

COMPARATIVE STUDY ON KOREA AND JAPAN URBAN PARKS CONCERNING THE DEVELOPMENT POLITICS AND TRANSITION OF SYSTEM

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ABSTRACT: Urban parks are open space with trees that provides a place of relaxation and peace for residence. Urban parks have been rapidly constructed in Korea since the Seoul Olympics (1988). On the other hand, In Japan the supply of urban parks is sufficient, and the maintenance and utilization of park that have been stocked during the period of high growth has become a problem. We thought it necessary to compare the parks of Korea and Japan during the period when the environment changed significantly after the Seoul Olympics. This purpose of study is to clarify the characteristics of Korea and Japan parks by comparing them. As a result of this study, the following features were clarified. In the transition of urban park politics, we found that there are similarities in responding to issues such as "diversifying needs", "park master plan", and "private entry". In both Korea and Japan, the important direction of future park policy is considered to be "use and maintenance".

Keywords: Urban Park, Comparison, Development Politics, Korea and Japan

1. INTRODUCTION

Both Korea and Japan, which are adjacent to each other, have developed while experiencing the period of high growth after World War II. However, in the future, both countries will continue to experience a declining birthrate and aging population, and due to this effect, the population will decline not only in rural areas but also in urban areas, making economic growth again difficult.

National policies in the future will require international efforts to address environmental issues such as biodiversity and disaster prevention efforts such as large-scale earthquakes. As a solution to these policy issues, it is also meaningful to focus on the park policy, which is a green base, and proceed with the study.

In this paper, based on the future changes in the social situation in Korea and Japan, such as the declining birthrate and aging population, we surveyed the park system in Korea and Japan and the actual usage situation.

By conducting a survey, we examined the direction of the park system and the points to keep in mind when formulating a plan in anticipation of future national trends.

2. OVERVIEW OF STUDY

In this section we summarize the overview of existing research and describes the focus our study. Lee [1] 's study compared the awareness of green in Korea and Japan. They conducted a questionnaire

survey on the awareness of greenery to the residents of Daegu City. According the survey, as word associated with green, Daegu citizens associate it with "green(color) and blue(color)" and Sapporo citizens associate it with "park".

As word associated with park, Daegu citizens associate it with " a place of rest" and Sapporo citizens it with "Child". Song [2] summarized the history of the development of the park system in Korea and Japan by examining matters related to urban parks in Korea and Japan from 1870 to 1980.

Kang [3] conducted a survey focusing on the relationship between the development of shrines and urban parks under the Japanese rule. Song et al. [4] compared the flow of major policies concerning urban parks in Korea and Japan since the 1970s.

Kim et al. [5] grasped the actual conditions of the urban park in Ilsan New City and investigated how park users evaluated this urban park. In addition, as a result of a questionnaire survey on future maintenance intentions, it was understood that urban parks utilizing natural forests were desired for future development.

By the survey of Kim et al. [6] about the future intentions for urban park development, residents said that they wanted the urban parks with natural forest.

Kim et al. [6] conducted a spatial evaluation of park users in Ilsan New City As a result of the evaluation, it was clarified that the neighboring parks established by the urban development are used for light sports and nature walks, and the green

Table 1 Review of urban park politics

A.C.	Korea	Japan
1986	Han-gang Waterfront Site Park Project	Fourth Five-Year Plan for Urban Park
1991		Fifth Five-Year Plan for Urban Park
1993	Revision of Urban Park Law Addition of Physical Education Park	Revision of Urban Park Law Increase in Park Area Level and Change the Type Name
1994	Busan Amenity Plan	Green Master Plan (Formulation: City)
1995		Civic Green Space System
1998		Sixth Five-Year Plan for Urban Parks Green Plan 2000
1999		Expansion of Green Areas
2000	Revision of Urban Park Law (Park MP, Purchase Request System)	Social Capital Development Priority Plan
2003	Established Seoul Green Trust Third Sector Introduction System for Urban Park Maintenance and Creation Projects	Abolition of Attraction Distance Standard for Parks and Establishment of Designated Manager System
2004	Five-Year Plan for National Balanced Development (2004-2008)	Landscape Law Creation of Multi-Dimensional Urban Park System
2005	Urban parks and Open space Law (Park and Open Space Basic Plan System)	
2007	Landscape law	
2009	Private park exception system Imagination Children Park Project (2008- 2011)	
2012	Urban Renewal Law	Plan to Extend Life of Park Facilities
2014	Revision of the Landscape Act (Mandatory Landscape Planning) Five-Year Plan for Regional Balanced Development Abolition Guidelines of Long-Term Unexecuted City Planning Facility	
2015	Arboretum ▪ Garden Creation and Promotion Methods Founding of National Garden ▪ Regional Transfer ▪ Private Garden ▪ Community Garden	
2016	Revision of Urban parks and Open space Law Development Exception Business of Private Park Guideline	Development of Open Space for New age
2017		Revision of Urban Park Law Park-PFI Established Legalization of Maintenance and Repair Standards
2018		Planning Guidelines to Extend Life of Park Facility

area ratio of the city is high.

