POLICY PLAN FOR PARKS AND GREENERIES IN SEOUL

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●요 약

서울시는 국가의 수도로서 이제 600년의 역사를 맞이하였다. 뛰어난 산수와 자연 경관을 가진 서울시의 자연은 근세이후 도시의 발전에 따른 점차적으로 훼손되어 왔으며, 특히 1960년대 이후의 도시성장기에 시행된 개발 위주의 도시 정책은 공원 녹지의 잠식을 가속화시켜 본래의 자연은 양적, 질적 측면에 많은 피해가 발생되었다.

또한 도시 정책의 부분으로서 공원 녹지 정책은 개발 위주의 도시 정책에 밀려 제기능을 발휘할 수 없었으며, 정책에 있어서도 목표와 미래 방향에 대한 뚜렷한 비전을 제시하지 못하였다.

현재 공원 녹지와 관련된 정책 환경을 볼때, 각종의 도시개발 사업, 지방 자치제 시행에 따른 도시의 난 개발은 부족한 공원녹지를 더욱 잠식하는 위협요소가 되고 있으며, 토지수요에 대한 공급의 한계 상황에 직면해 있는 시점에서 개발론자들은 공원 녹지를 개발의 주요대상으로 인식하는 자세를 견지하고 있다. 그러나 최근들어 지구 환경의 문제의 대두, 환경에 대한 시민의 관심, 정책 집행자들의 환경 보전과 관리의 움직임이 나타나기 시작하고 있어 서울시의 공원 녹지의 미래 전망을 밝게 해주는 긍정적인 요소가 되고 있다.

2000년대를 바라본 현시점에서 도시의 기간 요소로서 공원 녹지는 단지 존재만의 가치가 아니라 적정한 기능을 부여하고 이용의 활성화를 통한 공원 녹지의 새로운 탄생이 요구되고 있다. 이것은 공원 녹지 정책 측면에서 공원 녹지의 양적 측면에서의 풍요로움과 질적측면에서의 기능성의 회복과 도시 구성적 측면에서의 공원 녹지의 네트워크의 구성이라는 3가지의 정책 이슈를 제기한다.

양적 측면에서 녹의 풍요로움을 확보하기 위해서는 기존의 공급 지표 위주의 정책보다는 공원 녹지의 총량적인 관리 체제를 통한 전 도시적 차원의 공원녹지 관리 시스템이 필요하며, 공원 녹지로서 잠재 가치를 가지고 있는 새로운 유형의 공원 녹지의 조성과 각종 개발사업에 대한 공원 녹지의 잠식 방지를 위한 명확한 사회적인 공감대의 형성이 요구된다. 질적 측면에서는 공원 녹지의 기능성의 회복이라는 측면과 시대에 부합되는 새로운 기능 및 가치의 부여가 필요하며, 이를 위해서는 공원의 매력, 공원의 시설기능 증진, 녹지의 질의 향상 및 녹지 가치의 증진에 대한 다양한 시책이 요구된다. 구성적 측면에서는 공원 녹지의 개별적 존재보다는 공원 녹지를 상호간 유기적인 계통을 확보하여 공원 녹지의 네트워크를 형성하여 도시속의 산재된 고립된 섬으로서의 공원 녹지가 아닌 시민생활에 늘 가까이 있는 생활 속의 공원녹지로 재편되어야 한다. 이러한 정책의 의제는 양적 측면에서 보전(CONSERVATION)과 창출(CREATION), 질적 측면에서 쇄신(RENOVATION)과 복구(RESTORATION), 그리고 구성적 측면에서 공원 녹지의 연결

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(CONNECTION)과 시민 참여에 의한 운동(MOVEMENT)이라는 정책 개념의 구현을 통해 가능하다.

이러한 정책 개념과 의제를 가지고 서울시 공원 녹지 정책을 구체화 시키기 위해서 푸르름의 새로운 탄생이라는 旗幟아래 풍요로운 서울, 사랑받는 공원, 생활 속의 녹지의 3대 목표, 공원 녹지의 보전, 잠재 공원 녹지의 창출, 공원의 활성화, 녹지의 복구, 경관 보전 및 복구, 공원 녹지의 네트워크, 도시 녹화의 7대 과제를 설정하고 미시설 공원 녹지 집행, 개발 사업시 공원 녹지의 확보, 환경 녹지의 총량 보호 관리, 도시 소공원 개발, 역사 문화 공원 조성, 하천 공간 복원, 공원 시설 기능 개선, 이용 프로그램 개발, 공원 관리 개선, 환경 피해 녹지의 회복, 도시 환경림 조성, 녹지 기능 증진, 도시 자연 경관 보전, 공원 녹지체계 구성, 공원 녹지 공급 균형, 주변 환경 녹화, 가로 녹화의 17개 시책을 제안하였다.

