녹색도시 정책여건 변화에 대응한 공원녹지 지표 개발방안 연구

A Study on Developing Indicators for Parks and Green Spaces

이상민 Lee, Sangmin 김용국 Kim, Yonggook 이여경 Lee, Yeokyung

SUMMARY

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In South Korea, when one tries to assess the local standard for parks (green space) or see if urban parks are sufficient, one focuses on parkland per person. Here, parkland per person refers to the urban parkland per person, that is, the area of parks created in cities divided by the population in cities.

This study was born when asked whether parkland per person is an appropriate indicator in describing the current standards for parks and green space and the directions for the parks and green space policy.

When it comes to parkland, we now anticipate social changes such as climate change, dwindling population, and low growth as well as various changes such as enforcement of sunset provisions or land and city policy paradigm change. Accordingly, the parks and green space policy needs to shift its perspective from the quantitative increase in parks and green space to the qualitative management, from unilateral supply to beneficiary—oriented supply, and it is high time to develop new parks and green space Indicators that can present such policy directions.

Thus, the purpose of the study is to present the directions for developing the parks and green space for the purpose of creating a green city policy that can respond to the various social changes and the policy environment changes related to parks and green space. For this purpose, the study surveys the current status of the domestic parks and green space indicators and its usage and compares it with the parks and green space policies and indicators for major foreign countries such as the UK, Japan, the US, and Germany to come up with specific directions for developing South Korea's parks and green space indicators.

First of all, Chapter 2 examines the current status and problems with the domestic parks and green space indicators. By examining the parks and green space indicators that are used in related areas such as national land and cities, one can distinguish them into the current indicators, which are for figuring out the general status in various areas at the level of the country (or local governments), the policy indicator, which diagnoses and assesses the current status with the aim of prodding certain policy directions, and the planning indicator, which is to be achieved through creating a plan. For these indicators, 'urban parkland per person' is being used as the only indicator that shows the quality of the urban environment or the quality of the residential environment.

The current usage of the green space and parks indicators have been analyzed for major South Korean cities with the parks and green space basic plan. Currently, the Guidelines for Establishing Parks & Green Space Basic Plan presents the five parks & green space indicators of green coverage ratio, urban parkland per person, park service standard, and urban greening goal. These indicators serve to set the goals for the parks and green space basic plan and provide the strategic targets to make them more effective.

An analysis of the seven South Korean metropolitan cities and parks and green space basic plan shows that the local governments select and operate three to five of the five indicators that are specified in the Guidelines for Establishing Parks & Green Space Basic Plan or use the indicators that they have developed on their own. However, as they use different indicator calculating standards or methods, it is impossible or meaningless to compare cities, even if indicators have the same names.

Thus, the cities have created and operate different indicators, because Guidelines for Establishing Parks & Green Space Basic Plan does not clearly present the criteria or methods for calculating different indicators. The other reason is that while Guidelines for Establishing Parks & Green Space Basic Plan is specific, the local governments apply some other standards and methods for calculating the indicators. To address these issues, Guidelines for Establishing Parks & Green Space Basic Plan should be revised and the country should select key indicators (or common indicators) that the local governments have to develop and operate and provide specific standards and methods for them.

Chapter 3 reviewed the suggestions for improving the domestic parks and green space indicators and their applicability based on the overseas parks and green space policies and the current development of indicators as in the UK, Japan, the US, and EU.

It comes up with five broadly domestic implications, of which the first is about the country presenting the directions for parks and green space. Most of the countries like the UK, Japan, and Germany have set the policy directions for parks and green space, and have developed and operate indicators for implementing related systems or policies.

The second implications is about creating a system of indicators and setting indicators which are appropriate for policy directions and goals. When policy directions or goals are established by the central governments, major overseas countries create a system of indicators that are fit for them and set specific goals.

The third implication is developing quantitative and qualitative indicators while considering the various functions and values of parks and green space. Most countries are working to develop and use new indicators which can measure the qualitative aspects of parks (green space) such as accessibility for residents, the qualitative management of parks and green space, and operation and management, based on the critical perception of the qualitative indicators that are represented by area per person.

The fourth implication is for developing and using the indicators that consider the conditions of different local governments. The local governments have developed and operate individual indicators as the criteria for creating, implementing, or

evaluating specific execution plans based on the national policies.

The final implication is for expanding the scope of parks and green space that considers the actual status of parks and green space and their diverse uses. Unlike South Korea, major overseas countries include in the scope of park and green space most of their green spaces that actual residents use or experience, and apply them in setting the parks and green space policy directions and developing indicators.

Chapter 4 suggests the directions for improving the domestic parks and green space indicators and a plan to work to develop indicators. First, for the directions for improving the domestic parks and green space indicators, I suggest 1) setting the country's policy directions and goals, 2) creating a system of indicators that consider the various aspects of parks and green space, 3) developing a system of indicators that consider the characteristics of the local governments or regions (common indicators/individual indicators), and 4) presenting clear criteria and methods such as the concept of indicators and methods for calculating indicators.

The implementation plans for developing the parks and green space indicators divide the parks and green space indicators into the categories of production, management, and use. To produce the parks & green space, we need to set the parks and green space policy directions more than anything else. At this stage, we should reestablish the concept and roles of parks and green space and set the future directions and goals for implementing the parks and green space policies. The second stage in the development of the indicators is to create the process and method for developing the parks and green space indicators. We will set the goals in developing the indicators so as to meet the parks & green space policy directions as established earlier and accordingly come up with the structure of indicators, the system of indicators, and the indicators. Here, the name of the game is selecting indicators, which should focus on the representation of the indicators (if they can represent the policy goals and areas), reliability (if the indicators are created using reliable statistics), continuity (if time series comparison and analysis are possible and if the indicators can be regularly updated), and availability (if data acquisition for measuring indicators is really possible).

For managing the indicators, we must make clear the agency involved in creating

and managing the indicators, the method for calculating the indicators and the statistical data to be used, and the scope of indicator application and indicator creation cycle.

Thus developed, the parks and green space indicators could be used as the indicators for suggesting specific policy implementation directions and as performance indicators, as planning indicators for creating related plans that consider the characteristics of the regions, as the basic data for creating future related policies and implementing projects, and as data for bringing nationwide publicity to and educating the public in the parks and green space policies.

The study has limitations, in that it has failed to develop a new system of parks and green space indicators, stopping at presenting the implementation plan for developing the directions and indicators for improving the domestic parks and green space indicators. However, the study is significant in that it has surveyed the current operation of the parks and green space indicators and their issues for major domestic cities and analyzes them while comparing them with the parks and green space policies, systems, and the current operation of the indicators for major overseas countries such as the UK, Japan, he US, Germany, and EU.

Looking ahead, we should go from here to develop actual parks and green space indicators and research the creation of a system of indicators. For this purpose, we should reexamine the concept and functions of the parks and green space for modern cities and reestablish the policy directions and goals for parks and green space at the national level. At the same time, we should create a system for managing and monitoring the operation of the parks and green space indicators. Especially, we should research and develop the methods for developing various functions and values of parks and green space and turning them into indicators. Also, we should continue our research on the methods for quantitative and qualitative measurement so that the quantitative as well as qualitative aspects of the parks and green may become indicators.

Keywords:

indicator, parks and open spaces, parkland per person, green city