Effective Management of Green Spaces Jakarta City

Rustam Hakim Manan Department of Landscape Architecture FALTL Universitas Trisakti – Jakarta - Indonesia Jl. Kyai Tapa No.1 Grogol, Jakarta 11440, INDONESIA

Abstract:- The rapid physical development of Jakarta in the last decade had resulted in the decrease of not only the green spaces in the city but also the quality of the spaces. Several aspects in the management of the green spaces such as planning, funding, institutionalizing, coordinating and human resources capacity have strong relation with the degradation of both quantity and quality of the green spaces. Good governance is an important factor in the management of green spaces. The research aims to investigate good governance of green spaces in Jakarta city by using survey method to collect data from two hundred and sixty respondents. The respondents have been selected from several categories, such as, academicians, non governmental organizations (NGOs) and also from business communities. Data was collected from twenty public figures by the interview method and seventeen respondents from politicians as well as stakeholders through questionnaire. The collected data from the survey has been analysis using statistical descriptive method, hierarchical analysis, interconnected decisions area and content analysis. The research shows the lack of good governance in the management of green spaces impact directly into the existence of the green spaces. Finally, this research suggests interconnected decisions models of good governance in greenspace management for Jakarta city.

Keywords: Good Governance, Green spaces Management

I. INTRODUCTION

In 2025 is expected to total 65 percent of the world's population live in urban areas (Schell and Ulijaszek, 1999) because of rapid urbanization efforts. Urbanization also alter the ecosystem of the city and distant relationship between humans and the environment. Thus the quality of green spaces in urban areas are needed to preserve the ecosystem of the city and improve access to rural areas around the city (Feng Li., Rusong Fund., Juergen Paulussen., Xusheng Liu, 2005).

Urban green areas serve to preserve the ecosystem of the city and to reduce the pressure of the population living in cities, directly and indirectly through ecosystem functions (Costanza et. Al., 1997) and produce oxygen and reduce carbon dioxide (Jo, 2002), preventing air and water pollution , regulate microclimate, reduce noise pollution (Bolund and Hunhammar, 1999), the protection of soil and water (Pauleit and Duhme, 2000), preserving the diversity of life (Attwell, 2000), and can be recreational, cultural and social values (Savard et al., 2000). Green areas such as

public parks, nature reserves and golf course affect the sale price of houses located nearby (Bolitzer, 2000 and Luttik, 2000). Therefore, apart from working to improve the urban environment, urban green spaces also play a role in maintaining the well-being and improve the quality of life of urban dwellers.

Benefit from the existence of urban green areas can be viewed from the perspective of economic benefits (economic benefits), which can reduce energy and water consumption (Roseland, 1998). From the point of social benefits (social benefits) useful green spaces for recreation areas, sports / games, and the rest (Roseland, 1998). In a study on the psychological benefits of green areas (Miller, 1997) found that these places can be beneficial in terms of socializing, fostering camaraderie and friendship, learn together, providing an opportunity to personal and social values, promote spiritual development, and freedom. To realize the functions and benefits of urban green spaces, green areas management is very much needed (Ann, CW, Bernard, D., Gunilla, L., Bettina, O., Stephan, P., Sybrand, T. (2005).

In general, the management of urban green areas were translated to management that includes several aspects of activities, ie planning, administration, human resources, and financial coordination (Oetomo, A, 2010). Planning and management of urban green spaces should be in tandem with the ongoing urban development (Miller, 1997, Grey, 1996, and Teal et al., 1998). In Canada, the United States and in Europe and emerging social movement organizations are aware of the environmental importance of preserving green spaces in urban areas (Sousa, 2003 and Kuhn, 2003).

Requirements to green urban areas to produce aspects of ubiquity, convenience and beauty of the city is undoubtedly even in urban green spaces are shrinking. Some experts say that urban green spaces can not be less than 30 percent or 1,200 square meters per people (Shirvani, 1985). In India around 20 percent from the city of New Delhi geographic area designated as a green city with a certainty of about 21 square meters per people. Meanwhile in Hong Kong the average urban green areas around 1.81 percent, ie, 3 square meters per people (Singh, V S., Deep, NP, Pradeep C, 2010). The rapid development of the city of Jakarta resulted in the quality and quantity of urban environmental decline. Rapid physical development in the city of Jakarta tends to give rise to the phenomenon of the physical structure of the city heading towards the maximum and the minimum green towards the environment so likely to change the face of Jakarta. To ensure the continued development of the city of Jakarta and a visionary environmental management system is required. Koesnadi Hardjasoemantri (2003) states that the relationship between good management systems to sustainable development can be seen from the point of administration and human resources in terms of attitude. According to the chairman of Directorate General Space (2002) to achieve the policy system of good governance in the management of green areas of Jakarta should be established.