이러한 정책사업의 원활한 추진을 위해서는 기존의 관주도의 일방적인 공원 녹지 행정이 아닌 시민의 참여를 통한 시민이 함께하는 정책 사업의 추진이 요구되며, 특히 민간 부문의 적극적인 참여를 유도하기 위한 방안이 동시에 강구되어야 한다. 또한 공공에서는 정책 집행을 위한 조직과 행정의 개편, 예산의 확보 방안을 적극적으로 검토해야 한다.

현재 서울시는 지방자치제 시행에 따라 시 행정에 있어 많은 변화가 예고되고 있으며, 공원 녹지는 새로운 환경 변화에 부합되는 적절한 도시요소가 될 것으로 추정된다. 서울시 하천 복개의 금지, 하천 공간의 복원에 대한 움직임, 환경 녹지 복구를 위한 사업의 시행, 민간부문의 환경 운동의 활성화 등 바람직한 현상이 전개되고 있어, 공원 녹지는 미래의 도시 관리에 있어 주요 관심사가 될 것이다.

1. Parks and greeneries in Seoul

A. History of parks and greeneries

Seoul as a natural city had the policy to prohibit entering forests in order to keep the sublimity of the capital city, to prevent natural disasters and to preserve forests during Yi dynasty. During the period of the Japanese oppression from the opening harbor to the Liberation, Pagoda Park was constructed as the first urban park in 1887, but the concept of the urban park was merely recognized as the potential development site. During the period of rehabilitation(1946-1961), the existing open space was illegally used for housing and building lot under the influence of exponentially increasing population and the city expanding with no limits. However, the park came to bo a part of urban planning facilities legally when the Urban Planning Act(1962) was set up and the Urban Park Act was established in 1967. In 1971 the establishment of Green-belt which is now a main frame of open space of Seoul made an important role to preserve the green forests from the reckless development project in the vicinity of Seoul.

The present period is the one for formation of modern parks and greeneries. And this period is the beginning point of setting up the urban development and management issues. Seoul is currently in transition to the international city, the implementation of local autonomy system, the changing urban structure and the new stabilized democratic system, etc. It is obvious that the city requires the new and clear directions for the future open space policy.

B. Laws related to parks and greeneries

1) Legal Types of parks and greeneries

The urban park is an urban planning facilities specified by the Urban Planning Act to protect its nature, to improve public health, rest and living environments. Types of urban parks are classified into children's park, neighborhood park, urban natural park, cemetery park and physical education park. Greeneries are divided into two types of buffer greeneries and landscape greeneries specified by the Urban Park Act to preserve and improve the natural environment of the city to prevent pollution and disaster and to make a good urban scenery. Besides the green areas and the greenbelt in the Urban Planning Act are similar concepts to the greeneries. Also, a square, a public amusement park, a public vacant lot, a public athletic field, a public cemetery and rivers in the Urban Planning Act are the facilities similar to parks and greeneries.

2) Laws related to urban parks and greeneries

The laws related to parks and greeneries(P & G) do not have only a single legal system, but also their components are extracted from various laws. And these are classified again as the upper law, the basic law, the related law, the development project law and the support law according to their grades in legal hierarchy and application attributes. There are the Comprehensive National Land Construction Planning Act, the National Land Utilization and Management Act, the Housing Lot Development Encouragement Act, the Land Adjustment Project Act, the Urban Rearrangement Act and the River Act among them.

