visit more remote protected areas.

This IUCN definition is quite understandable, but I have an impression that in many Asian countries including Japan, land use system of urban protected areas themselves are more complicated, as multiple land use of urban protected areas is quite common. An example is national parks of Japan, which are considered as typical urban protected areas.

As you know, Yellowstone National Park, the first national park in the world, was established in USA in 1872 for the purposes of ecosystem conservation and outdoor recreation. Since then so many national parks have been established in different countries. However, the types and their management styles vary in different countries. Simply I will try to classify world national parks into 5 categories (Oyadomari 2008)

1. American type national parks: Normally the established areas are used solely for park purposes; that is for ecosystem conservation and outdoor recreational use for the public enjoyment and most areas are federally-owned.
2. Switzerland type national parks: National Parks are for scientific purposes and recreational use is strictly controlled.
3. Japan and England type national parks. National Parks are designated regardless of land ownership and multiple land use is permitted within the areas.
4. African type national parks: Similar to American type, but most visitors are not local people or national citizens but foreign visitors on international tourism.
5. Combinations of above types: Within the country, some national parks are American type and some are Japan and England type.

II Land Use System of Japan

Today, Japan is a crowded land of about 127.3 million people as of 2013. With such a dense population and the need for agricultural and other economic uses of land, a large area of land has been designated as national parks. As of 2015, the national park system comprises 32 national parks, 56 quasi-national parks, and 313 prefectural natural parks covering

more than 5,434,469 ha of land in 47 prefectures including Tokyo-to, Hokkaido, Kyoto-fu, and Osaka-fu (Ministry of the Environment 2015).

Unlike the kind of magnificent natural beauty often seen in American national parks such as Yellowstone, Grand Canyon, and Yosemite, Japan's national parks lack expansiveness and wilderness, but their landscapes are varied and fine-textured. They include mountains, lakes, waterfalls, sand dunes, beaches, and coral reefs. Besides those natural landscapes, Japanese national parks also include various types of man-made landscapes such as old villages, paddy fields, terraced orchards, and artificial forests, and such traditional forms of land are protected as well as natural landscapes. Thus, the uniqueness of Japan's national parks is that they include many man-made landscapes, such as historical sites, agricultural areas, and municipalities. Since the beginning of Japan's history, Japanese have lived and used the land for agriculture, forestry, and other economic purposes, as well as for outdoor recreation. Hence, almost every possible bit of land has been cultivated and few areas are untouched.

In the United States, more than 95 percent of land within national parks is owned by the Federal government, but only 61.2 percent of Japan's national park is under federal ownership, 12.4 percent is other public land, and the remaining 25.7 percent is privately owned. Therefore, the national park land is naturally subject to heavy use and constantly encounters exploitation from other land uses.

According to the National Land Use Planning Law, land in Japan is classified into five categories: urban, agricultural, forest, natural parks, and nature conservation areas. However, natural park areas (national parks, quasi-national parks, and prefectural natural parks) essentially include urban and agricultural and forest territory, as well as nature conservation areas; yet each area is under different jurisdiction, resulting in the involvement of many Ministries and Agencies. For example, agricultural areas are controlled by the Ministry of Agriculture, Forestry and Fisheries, forest areas by the Forest Agency, urban development and highway construction within national parks by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). Clearly, the Ministry of the Environment faces difficulty in coordination and adjustment of park policies. Thus, national park management policies in Japan are always the products of negotiation and compromise.