Sugawara and colleagues [7] clarified the development and characteristics of the civil movements in Korea. Kim et al. [8] analyzed the causal relationship by conducting a questionnaire survey on residents in order to clarify the influence of the green areas on the slopes of the urban edge on the choice of residential area in Busan City.

Tsukada et al. [9] stated that in Maebashi City's war reconstruction plan, there was a planned idea of a water and green network from that time to connect parks with rivers that penetrate the city, such as the Tone River and Hirose River. It was clarified by a literature search.

Morita et al. [10] clarified the characteristics of a simulation model regarding the effects of urban environment and urban activities, using Natori Bridge and Hirose Bridge in Sendai City, Miyagi Prefecture as examples.

Tsukada et al. [11] announced the results of analysis by text mining method from the free opinions of citizens regarding the green space of Maebashi City. In addition, Tsukada et al. [12] announced the results of a questionnaire survey on the spillover effect of Shikishima Park Open Garden in Maebashi City.

Nakanishi et al. [13] investigated the relationship between land use systems in Korea, Japan, and Taiwan. Nakanishi et al. [14] analyzed the relationship between the city planning master plans of Japan and Korea.

3. STUDY AREA AND STUDY METHODS

As mentioned above, there are many studies that compared Korea and Japan regarding urban parks and greenery. However, few studies have compared Korea and Japan on urban parks and greenery since the Seoul Olympics (1988).

This study clarified the similarities and differences by clarifying the changes in the politics of urban parks in Korea and Japan from the time of Seoul Olympics to the present day. Moreover, the characteristics of urban park were clarified by grasping the amount of improvement for each type of urban park.

The research method was mainly based on the existing literature survey. In addition, based on the results of the survey, basic consideration was given to future issues regarding urban parks.

4. COMPARATIVE STUDY ON KOREA AND JAPANESE URBAN PARK SYSTEM

4.1 Review of Urban Park Politics

Table 1 summarizes the changes in policies regarding urban parks since the Seoul Olympics (1988).

In Korea, a part of the Urban Park Law was revised in 1993, when the Seoul Olympic Games were held, and "Physical Education Park" was added as one of the parks. In 2000, Urban Park Law was completely revised. In 1986, "The plan of Hangeang Waterfront Site Park Project" was formulated.

This plan is also linked to the Han River Renaissance in 2003 based on the "Enactment of the National Land Planning Act of 2000 with the basic principle of nature restoration" in order to improve the natural environment of the Han River waterfront.

Based on this plan, the development of the World Cup Park and Urban Park by converting land use of Seoul Forest was promoted.

In 2012, Urban Park Law was revised against the backdrop of decentralization, and Park Master Plan has been created by the city government. In 2015, the Law for the Creation and Promotion of Arboretum and Gardens was enacted to promote the conservation and utilization of valuable gardens.

On the other hand, in Korea, a non-service Urban Park Plan was an issue. To solve this, in 2014 Guideline of a long-term Unexecuted Urban Planning Facility Cancellation was created. In 2016, the "Private Park Development Guidelines" were established to promote the participation of the vitality of the private sector in urban parks.

In 1986, the 4th Five-Year Plan for Urban Park was formulated in 1986. In addition, in 1991, the 5th Five-Year Plan for Urban Park was formulated in Japan.

An added issue that was not included in the conventional plan was "meeting diverse needs." In 1993, "Children's Park" was renamed "Block Park".

This reason is that, based on the progress of an aging society, the idea has changed from a uniform park for child to a park with diverse needs.

In 1994, against the backdrop of decentralization, by the establishment of Green Master Plan, open spaces and parks were integrated.

Also, in 2000, the conventional Five-Year Plan for Urban Parks, etc. was integrated into the Social Capital Development Priority Plan.

Designated Manager System was established in 2003 by amending the Local Autonomy Law against the backdrop of increasing stock and deregulation.

Designated Manager System was also introduced in urban parks, and in 2017, Park-PFI system was created to promote the participation of the vitality of the private sector.

On the other hand, the deterioration and renewal of urban park became serious, Park Facility Extension of Life Plan Development Guideline was created in 2018.

The similarities and differences between the urban park policies in Japan and Korea are as follows.

