

Urban Park and Green Space Planning System according to Newly Enacted Land Planning Related Laws, South Korea

Lee, Myung-Woo*

*Dept. of Landscape Architecture, Chonbuk Nat'l Univ.

ABSTRACT

Newly revised Urban Park Act and Land Planning Law are evaluated. Through exploring their functions and limits. Critical guidelines for Green Space Preservation and Planning Law are suggested. The following is the summary of the findings: 1. New urban and regional planning system has the foundation for green space planning expressed as environmental planning, green space planning, landscape planning and park planning. 2. New Urban park act broadens and diversifies the range of urban park and green space(eg, stream and river, road, detention pond etc.) 3. The Urban Natural park items are removed because of long term unconstructed urban facilities and the new concept of " Urban Park Zone" are inserted. And Green Space Preservation District and Urban Greening District's were introduced. And system of Contract of green space utilization and Agreement of Greening were adapted. 4. There exists new emerging needs for establishment of comprehensive green space preservation and planning law. 5. And the green space system can be classified to preservation system, recreation system and scenery system.. 6. The types of proposed green space planning are regional green space plg, urban green space plg,and district unit green space plg.

Key Words : Urban Park and Green Space System, Land Planning Law, Urban Park Zone, Contract and Agreement of Urban Greening

I. INTRODUCTION

Until recent, Korea green space and parks plan had been made as sub part in comprehensive long range urban plan in a form of strategic plan. Though local governments have made various and ambitious implementing plan for creating park, it has been difficult to practically implement the park plan because of lack of legal implementing system and administrative and fiscal institution. Ex Urban Park

Act in Korea has rigidly formal criteria and constrained park types and no provision for citizen participation, various urban theme park and nature reservation.

It is the year 2002 when there started the seemingly reform of legal park planning schemes, which introduced items of Greening and Biotope planning in the newly enacted National Land Standard Law and National Land Planning and Use Act(NPA) for sustainable development. Misnistry of Construction and

Transportation had performed the research for reforming Urban Park Act well matched to new urban planning system and had made enacting announcement until Sep. 2004. (Korea Planners Association, 2002) This new Urban Park Act involves systemic classifying of various park types, Contract zone of citizen participation, Urban Park Zone like zoning ordinance, institutionalization of implementing enabling green space and parks planning to be fiscally and administratively supported, which is one of the long wishing goals in the discipline of Landscape Planning and Design. In spite of this reform of Urban Park Act, there exists critical problems as ecologically sustainable urban area yet.

Main objective of this study is to introduce and analyse the trait of current enacting Urban Park Act, NPA, and National Land Standard Law and to raise the issues to prepare the comprehensively enhancing legal alternative of green space, that is, "Special Green Space Planning and Use Act: SGA", for proper green networking planning.

II. BACKGROUND AND SHORT HISTORY

Korea Institute of Construction Technology published report titled "a study on development core technology for ecocity" which was the prominent strategic study for realizing ecocity and concretizing the concept of ESSD. This report introduced a concept of ecological landscape planning which is mutual adjusting process with the construction and development planning and benchmarking German Landschaft's Planung. The case study area was adopted and tested at Dongji housing district Hwasunggun Gyeonggi-do for settlement. But this approach seems to be improper to implementing to Korea system 'cause of being clear administrative affair boundary and

unfamiliar to cooperating and adjusting the conflict between Ministry of Construction and Transportation and Ministry of Environment. And the new legal enactment NPA made it difficult to have the counter planning process.

The concept of Japanese Green Master Plan and Land use Planning by natural suitability might not accord to newly enacted Korean Land Law, which was explored in research of Korean Planners Association 2002.

Several foreign case studies were published on J. of Korean Landscape Architecture. (Kim, Sung-Hwan (1989), Kim Yong-Soo et al.(1994), Oh, Byung-Tae(1986)

Several Korea based studies for greening was performed for maximizing the ecological potential as Biotope Network at small and medium scale city, e.g. Jeonju city Jeollabukdo.

III. RESULTS

1. National Land Use and Planning Act

1) National Land Standard Law

National Land Standard Law enacted at the year 2002 has two underlying skeleton of "land development after planning" and "land suitability evaluation" as preventive measures which consider various impacts on ecological resources and landscape for environmental friendly managing National land. According to this law, types of Korean land plan are classified into four categories, i.e. Comprehensive National Land Plan, Comprehensive Province Plan, Regional Plan(Area wide Development Plan and Specific Region Development Plan), and Compartment Plan.