III Collaborative management of Japan's National Parks

In Japan, 45 out of 47 prefectures, 187 cities, 142 towns and 48 villages have been involved with 32 national park managements. The following are some examples of national parks situated in or at the edge of larger cities. (Fig.-1)

Fig. 1 National Parks and Their Populated Urban Areas

No.	National Park	City involved	Population
1	Shikotsu-Toya	Sapporo	1,930,496
2	Kushiro-shitsugen	Kushiro	180,160
3	Towada-Hachimantai	Aomori	298,416
4	Nikko	Nikko	88,363
5	Joshinetsu-Kogen	Nagano	386,065
6	Chichibu-Tama-Kai	Tokyo	13,115,747
7	Ise-Shima	Ise	131,670
8	Setonaikai	Kobe	1,553,789
9	Setonaikai	Okayama	704,572
10	Saikai	Sasebo	262,093
11	Aso-Kuju	Yufu	35,836
12	Aso-Kuju	Beppu	704,572
13	Kirishima- Kinkowan	Kagoshima	609,250
14	Iriomote	Ishigaki	48,816

(Source: Local Administration Bureau, the Ministry of Internal Affairs and Communications, "Population of Cities" (2014))

In this context, many national parks in Japan are considered Urban Protected Areas. Furthermore, a total number of more than 300 million people visited Japan's national parks in 2015, which is more than the number of the recreation visitors of the US National Parks which was 292,800,082 in 2014. Among 32 national parks in Japan, 24 national parks are visited by more than one million tourists per year, and 6 national parks receive more than 10 million visitors per year. The latter are Shikotsu-Toya(Sapporo), Nikko(Nikko), Joshinetsu-Kogen(Nagaono), Chichibu-Tama-Kai(Tokyo), Fuji-Hakone-Izu,(Hakone) Setonaikai(Kobe, Okayama), Aso-Kuju(Yufuin) , Kirishima-Kinkowan(Kagoshima) national parks.

Most national parks in Japan are, therefore, threatened not only by urban sprawl of adjacent cities , but also by intensification of urban development and tourism impact within national parks. Thus, the Ministry of the Environment needs collaborative management involving local people, NGO's and other private sectors as well as prefectures, cities and towns.

IV Collaborative Management of Nikko National Park

Let me now elaborate on one successful example of collaborative management of a national parks namely, Nikko National Park.

Nikko national park is one of the oldest national parks in Japan. It was designated in December, 1934. It is situated about 150km north of Tokyo, about 2 hours by train. Nikko National Park has also rich tourism resources such as famous historic shrines and temples, hot springs, mountains, lakes, marshes and waterfalls. Nikko is also designated not only as a national park, but also was registered as a World Cultural Heritage site and a Ramsar site. For its relatively easy access from Tokyo and variety of its attractions, Nikko National Park attracts not only residents of Tokyo and Kanto region, but also many tourists from abroad. In order to explain the collaboration in point, let me divide Nikko National Park into 4 areas and explain how each area has been managed by different acting bodies and sectors cooperatively.

(1) World heritage area

The Nikko Toshogu Shrine, Futarasan Shrine and Rinnoji Temple and the surrounding forests are registered as a UNESCO World Cultural site. Toshogu Shrine is the mausoleum of Tokugawa Ieyasu, the first shogun of the Edo Shogunate. It was built in the 17th century and because of its historical and cultural value, it attracts many visitors. This area is the most popular spot in Nikko National Park and collaborative management of the Park is essential to control its overuse and provision of tourist services. Although this area is designated as a national park by the Ministry of Environment, this area is also a World Heritage site managed by the Cultural Agency of the Ministry of Education, Culture, Sports, Science and Technology; therefore, those two different central government's Ministry and Agency's collaboration is necessary. In addition, Tochigi prefecture and Nikko City have also managed the area according to their prefectural and city planning. Furthermore, the shrines and temples are very influential in decision-making process of area management, as the area is owned by them privately. Such influential power sometimes causes trouble. For example, when the area was registered as a World Heritage site, lots of tourists began to visit those shrines and temples, and the Rinnoji Temple constructed a new parking lot within their land, but advice of the concerned governments and agencies was of no use. In general, however, those shrines and temples promote cultural and natural heritage conservation for the sake of tourism. Many hotels, inns and gift shops in this area have received economic benefits from religious and heritage tourism as well; therefore, they are quite supportive of the shrines and temples for their cultural and natural heritage conservation of this area. Townspeople also help many traditional events and religious ceremonies held by those shrines and temples such as horseback archery and Yayoi festival in spring by enactment using samurai costumes. They would like to bequeath such traditional events and ceremonies as well as their traditional lifestyle to their future generations. Local people also do various volunteering activities such as cleaning streets and maintaining free resting houses for visitors and taking care of 70 stone statues of Jizo at Kanmangafuchi by cleaning and changing their woolen caps every year. This Kanmangafuchi was formed after an eruption of Mount Nantai, and now this is known as a quiet promenade among foreign tourists. Local people also help maintain countryside landscapes of this area by cutting