Upper Law	Comprehensive National Land Construction Planning Act (National land planning) National Land Utilization and Management Act (National land utilization planning) Metropolitan Regional Improvement Planning Act		
Basic Law	(Metropolitan regional Urban Planning Act Urban Park Act	planning) (Urban master plan) (Urban rearrangement plan) (Parks and greeneries plan)	

Support Law	Development Project Law	Related Law
Redemption Act of Development	Land Adjustment Project Act	Compulsory Purchase of Land Act
Windfall	Urban Re-arrangement Act	ļ
Taxing over Excessive Land Act	Housing Lot Development	Building Act

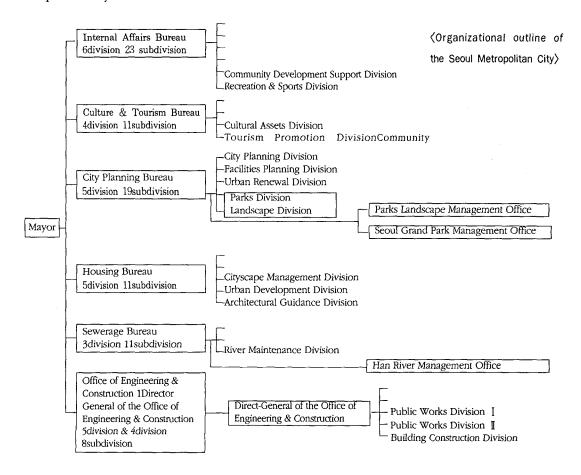
Local Tax Act	Encouragement Act	Forest Act
Local Financial Act	Housing Construction	River Act
Local Autonomy Act	Encouragement Act	Parking Act Cultural PropertiesProtection Act Military Facilities Protection Act

(The Legal systems related to parks and greeneries)

C. Administrative system for parks and greeneries

1) Organization of civil servants involved in open space

Organization of civil servants concerned P & G (Parks and Greeneries) in Seoul has gone through the developed period of 1970's, the reduction period of 1980's and the administration refinement period of 1990's. The current administrative organizational outline of Seoul Metropolitan City is as follows.



2) Park management

Park management of Seoul Metropolitan City can be divided into its own management and consignment management. Greeneries are under management of such Construction, the Ministry of Internal Affairs, and the Forest Office. Five major parks of Boramae Park, Yong-san Family Park, etc. are managed by Park and Landscape Management Office under the jurisdiction of Seoul Metropolitan City and the rest of them is controlled by the administrative authorities(District Office) where the parks are located. The total of 174 convenience facilities and exercise devices in 34 parks are under the consignment management.

3) Budget

The total budget assigned to main office (including project office) and District Office is approximately 133.5 billion \mathbb{W} out of it is set aside for the project cost. The cost of maintenance consists of 16.3%(18.3 billion \mathbb{W}) of the total budget and the cost of purchasing land exceeds P & G project cost in the budget. No.1 component of the total budget for P & G part is land purchasing cost as it reaches 40.2 billion \mathbb{W} showing that compensating for private land is becoming a critical issue now.

D. Demands for parks and greeneries

1) Leisure of Seoul citizens

As a result of the study on the demand of citizens of Seoul for leisure, major leisure activities focused on outdoor activities and showed that outdoor leisure activities are gradually increasing both weekday and weekends. This requires the provision of a variety of facilities, programs and easily accessible leisure facilities to accommodate the positive leisure activities. It was also found that the leisure pattern of Seoul residents came to be the types of four season and they greatly prefer the parks with highly natural characteristics.

2) Use behavior of Seoul citizens

In the survey to understand the behavior in P & G used by Seoul residents, the residents pointed out that their behaviour in using the parks is very simple and there is no clear distinct characteristics between the parks. These unsatisfaction is caused by the monotony of facilities and the deterioration of function in P & G. Therefore, P & G should be renovated complementing the facilities. Also, the plans for the mew type of parks and facilities that are able to accommodate various leisure activities are indispensible in prompt.

E. Ecological structure and Degree of Green Naturality(DGN)

The analysis of the current plant map and the degree of green naturality(DGN) could be the

material to monitor the change greeneries in Seoul. The study on size and rate in the current plant map shows that Red Pine tree group takes the widest area and Black Locust group and Red pine tree. Pitch Pine tree group is the major components of the current plants.

The DGN of urban natural parks and neighborhood parks falls into 6th grade. The management to protect more than 20 year old trees is urgently needed because they play an important role in improving the environment quality.