Table 2 The present situation of urban parks in Korea (2020)

Type	Subdivision	Location	Area [ha]
Urban park	Children's Park	10,627	2,591
	Neighborhood park	5,168	6,181
	Cemetery park	57	2,950
	Urban natural park	65	13,524
	Subtotal	15,917	25,246
Green Space		22,070	22,176
Amusement Park		244	15,509
Physical Education Park		319	2,719
Total (12.7m ² per person)		38,550	65,650

Table 3 The present situation of urban parks in Japan (2019)

Type	Subdivision	Location	Area [ha]
Urban park in housing area	Block Park	88,052	14,198
	Neighborhood Park	5,792	10,430
	District park	1,619	8,589
	Country Park	(180)	(1,400)
	Subtotal	95,643	34,617
Urban park in city area	General park	1,375	26,099
	Sports park	834	12,978
	Subtotal	2,209	39,077
Urban park in wide area	Wide area Park	215	14,906
	Urban Recreation	6	564
	Subtotal	221	15,470
Urban park in Nationally		17	4,251
Urban park of Green space	Unique Urban Park	1,360	13,713
	Buffer Space	240	1,814
	Urban Green Space	8,939	16,259
	Urban Forest	156	932
	Open Space Urban Park	348	163
	Green Road	968	923
	Subtotal	12,011	33,804
Contracted Space	Citizen's Green	7	3
Contracted Space	Citizen's Green	169	100
Total (10.6m ² per person)		110,277	127,321



Fig. 1 Green Space in Korea

(Location: Busan Metropolitan City, Photographed by authors)



Fig. 2 Physical Education Park in Korea

(Location: Busan Metropolitan City, Photographed by authors)

First, regarding the similarities, the type of urban park was changed. Korea has added the type of Physical Education Park in 1993 after the Seoul Olympics, Japan has changed the children's park to a block park in 1993, and These changes addressed "diversified needs".

The next similarity is the creation of the "Green Master Plan and Landscape Initiatives" created by the city due to the progress of decentralization.

Korea enacted Park Master Plan in 2011 and the Landscape Law in 2007, Japan enacted Establishment of Green Master Plan in 1994 and the Landscape Law in 2004. Third is the entry of private vitality into urban park.

Japan introduced Designated Manager System in 2003 and Park-PFI in 2017, and Korea amended the Law Concerning Urban Parks and Green Spaces and prepared the "Private Creation Guidelines" in 2016.



Fig. 3 Brock Park in Japan (1)

(Location: maebashishi city, Photographed by authors)



Fig. 4 Brock Park in Japan (2)

(Location: maebashishi city, Photographed by authors)

Next is the difference between Korea and Japan. In Korea, with the enactment of the "National Planning Law" in 2003, the tendency to return to nature increased. "World Cup parks that turn garbage collection into parks" and "Seoul forests that turn racetracks and golf courses into parks" are being actively converted into land alongside rivers.

In Japan, the increase in stock and the deterioration of existing facilities are becoming more serious.

Proper maintenance and management of stock has become an important issue, such as notification for the safety of playground equipment in 2002 and showing the basic concept of extending Plan to Extend Life of Park Facilities in 2012.

4.2 Present Situation of Urban Park

Table 2 shows the current status of urban park

development in Korea in 2020 (Statistics Agency). The total number of urban parks in Korea is 33,260 locations, 42,995 ha (park area per person is 12.7 m² / person, 1.29 ha / location). Focusing on the type of park, Green Space have the largest number and area (22,070 locations, 22,176 ha (1.00 ha / location)).

Table 3 shows the current status of urban park development in Japan in 2019 (surveyed by the Ministry of Land). The total number of urban parks in Japan is 110,277 locations and 127,321 ha. Park area per person is 10.6 m² / person, 1.15 ha / location.

Focusing on the type of park, Block parks have the largest number (88,052 (0.16 ha / location)) and general parks have the largest area (26,099ha (18.9ha / location)).

In Japan, green spaces are included in urban parks, whereas in Korea, green spaces are excluded from urban parks, but in this study, green spaces are included in urban parks [14].

Comparing Korea and Japan, Korea has a total park area of 65,650 ha, urban park area in Japan was 1.9 times larger than that in Korea. On the other hand, the area of parks per person in Korea is 12.7m² / person, whereas the area of parks per person in Japan is 10.6m², urban park area of one person in Korea was 1.2 times that of one in Japan.

In addition, the park area per location is 1.29 ha in Korea and 1.15 hectares in Japan, and the park area per location in Korea is 1.1 times that of Japan.

In Korea, construction of skyscrapers for housing has been promoted as a city regeneration project since the Seoul Olympics [15]. As a result, green spaces are increasing at the same time as housing supply [15].

Green Space (Fig.1) is a park like a Green Road in Japan. Green Space and Physical Education Park (Fig.2) have functions that can be used on foot like a block park (Fig.3 and Fig.4) in Japan.

As a result of comparing the Korean Physical Education Parks with the Japanese Block Parks, we found that the Japanese Block Parks were used by children, otherwise the Korean Physical Education Parks were used by the elderly.