Japanese pampas grass as volunteer activities . One NGO group uses this area for environmental education too. Thus, this area has been managed by many different private groups such as shrines and temples, hotels, inns and gift shops, local communities, cultural and nature conservation groups as well as the central government and local authorities.

(2) Outstanding natural beauty of Oku-Nikko

Oku-Nikko is a few kilometers north of the main Nikko, and is famous as a hot springs resort area. Oku-Nikko has many attractive spots such as Senjogahara and Mt. Shiranesan(2,578m), the highest mountain in the Kanto Region and northward.

This area has the oldest visitor center built by the Ministry of Environment and currently the Natural Parks Foundation manages the visitor center by government designation. This is our University Study Field, and every summer our university students have an internship program here for two weeks without using any electronic appliance. Mobile phones, PCs, TVs, and rice-cookers, etc., are not allowed. Here, students do cleaning of latrines, garbage picking, weeding of exotic invasive plant species, scientific research, visitor center information service, interpretation, etc. Local volunteer groups also help with interpretation and litter picking and weeding. Hotels and shop owners of this area also successfully hold ‘Forest Music Concerts’ near the lake at the end of every summer in order to attract more visitors. Furthermore, they organize some events for off-season activities such as snow festivals, winter fireworks, sky watching tours, ice sculpture festival and family festival during the winter. Moreover, female owners of Japanese inns in this area make special sake called “Kifujin (Noblewomen)” named after one famous white birch tree which stands alone in the Odashiro marsh for more than 80 years. Those female innkeepers also design new gifts using local agricultural products. Their cooperative management in this area is quite successful.

(3) Kinugawa River, Nasu and Shiobara

Further north, there is Kinugawa Hot spring resort along the Kinugawa River. This area also has many scenic valleys and waterfalls. Every year, local people organize a cherry festival using a unique costumed mascot character and attract many tourists. Though this area is famous for hot springs which attract the more elderly, recently they began new programs for young tourists such as canoeing, rafting, kayaking, and hot air balloon as well as nature walking and mountain bike tours. Unfortunately, however, banks of the Kinugawa River collapsed due to heavy rains from a storm last September and a residential area was flooded. More than 90,000 people lost their homes.

In the northern part of the park, there is the Nasu Mountain Range, one of which is Mt. Chausudake (1,915m) with very dynamic and panoramic views from its top, and sunrise views from the National Vacation Village resort are spectacular. There is also a new tourism spot called Nasu Heisei-no-mori forest. This is located in Nasukogen which was once managed as part of the Nasu Imperial Villa until 2008. It was opened as “Nasu Heisei-no-mori Forest” to general public by the will of the Emperor and the Empress for people to get in touch with its nature. The forest has a wide variety of flora and fauna and guided walks are conducted by the designated NGO for the visitors with experienced interpreters. In the Shiobara area, there are some hot spring resorts and Happogahara is famous for Japanese azalea communities. Here, local people also provide volunteer guides and interpreters for tourists. They train such interpreters by themselves.

(4) Kirifuri Kogen

Kirifuri-kogen Heights is a highland about 1,200 meters above sea level. Kirifuri-no-taki Falls, 75 meters high, is famous as one of the three most beautiful falls in Nikko. Kisuge-daira is famous for Nikko alpine day lilies with yellow flowers from early summer to midsummer. From the Kirifuri-kogen, you can enjoy a short walk around Kisuge-daira. By walking the Maru-yama hiking course, you can enjoy fine views of Nikko city and the Nikko mountains. There are some campsites.