F. Satellite pictures(LANDSAT)

Using MSS and TM materials received from landsat 5, the study on change in greeneries size, development of plants and activities of plants in P & G as well as Seoul's open space status over time(1972-1992) was performed through their processing with EDRAS Image processing System. In Vegetation cover the analysis showed that the residential area has been increased to the contrary the farm land and forest area decreased owing to the progress of industry. Coniferous forest area has been increased, but on the other hand latifoliate forest area decreased. Green area in 1992 has been decreased comparing with 1972. also, in vegetation vigority low and high area has been decreased but medium area increased.

G. Current status of parks and greeneries

As for the status of P & G in Seoul, the size of the parks had 1945, but the trends ceased in 1976. Also it was seen the unit size of the park decreased as the number of the parks increased twice from 1975.

The planned parks in Seoul account for 150,361,378.84m (1,351 spots). It also corresponds to 42.74% of urbanized area of Seoul, Its size of enforced parks is 103,466,303,82.m (1.108 spots) as the rate of 69.81%. the planned park size and urban park size are 13.75m and 9.47m per capita respectively, which reach the international level.

However, P & G is degraded its value and utility because most of P & G are distributed outside of the urbanized area.

2. Formulation of policy

A Environment in policy

1) International environment

The trends of internationalization require transfer from the concept of nation to the concept of the world or to the globalization which pursues competition and exchanges between the regions. These also go along with change from development-oriented mind to environment-oriented mind. International regulations such as Green Round, Local Agenda 21 and academic issues like ESSD and Ecopolis present the need to set up the policy of P & G at the global environmental level.

2) Social, cultural and economical environment

The City of Seoul with 600 years history is currently trying to restore itself into a historical city through new study on its history and culture. The local self-government system which will start in the near future will require the region's autonomy. As the scope of civil participation in public development process is expected to be broaden and the civil requirements to be diversified due to the democratization of political system and the stabilization of local self-rule system. The efficient policy to manage public facility is essential urgently. It is clear that environmental movement and issues will come up as an important part of the future urban policy.

3) Environment of parks and greeneries status

The improvement of the current quality and quantity of P & G is required as the population is getting older and older and demand for P & G is increasing. However, it has been practically difficult and financially burdensome to secure the new land for parks since its priority in public service provision is low. We need the positive and practical way to provide parks and greeneries and to improve the quality of them.

B. Policy Agenda

The urban policy of Seoul has changed over time. In the 1960's and 1970's the focuses of urban policy were urban development and urban rearrangement/infrastructure facilities installation in the late 1970's to 1980's. And the issues of 90's is concentrated on the implementation of urban function, management and urban control.

(Agenda I -Preservation and Creation of parks and greeneries)

Implementation through the comprehensive protection of the existing open space, institutionalization of potential types and securing of the stable basis for P & G against the uncertain future development project.

- · Solution of problems with privately-owned land within the parks
- · Protestion of P & G from and its creation though development projects
- · Development and institutionalization of potential parks types.
- · Protection management to keep the total amount of P & G at the city of as Seoul level

(Agenda I - Restoration of parks and greeneries)

Restoration and revision of the open space through the quality improvement of P & G and scenery at the urban environment level to activate its leisure, environmental and cultural functions.

- Promotion of attraction of the parks by reflecting the needs of their users rather than focusing on service provision itself
- Improvement of urban park management to restore the function of the parks

- Quality improvement to prevent the damage to green area by environmental pollution and use destruction
- · Cultivation of urban environmental forest to maintain urban green area

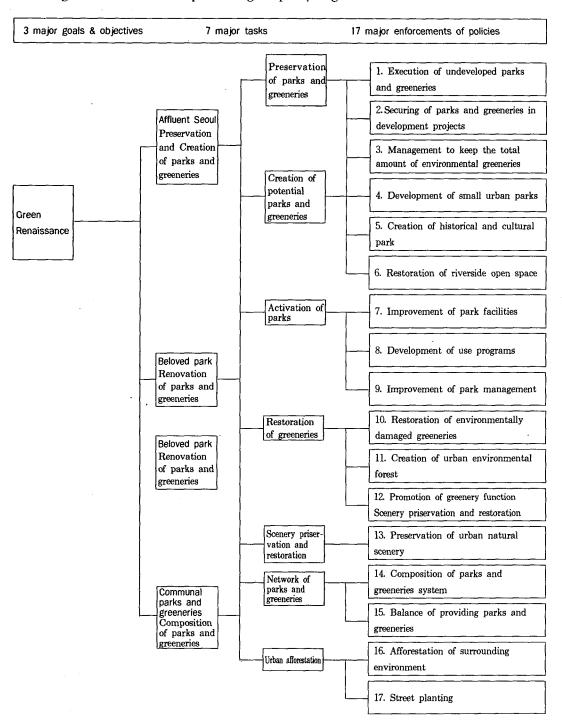
⟨Agenda II - Composition of parks and greeneries⟩