This National Land Standard Law provides the foundation for preparing environment conservation and advancing planning to the basic principles of

SSD through establishing National land information system.

2) National Land Use and Planning Act (NPA)

National Land Use and Planning Act let the status of counties planning in province equal to city planning which is the different aspect comparing with previous area land law. NPA defines three hierarchical system, i.e. Areawide urban plan, urban(county) master plan, and urban(county) management plan.

The highest status Areawide urban plan must involve ① spatial structure and functional allocation, ② environmental conservation and green area management system, ③ placement, scale and allocation of areawide facility, ④ landscape planning, ⑤ etc. Green area item is defined with environment and Green area management concept is used.

Urban(county) master plan must involve ① planning goals and directions and regional peculiarity, ② Circumstances changing trend of population, industry, economy, spatial structure, and land use, ③ land use and development, ④ Demand and supply of each land use, ⑤ environmental conservation and management, ⑥ Infra structure, ⑦ park and green space, ⑧ landscape. This plan make foundation for preparing Park and green space plan by separately defining of the environmental conservation and management.

Urban(county) management plan must involve district Unit Planning(DUP) and designation of district unit zone on urban development site, and general zoning area and of urban planning facilities like park and green space and roads. DUP is a integrated concept of American Urban Design and German District Detail Plan. DUP must involve ⑤ plan for networking creating and protecting of biotope and habitat and for circulation of water and ambient air. There is second special type of DUP(2-DUP) applied to development promotion area, which require

impact minimizing of impact on ecosystem by preparing Prior Impact Assessment and proper ecological landscape planning. 2-DUP lists parks to neighborhood park, children park, buffer green, water front space, and green space. This plan requires that on site green area should connect off site for preventing from breaking off the wild life movement and biotope map be prepared.

2. New Urban Park Act and Green Space and Park Planning

1) Definition of Green Space and Park

New urban park act adds the forest, river and stream, and street to the range of green space and parks at the outside of urban area. And the type of park is classified into several residential parks and theme parks the additional types of which could be added by local government.

Urban Park Act

Section 2: Definitions

4. Green Space and Parks are lands on the urban area to be used for citizen's rest and emotional fostering by formulation of comfortable urban environment, which have natural friendly environment such as vegetation(trees, grasses, ground covers, and flowers) water bodies and soils or have potential for such environment as follows.

- A. land not occupied by building or structure in urban area
- B. urban parks, green space, resort area, river and stream, outdoor play ground, public open space, reservoir
- C. forest or farm land outside urban area
- D. the others defined by administrative regulations

Section 3: types of residential parks

1. pocket park
2. children park
3. neighborhood park
4. regional park

Section 3.2: types of theme park

1. historic park
2. cultural park
3. ecological park
4. water front park
5. cemetery park
6. athletics park
7. the others which are designated and named by mayor

Section 10: types of green space

1. buffer green space
2. scenic green space: green space to be installed for enhancing the urban landscape by restoration and betterment of damaged nature or conservation of natural environment
3. green way: linear green space to provide resting and leisure place to citizen and to form green network through organically connecting parks, streams and hills in urban area

2) Characteristics of Green Space and Park Planning

New Urban Park Act defines the plan for parks and green space, which is the sub part of the area wide urban planning and urban master plan, and also a kind of urban management plan as urban planning facilities. This also has the provisions of construction and management planning at the designated urban park, items of which are green axis and network through preserving and managing and using green space and park.

Two types of District are introduced, that is,

District for green space is what to be used for conservation of sound forest stands and vegetation area left at residential area or others in urban boundary and District for special greening is that which be needed to make greening at poor forest and vegetation area in urban boundary.

Devices for citizen participation are introduced, that is, Contract of green space utilization and Greening agreement system. New Urban Park Act let local government must secure the green spaces and parks. Urban park zoning can be designated as substitution for previous Urban nature park which is one of the long period unconstructed urban facilities.

Urban Park Act

Section 2: Definitions

5. Master Plan for Green Space and Parks is plan which comprehensively propose adding, conservation, management, and use of urban green space and parks.