Kisuge-daira is located about 8km north of Nikko city, and its altitude ranges between 1,300m and 1,600m with a

field of different kinds of flowers from spring to summer and early autumn. There is a 1,445 step stairway called Tenku Kairo (corridor in the sky), and you can get a certificate once you climb all the way to the top. From the lookout a panoramic view of the Kanto Plain, Mount Fuji and Tokyo Skytree can be seen on a clear day. This Kirifuri Highland Kisuge-daira Park is managed and operated by the Natural Parks Foundation as a Nikko city-designated operator.

Nikko is one example of collaborative management of urban protected area, which is designated as a National Park near metropolitan areas or densely populated areas. There are many other examples like this, such as Fuji-Hakone-Izu national park in Kanagawa prefecture and Meiji-no-mori Takao Quasi-national park in Tokyo. Fuji-Hakone-Izu national park is quite similar to Yangmingshan national park in Taiwan, as it includes both historic and natural heritage including volcanoes and hot springs. Especially, Hakone has been designated as a Geopark by UNESCO. Recently one area was off-limits due to volcanic eruption. Hakone is the location of a noted Shinto shrine and there are many historical sites as well. Again local volunteer groups are actively involved in park management by publishing guidebooks as well as interpretation services and organizing various events for tourists.

Another example is Meiji-no-mori Takao Quasi-national park in Tokyo. Meiji-no-mori Takao quasi national park is managed by the Tokyo metropolitan government and cities and towns covering the park. This is an urban protected area within metropolitan Tokyo. Mount Takao is very popular among people residing in Tokyo, as they can easily go on a picnic throughout the seasons. Recently, Hachioji city constructed a very unique museum called Takao 599 Museum and attracts lots of tourists. In addition, using a famous architect, Mr. Kengo Kuma, the entrance area was renewed. This unique designed building also attracts not only naturalists but also the people who are interested in his architectural design. The new museum is very unique and is worth visiting. In this way, in every place, a natural park is connected to urban areas and national parks play a role to provide outdoor recreation to city people.

It must be also mentioned that Japan has a good Urban Protected Area system, named Important Preservation District for Groups of Traditional Buildings, and is managed by the Cultural Agency of the Ministry of Education, Culture, Sports, Science and Technology. This is a system of designating historic towns to preserve them the way they were. In order to conserve the buildings just like the old days, local people residing the town regulate their daily activities and lifestyles in many ways. Thus, in order to designate the areas, the government must obtain major consensus and cooperation and supports of local people after its designation. However, many of these places became very popular tourist spots after such designation. In general local people welcome this designation. Some of them were even registered as World Cultural sites, and the local people enjoy the tourism income generated thereby.

Thus, in Japan, collaborative management of various sectors is the key for successful conservation of urban protected areas. However, there are some problems left for this collaborative management. Namely,

1. The Central government does not want to transfer their power entirely.
2. Volunteering is very popular in Japan, but there are fewer young people joining volunteer work. Lots of volunteers are old who are called 'active silver,' over 50 years or more.
3. Power balance among collaboration groups is difficult. Sometimes, the most Influential group will take initiative to control management.
4. Sometimes, no one knows the responsibility of the management! This role assignments should be done by the government, but sometimes, they have no idea how to control the local groups, as often the government officials stay in this area for a couple of years, and they are again transferred to other places. Thus, the local people know more about the situation than the government officials, and the government officials have no control over this area management.
5. In Japan, human relationship is considered vertical, and young people must respect the elderly. This tradition sometimes causes failure of transferring their responsibility and young people cannot do change the management in a revolutionary way.
6. Different values of different sectors sometimes clash over conservation policies and local development. In general, the Central government and local authorities try to respect the ideas and comments of local people for the

management of urban protected areas, but sometimes it is difficult. One example is the Moll of Kawagoe Historic districts. This design was determined by the local people, but the professional planners are puzzled by this design.