Composition P & G in day-to-day life to create urban environment 'WITH' open space and perform urban afforestation to form P & G which is located where it should be and always easily accessible to the users. ain future development project.

- · Restoration of linear green area and establishment of strategic parks to connect P & G
- Composition of the open space system in community level through development of small parks
- \bullet Maintenance of P & G according to environmental characteristics and balance of providing P & G

3. Policy Goals & Objectives

A.B.C. goals/obkectives for implementing the policy of green Renaissance



4. Affluent Seoul

A. Execution of undeveloped parks and greeneries

Undeveloped parks and greeneries accounts for about 31.19%(about 47km², 243 pots) of the total park area as of late December in '93. These parks take the widest area as urban planning facilities in that not have been developed yet. Since most of them are privately owned, it brings about the breach of private property right. Therefore, the execution of undeveloped parks and greeneries is urgently need to restore the function of the parks and to protect private assets. In executing, parks should be preserved by preventing the damage into them due to thoughtless private investment, and policy executor have to create various strategies to meet the situation.

Guidelines

- Putting priority for execution to the parks with suffering heavily by development
- Budget support for purchasing the undeveloped parks at the governmental level
- Provision of protective measures for the site off undeveloped parks
- Creation of various strategic measures to protect private property rights
- Unification of various opinions from policy performer, Citizens, and policy makers
- Setting-up of long-term and progressive planning
- Performance of based on the park characteristics

B. Securing of parks and greeneries in development projects

Urban maintenance and urban restructuring are encouraging development projects such as the Urban Rearrangement project, the Housing Lot Development Encouragement project and the Land Adjustment project. They also become the major types of encroach on the P&G. As a variety of urban development strategies are expected the performed, which are mostly likely to be TDR, SED or IZ, etc. The methods to preserve and secure P&G are required to respond to these trends.

- Understanding of major development projects and establishment of its measures
- Minimization of the damage into P&G and maximization of secured P&G in performance of development projects
- Strong control over development within forests and enforcement of restoration of near-by greeneries to minimize the damage of construction after the project is completed
- Regulation to prevent the reduction of P&G area by clarifying the criteria for securing park
- Securing of appropriate size of parks and greeneries against urban rearrangement project in CBD
- Setting-up strategies to secure P&G against various urban development methods

C. Management to keep the total amount of environmental greeneries

The demands for land in Seoul is rapidly increasing while the supply of land is gradually decreasing. Therefore, it should be set up the comprehensive strategies to protect green areas which are major victims of development keeping the total amount of it.

Laws related to green area have components of green area, scenic district, greenbelt specified by Urban Planning Law, but it is not suitable for greeneries the protection and management in Seoul with complicated attributes since the content of them are too simple for them. So the extensive revision for the law system related to green area is required and Ultimately the management greeneries should be set up. As the prerequisites for them, the database based on GIS for environmental green areas and the green area management system at the City of Seoul level should be made.

Guidelines

- Performance of the analysis in detail on current status of greeneries in Seoul
- Revision of the law system related current green area in terms of use/ maintenance/management
- Selection of green area evaluation criteria/indices and setting-up of mini/max level for management
- Setting-up of detailed guidelines, regulation of action and their application method to accomplish the purpose
- Collection of opinions from various groups such as related organization, developer, environmentalist and citizens
- Setting-up the enough room in total amount of control for urban development
- Building-up the GIS for environmental green area

D. Development of small urban parks

The demand for small urban park is gradually increasing as green areas relatively insufficient in the urbanized areas. However, it is difficult to provide additional parks due to costly land. It resulted in the need for development of potential resources. Small urban parks are the ones that the citizens can easily experience in their everyday life and play an important role to create amenity in environment. These small urban parks afford the connection and creation of green space in the urbanized area.