Section 2.5: Responsibility of Preparing Master Plan for Green Space and Parks

- ① Mayor must prepare Master Plan for Green Space and Parks on his administrative area

Section 2.6: Contents of Master Plan for Green Space and Parks

- ① The following policies formulation guidance must be included in Master Plan for Green Space and Parks
 1. Planning goals and directions and regional peculiarity
 2. Circumstances changing trend of to green space and parks according to population, industry, economy, spatial structure, and land use
 3. Comprehensive arrangement of green space and parks

- 4. Network and axis of green space and parks
- 5. Demand and supply of green space and parks
- 6. Conservation, management and use of green space and parks
- 7. Urban greening
- 8. The others which are defined by administrative regulation
- ② Master Plan for Green Space and Parks must accord to area wide urban plan or urban master plan.
- ③ Ministry of Construction and Transportation has right of establishing criteria for Master plan of green space and park

Section 2.10: making the urban greening plan

- ① Mayor can make the urban greening plan at his governing area

Section 2.11: designation of district

- ① Mayor can make Urban Management Plan of designation or changing the following districts according to Master Plan for Green Space and Parks if necessary
 - 1. District for green space conservation : District to be used for conservation of sound forest stands and vegetation area left at residential area or others in urban boundary
 - 2. District for special greening : District to be needed to make greening at poor forest and vegetation area in urban boundary

Section 2.12: securing green space and urban park

- ① Mayor must secure urban parks or green space according to the criteria of Ministry of Construction and transportation's regulation in urban area for figuring out comfortable urban environment
- ② Mayor must secure urban parks or green

space according to the criteria of Ministry of Construction and transportation's regulation when establishing a development plan over presidential regulation's providing scales

- ③ Mayor must secure urban parks or green space to extents over presidential' providing ratio to the size of site at the followings..
 - 1. remains of school, plants and army camp
 - 2. the others which are provided by presidential regulation

Section 2.13: contract of green space utilization ① Mayor can make contract with land owner who has sound forest stands and vegetation area for securing green space and parks to be used by citizen and provide it to public

Section 2.14: greening agreement ① mayor can make agreement with resident or land owner' willingness for following purpose

- 1. protecting forest zone
- 2. enhancing level of vegetation area portion to relevant site
- 3. increasing regional representative vegetation

Section 9.2: urban park zone ① mayor or governor can designate or displace urban park zone for providing sound leisure and resting space and protecting urban natural environment and landscape by urban management planning

② Criteria for urban park zone's designation and displacement is established to comprehensively considering area wide urban plan, urban master plan and natural environment such as topography by presidential's provision.

- 3. Analysis of Green Space and Park Planning and Alternatives for Eco Networking Design

In spite of establishing the direct controlled provision for park and green space planning, there is fundamental problem that this is a kind of development plan which is proceeded by development orienting institute. It is anticipated that preparing the preservation orienting plan is hard in condition of upper development and economy orienting urban planning system. Proper biotope plan preparation would be impractical because of lack of ecological information system, which is required for making DUP. Forest Act control the Green space at mountain and hilly area and street plants. Nature environment conservation act and wetland conservation law control the limited ecological areas at large scale except those in urban area.

High level status legislation is needed for green spaces integrating and networking with urban green spaces. Namely Special Green Space Conservation and Planning(or Use) Act(SGA) would be necessary to prepare the proper comprehensive eco network planning which can be applied as primary prerequisite planning at the early land use planning stage. SGA would have three stages for green network, Area wide green space planning, Green space master plan, District unit green space plan which are counter park to NPA system.

This will let the landscape designer create the more ecologically adaptive work.

IV. CONCLUSION AND SUMMARY

Newly revised Urban Park Act and Land Planning Law are analysed through exploring their functions and limits. Critical guidelines for Green Space Preservation and Planning Law are suggested. The following is the summary of the findings: 1. New urban and regional planning system has the foundation for green space planning expressed as

environmental planning, green space planning, landscape planning and park planning. 2. New Urban park act broadens and diversifies the range of urban park and green space(eg, stream and river, road, detention pond etc.) 3. The Urban Natural park items are removed because of long term unconstructed urban facilities and the new concept of " Urban Park Zone" are inserted. And Green Space Preservation District and Urban Greening District's were introduced. And system of Contract of green space utilization and Agreement of Greening were adapted. 4. There exists new emerging needs for establishment of comprehensive green space preservation and planning law. 5. And the green space system can be classified to preservation system, recreation system and scenery system. 6. The types of proposed green space planning are regional green space planning, urban green space planning and district unit green space planning.

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