V National Trust Movement

As you know, the British National Trust was established in 1895 for the sake of outdoor recreation and countryside conservation. In Japan, we started this movement in the 1960's, and many cultural and natural heritages have been protected by citizen movements. I worked for the Association of National Trust in Japan for more than 10 years, and now 34 local Trust groups joined the Association of National Trusts in Japan and have been protecting their own properties by themselves. They purchased the land to protect them, or they had agreements with land owners of the area for protection. This is a good system for conservation of Urban Protected Areas including both cultural and natural heritage areas.

Green open spaces within urban areas are protected by urban related legislation such as Urban Planning Law, Urban Parks Law, the Cultural Property Law and many more nature conservation related legislation. Natural areas are protected by Forest Law, Natural Parks Law, and Nature Conservation Law. National trust groups purchase the spaces which are not covered by those laws for conservation. In Japan, unlike Britain's National Trust, many small national trust groups manage their own areas, in collaboration with local authorities and other local communities. Sometimes, local communities formed the National Trust group to protect their towns. Thus, this is also a good example of collaborative management of Urban Protected Areas in Japan.

VI Conclusion

Finally, let me remind you of the concept of national parks in USA and other countries. The first US national park was established for ecosystem conservation and outdoor recreation for public enjoyment. However, the concept of Britain is different. They consider national parks as outstanding natural beauty and Amenity that all British people are supposed to have. National Parks are basic rights for the people to have for living. Thus, British national parks are classified as Category V and they are man-made countryside where people live and do daily activities for living. Japanese national parks are also like the British type and people live in national parks and do daily activities (Oyadomari 2010).

IUCN listed Royal National Park in Australia as one example of Urban Protected Areas. This national park was established after Yellowstone National Park, and is the second oldest national park in the world. However, its concept is somewhat different from Yellowstone. It is more 'urban park' than natural wonder of Yellowstone National Park. It is indeed Urban Protected Area. According to the history of Royal National Park, it was established as a park for public health and recreation, and ecosystem conservation was not emphasized at that time. Thus, many exotic species of fauna and flora were introduced into this area to create a British landscape for immigrants from Britain to enjoy. This park was created for city dwellers of Sydney for refreshment and relaxation, and to escape from congested and polluted city environment. In Australia, the national parks established in the early days are more or less British type national park where people reside, do farming and other economic activities for living (Oyadomari 2007).

In this sense, since the 19th century, there are two streams of national park concepts: One is Yellowstone, and the other is Royal national park type.

When the first World Conference on National Parks was held in Seattle, Washington in 1962, many countries tried to adopt American type national park system. In 1972, when the 2nd Conference was held at Yellowstone National Park, still American type park concept was dominant. However, from 1982 when the third Conference was held in Bali, Indonesia, the situation started changing. That is, the British type concept began to be reexamined, because the president of Indonesia at that time made a speech relating that local people within national parks should be considered as well as precious fauna and flora of national parks. Since then, many countries shifted their park management system from

established park system to designated park system, namely that multiple land use is allowed in national parks, and it is permitted that local people live in national parks and participate in park management with the Government's Park Service. That is the beginning of collaborative management of national parks.

Japan adopted this designated national park system, since its establishment in 1931. This is a reasonable land use for our country which is small and densely populated. Thus, for a long time, collaborative management of urban protected areas or national parks has been essential, and I believe that our beautiful landscapes have been formed and maintained by the involvement of local people within the national parks, and local characteristics of culture and landscapes are formed by wisdom of local people who cope with topography, geography, weather and other natural conditions for their survival and living. I think that national parks and urban protected areas of many Asian countries have been managed in the same way as in Japan. Thus, we have more advanced experience and skill to cope with Urban Protected Area conservation. I hope we should review our traditional management of land use and conservation of national parks more carefully, and investigate collaborative management of parks suitable to our societal conditions.

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