- Evaluation of potentiality to small urban parks and device a development scheme by type
- · Consideration to activate their uses by providing the particular function and theme
- Establishment of efficient distribution criteria based on the propriety of space distribution

- Setting-up of the incentive method to induce the citizens participation
- Examination on the possibility of conversion of small parking lot into small urban parks

E. Creation of historical and cultural park

The cultural remains that can be protected by the Cultural Remains Protection Law and the Urban Planning Act are only the ones with 'high historical and cultural values' as specified those two laws. So the regulations for small historical and cultural space for citizens are not yet systemized as just monumental spaces are the major subjects of preservation. It is recommended to create historical and cultural parks centering on a pavilion, a well and a ferry point. It is urgent not only to solve the problem that conflict between the function of modern urban and the tradition but also to preserve traditional spaces.

□ Guidelines

- Composition of the committee to drive historical and cultural park projects
- Setting-up of the measures to get financial support from efforts of both Cultural Property Preservation Bureau and Parks Division
- Securing of a provision for historical parks in the Cultural Properties Protection Act and the Urban Park Act
- Positive encouraging of participations by the neighborhood residents and local historians

F. Restoration of riverside open space

The river and stream in Seoul play a role of drainage line or road. However, it should perform an environmental and recreational function as urban linear open spaces.

The restoration of stream now drive actively in movement of civil environment organizations and similar projects in Germany, Britain, and Japan have been carried out successfully. These restorations could be the way to renew the linear green area system in Seoul and provide parks on a large scale.

- Setting-up of measures by the type to reflect the environmental characteristics of river
- Performance of step by step process, that is, purification of water restoration of ecology—recreational utilization
- Consideration of measures to minimize the damage to nature in the development plan
- Assigning a part between the public and private sectors and establishing management policies continuously
- In-depth examination on selection criteria of restoration objects, restoration

technologies and guidelines

- Encouraging of active participation by civil organizations and volunteer
- Improvement of accessibility to streams by citizens and consideration of relation between the stream and the usage of nearby land
- Setting-up an example projects to drive efficiently

5. Beloved parks and greeneries

A. Improvement of park facilities

Today most of the parks are facing the critical problems of inefficiency of their use without exceptions of advanced countries. Thus, the improvement of the function th meet the needs of users should be conducted immediately for the parks to secure competitiveness over other public facilities. To do so, detailed plan for the modernization of parks, the differentiation by landuse, and the characterization of the parks by types are required. They should be based on decisions and evaluations using proper planning criteria and indices.

Guidelines

- Suggestion of management criteria and indices to improve of the function, use program, and plan
- Endowment of multi function according to the sense of place, contexts, and natural characteristics as a field of ecology education
- Induction of modernized facilities and programs to renovate
- Specialization of parks to match land use such as CBD, residential area or industrial area

B. Development of use programs

The diverse programs should be prepared in urgent to give the various opportunities to the citizens to use the parks. It is apparent that the future urban parks shall become the center of local culture by adopting a variety of events and their facilities match their programs on the software aspect. In addition, it is needed the promotion of P & G, the improvement of senses towards greening, the adoption of environment movement program and the unification of management system on the hardware and software.

- Settling down the role of parks as the center of local culture
- · Organization unified management system in facilities and programs
- · Active encouraging of participations by civil environment organization and volunteers
- Active development of park use programs by civil participations and their characterization

- Greening movement addressing the importance of environment and P & G
- Preparation of information delivery system to periodically provide the information
- related to parks to the citizens

C. Improvement of park management

Today's park management of Seoul has the problems of deficiency of management organization, insufficiency of management cost and low level of management technology equipment and qualification of the related personnels. The improvement of park management requires not keeping status quo but management such as renovation and refresh of the parks.

To improve park management, the renovation in hardware and software has to be executed simultaneously. Lastly, the function of management office of Parks Landscape Management office should be expanded also.