5. CONCLUSION

In this study, the following was clarified by grasping the changes in urban park policies and the amount of urban park development since the Seoul Olympics in Korea and Japan.

In the transition of urban park policies since the Seoul Olympics, we grasped the similarities corresponding to the issues of " diversifying needs ", "Park Master Plan", and " Private Entry ". In addition, it has become clear that in Japan, a plan for maintenance and renewal of parks has been formulated in consideration of the increase in stock

and renewal of facilities, on the other hand, that in Korea, park maintenance is being promoted by land use conversion.

Furthermore, Japan has approximately 1.9 times the total area of urban parks, etc. as compared with Korea, while Korea has 1.2 times the park area per person and 1.1 per location as compared to Japan. We were able to understand the actual conditions of development in Korea and Japan and the background of park policy. Both Korea and Japan are facing a population decline and an aging population. Therefore, how to maintain and update the current stock satisfactorily becomes an issue. For this reason, Korea is promoting the natural return to parks, but considering that Japan is having difficulty in the maintenance plan for renewal, we think that the maintenance renewal plan should be formulated at this point.

6. REFERENCES

- [1] Lee Y. D., Asakawa S. and Park C. Y., "A Comparative Study on Consciousness of Greenery between Inhabitants of Daegu and Sapporo," Japanese Institute Landscape Architecture, Vol. 52, No. 4, 1989, pp. 255-262.
- [2] Song T. and Shirai H., "A Comparative Study on Japanese and Korean Urban Parks Concerning of Policies since 70's," Japanese Institute Landscape Architecture, Vol.55., No. 5, 1992, pp. 13-18.
- [3] Kang S., "Urban Parks and Prosperity of Japanese Zinza Shrines in Korea," Japanese Institute Landscape Architecture, Vol. 56, No. 5, 1993, pp. 61-66.
- [4] Song T. and Hikoe S., "A Comparative Study on Japanese and Korean Urban Parks Concerning of Policies since 70's," Japanese Institute Landscape Architecture, Vol. 56, No. 5, 1993, pp. 85-90.
- [5] Kim Y. and Sawaki M., "The Greenery Park Evaluation Study from View of Inhabitant in case of Ilsan New town in Korea," Japanese Institute Landscape Architecture, Vol. 63, No. 5, 2000, pp. 657-662.
- [6] Kim Y. and Sawaki M., "Spatial Evaluation by Users of Park in Case of Ilsan New Town in Korea," Japanese Institute Landscape Architecture, Vol. 64, No. 5, 2001, pp. 641-646.
- [7] Sugawara A., Yoshimura T. and Watanabe S., "A Study on Characteristics and Tasks of Korean Machi-Zukuri, "Maulmandulgi": A Case of Pusan, Korea," Journal of City Planning Institute of Japan, Vol. 38, No. 3, 2003, pp. 883-888.
- [8] Kim Y., Kaneko T. and Kumagai Y., "A Study on the Relation between Slope Green and the Residence Choice in Busan City," Japanese Institute Landscape Architecture Vol.72, No.5, 2009, pp. 859-862.
- [9] Shinya T., Tetsuo M. and Akira Y., "Inquiry of the Value Parks in the Characteristics and Use of Park through Urban Revival Planning Projects in Maebashi City," Int. Journal of GEOMATE, Vol.3(1), 2012, pp.285-289.
- [10] Tetsuo M., Tsuyoshi B., Hiroshi S., Shinya T. and Takashi H., "An Aquatic Environment Assessment Model for the Comprehensive Assessment of Environmental Measures in Metropolitan Areas," Int. Journal of GEOMATE, Vol.3(1), 2012, pp.185-190.
- [11] Shinya T. and Tetsuo M., "A study of public opinion on Green Spaces using data from Free-Text descriptive responses- A case study of Regional city in Japan -," Int. Journal of GEOMATE, Vol.14(46), 2018, pp.21-25.
- [12] Shinya T., Kazuya T. and Tetsuo M., "Residents' Evaluation and Continuity in the case of Shikishima Open Garden in Maebashi city," Int. Journal of GEOMATE, Vol.18(68), 2016, pp.108-113.
- [13] Nakanishi M. and Fujioka M., "A Comparative Study on Urban Planning Master Plan in Japan, South Korea and Taiwan," Journal of City Planning Institute of Japan, Vol. 54, No. 3, 2019, pp. 1438-1445.
- [14] Park. K. W. and Sakai M., "A comparative study was carried out on the development policies of urban parks in japan and Korea," Kyushu University Institutional Repository, Vol. 75, 1996, pp. 27-47.
- [15] Li H., "Changes in urban landscape in Seoul, Korea," Historical Geography, 50-1(237), 2008, pp. 19-33.

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