Guidelines

- Composition comprehensive system for P&G
- Consolidation of management organization and their functions
- Modernization through improving management technology and facilities
- Role allocation of management functions and improvement of service
- Setting-up of various management plans and establishment of regulations for management system
- Securing of the inventory of P & G Evaluation of validity of management consignee and setting-up of the criteria of management evaluation
- Enhancement of civil attitudes towards P & G and positive utilization of volunteers

D. Restoration of environmentally damaged greeneries

The damage that affects greeneries such as acidification of soil, destruction of ecological order and abusive use, etc shows up as a serious problem. The ecological transition progress of most greeneries in Seoul has come into cease and death of dominant plants and the reduction of species diversity are clearly observed. So the detailed analysis on current status of environmental damages and the long-term measures should be made to restore greeneries and it will increase the value of greeneries.

- Performance of periodic observation of damaged greeneries and continuous restoration experimentation
- Securing of experts for research and analysis on forest ecosystem and soil restoration experimentation
- Long term performance for restoring plants and improving soil
- Development of restoration technologies for the damaged greeneries

E. Creation of urban environmental forest

The greeneries of Seoul are classified the forest as specified by the Forest Act, the greenbelt as specified by the Urban planning Act, the buffer green area and landscape green area as specified by the Urban park Act and other green areas thus resulting in the ambiguous definition of green areas. However, the definition of the urban greeneries should be set up as an environmental green area rather than simply forests or others. It requests the management and the promotion of green areas in terms of urban environmental forest.

Seoul Metropolitan City has been leading the project of creation of urban environmental forest for the purpose of improvement of scenery since 1991. Under this project, the existing plan were identified and the specified trees—for scenery were planted. However, side-effects like disturbance in ecosystem had been generated since ecological adaptability of these species were lower and adoption of foreign species were done without proper examinations. Setting up of counter measure is in need.

□ Guidelines

- Analysis of ecological characteristics of expected spots and adopting plants in greeneries
- Setting-up target species of trees considering environmental pollution and succession
- Use of domestic species that are highly resistant to pollution
- Management to make it possible to be succession to oak trees
- Facilitation of transition through seeding of oak trees, domestic species of trees, and young plants
- Step-by-step elimination of Carolina Poplar and Black Locust under the long-term plan

F. Promotion of greenery function

Seoul's greeneries have played a passive role while only the effect of its existence itself has been considered. It does not match the trends of multiple and complicated use of land that is becoming highly sophiscated and densified. Moreover, the green area is conceived as potential area to be developed in the future by policy performer and developer. When basic urban planning for self-rule District expected to complete by 2000 takes in effect, the environment of Seoul residents will be drastically deteriorated as the huge range of residential area turn into commercial areas. The green area of Seoul should positively respond to these negative factors heightening the importance of green area within the city.

- Classification of green area function into two, one for the effect that can be obtained from its use and the other for the effect that can be obtained from its existence itself
- Performance of the project that suburban green area is the major target, which is a topographically hillside with high pressure for development

- Maximization of the effects that can be obtained from its existence itself such as scenic beauty, preservation of environment and prevention of disaster
- Promotion of the use for the purpose of recreation but control over the activities highly depending on facilities
- Induction activity friendly relations with nature such as hiking, picnic, forest bath and nature exploration
- Furnishing the niche for wildlife

G. Preservation of urban natural scenery

As a gift of Heaven, Seoul is surrounded by inner 4 mountains (Feng Sui Terminology) of Bukaksan, Namsan, Inwangsan and Naksan and outer 4 mountains (Feng Sui Terminology) of Bukhansan, Yongmasan, Kwanaksan and Dukyangsan. These mountains could be seen as skyline from suburban area but we can not enjoy their full scenery due to landscape barrier by artificial buildings.

Thus, we need the policies to manage the natural scenery for the preservation and restoration of mountainous natural scenery, river scenery and green area scenery in urbanized area.

Guidelines

- Preparation of special management guidelines for the areas with extensive visible range such as mountains and hilly districts
- Setting-up of the plans proper to the individual visible ranges such as close range, short-distance range and long distance range
- Preparation of restoration guidelines and preservation guidelines according to the characteristics of the individual
- Consideration of scenery diversity, seasonal change and locational characteristics for river scenery plan and its performance
- Restoration of small urban parks and improvement of the scenery of urbanized area

6. Communal parks and greeneries

A. Composition of parks and greeneries system

The open space system of Seoul can be divided into broad range of the open space system at the city of Seoul level and small range system in the administrative district (Gu). The broad range system of open space consist of North—South axis related landform, the Han River is related waterscape and the circular axis of inner ring including inner 4 mountains and outter ring including outter 4 mountains. Regional open space system is the finer connections of open spaces that the residents in a neighborhood feel actually. It links all natural elements and artificial elements functionally and physically meeting the current trends of decentralization of Seoul due to

multipolarized structure and development of subway centered community zone.

To establish the open space system of Seoul, the appropriate measures for Seun shopping mall located between Bukaksan and Namsan, Yongsan district between Namsan and Kwanaksan and Dongjak district should be taken to restore the greeneries and also it is necessary to secure linear green areas with minimum width considering the cost of land. The regional park system is based on the administrative district of Gu (ward). Those regional park specified by Basic Urban Master plan of Seoul in 1990 are the major components, it also includes creation of small urban parks, historical/cultural parks and streambed as well.

Guidelines

- Securing of connecting space for cut off green area axis to restore open space system
- Preparation of restorating plan for the specified areas among the damaged part on North—South axis related landform and its step-by-step performance
- Composition of regional open space system based on District scale
- Connecting ecological ranges in terms of environmental ecology
- Simultaneous conducting of improvement of park accessibility founding of park guidance system and securing of connecting green corridor between parks
- Creation of green corridor for each District through simultaneous performance of development of small urban parks and restoration of riverside
- Organization of linear open space system connecting with subway centered community zone cycling road and pedestrian passage

B. Balance of providing parks and greeneries

P & G of Seoul has the problems of unbalanced distribution, quantity and non-characteristical quality. From the start of self rule system, each district will face these problems. The problem of unbalance between the Districts might be left unsolved.

The pursuit of identity by the District requires the creation of P \$ G that fits the regional characteristics features of a particular District. Thus, the appropriate adjustment against excessive number of undeveloped parks, improper distribution, disconnected open spaces and poor accessibility is needed to solve the gap between the Districts.

- Active conducting of policy to create P & G for the District which does not have enough of it.
- · Connection with the restoration project for riverside with high potentiality
- Presentation of long-term and short-term measures against unbalance between the Districts
- Conducting the grand scale project of recreational park in the city of Seoul level for the wards whose provision of parks is insufficient

- Consideration of quality improvement in case that the balance of quantity is impossible
- Focusing on the implemention the undeveloped park, the promotion of accessibility and the improvement of P & G function
- Setting—up of major agenda for the balance of provision and the clarification of targeted index/implementation guidelines when making the urban master planning of Seoul

C. Afforestation of surrounding environment

The Afforestations of public and private facilities is essential to make green city. The subjects for afforestation projects of Seoul are infrastructure such as streets, railroads, governmental buildings(city hall, district office), police station and school, civil facilities such as residental ares, commercial buildings, office buildings and private gardens.

To conduct the afforestation for civil facilities with efficiency, the model practical should be preceded over the public facilities. It also requires the establishment of legal regulations for systematic support, the organization of long-term enforcement system and planting movement where the citizens play a important role driving force.

Guidelines

- Positive adoption of practical afforestation programs such as regulations/incentive methods/educations for the planting of civil facilities
- Conducting of the model project for the pubic facilities
- Securing of a provision for continuous project performance in municipal ordinances(city/District)
- Solidification of guidance and supervision of the administrative authorities and their financial support
- · Assignment of afforestation area and utilization of urban design system
- Movement of doubling green area in single houses and apartment houses
- Selection of planting criteria such as planting standard, planting placement standard coincide with environmental characteristics

D. Street planting

Street planting consists of small size of green area related street trees is an essential element to compose cozy walking environment and streetscape. Street planting related to pedestrians is a linear greenery and that is a basic element of open space system. Tree planting beside road has more public than any other. Therefore street planting can be a major means of city planting and that has a big spreading effect. It deals with several major matters such as the function of street trees and their management guidelines, connections between the small size green areas,

connections with urban planting based on street tree system. The ultimate object is to create a rich greenery in street environment.

- Consideration of the characterization of road and their images of scenery individually
- Preparation of planting guidelines and connections between street trees and nearby green areas
- Settlement of the type of relations between street facilities and street trees
- Trial to connect street trees and the green areas of street node
- Construction of street tree system and establishment of planting system by route
- Establishment of planting models considering to street facilities and street characteristics
- Setting-up of management guidelines and model considering the characteristics of street trees