Although the system of good governance have been introduced since the early 1990s, but the application of the principle of good administration system extensively and consistently in the management of the municipality has not reached the expected level. The principles of good administration system according to (UN Habitat, 2004) which should be applied in the implementation of the policy is the first response, note / response needs of the community and stakeholders; Second, participation, involvement in the process of policy community formulation; Third, transparency, widespread availability of information and open to any one program; fourth charge, the decision taken by the government, the private sector and the community must be accountable to the public and all stakeholders; Fifth, consensus, differences of interest are discussed in detail in the public interest, sixth, effective and efficient, optimal use of energy resources, and the seventh, law enforcement; consistent application of the legislation.

In summary of this research will be to find a model element management effectiveness urban green areas with the principle of good administration, particularly in the city of Jakarta. Jakarta Master Plan 1965-1985 targets green area covering 37.20 percent of the total area of Jakarta, but in the General Spatial Plan (RUTR) Jakarta from 1985 to 2005 target of green space is reduced to 25.85 per cent. Furthermore, in the Regional Spatial Plan (RTRW) Jakarta from 2005 to 2010 that targeted green space has diminished, which is 13.94 percent. In 2004 the green area on the ground only about nine per cent (9 per cent) or 50 square kilometers. Green area of the city of Jakarta which are shrinking.

Empirically, in the ongoing management of many urban green areas have been changed to use another function (Directorate Public Work Republic of Indonesia, 1994). Urban green area just a complement to a green area of the town that is considered only as aesthetic enhancement to the environment.

Competition for use of land in big cities is influenced by the market mechanism, causing a lot of green areas varied use into residential, commercial, hotels, gas stations and restaurants. The loose oversight of the authorities on the development of the city of Jakarta, limited human resource capacity in the department related to the management of green areas in terms of professionalism, institutional issues, diversity Department of Agriculture, the problem of the very limited availability of land as green space and the problem of funds for the expansion of green areas shrink add green space of the city of Jakarta (Joga, and Antar, 2007).

Hence the question that will be raised for discussion include; First, why is the city of Jakarta Green spaces Management less effective; Second, aspects of management (planning, administrative aspects, aspects of human resources, the coordination aspect, or the financial aspect) which is the most inhibited the expansion of green areas of Jakarta; Third, the principle of good administration systems (good governance) which are less embedded in the management aspects identified in the second question; Fourth, how does the model formulation of appropriate management of green areas with the principles of good governance systems (good governance)



Figure 1.1: Boundary Region of Jakarta City Administration and the Border Region Municipality Source: Government of DKI Jakarta Bappeda Books, 2007

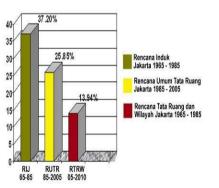


Figure 1.2: Quantity of Green City Jakarta from 1965 to 2010 Source: Master Plan Jakarta - DKI Jakarta Books, 2005

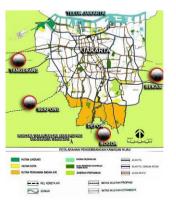


Figure 1.3: Target Jakarta City Green Plan 2010 Source: Master Plan Jakarta - DKI Jakarta Books, 2005

II. GREENSPACES MANAGEMENT JAKARTA CITY

During the Dutch colonial city of Jakarta is a city of green areas. This is not because the people of the city of Jakarta at the time as a culture closer to the environment than the current population, but because of the many villages that the economics of agriculture are still wide. Traditionally green area at the time of the main function, which is a function of the economy.

Jakarta City starting in the Sunda Kelapa, a small town Pajajaran Government in West Java Province. Having taken over by the Government of Banten name changed to Jayakarta. Jayakarta in 1619 and the territory seized by Jan Pietersz Coen, a company commander of the Dutch VOC. He changed the name Jayakarta to Batavia (Heuken, 2000). Batavia plans have been developed by the city of Amsterdam with canal mold into the river and sea transportation routes, which later became the main port for trade efforts Vereenigde Oost Indische Compangnie (VOC) and the capital of the Dutch East Indies

Batavia city is famous not only for trade and canal-canal dirty but also because of its green areas. The city is very green with trees filled, particularly in vacant land or an area designated as parks and agricultural areas in the outskirts or Ommelanden. Kehijauaan city of Jakarta unchanged at the end of the 18th century. At that time the city Batavia increasingly densely populated and in the same time the city Batavia hit by the epidemic. Batavia City transforming into a town cemetery (Funo, et al, 2004).



Figure 2.1: Concept Expansion Jakarta City from 1985 to 2005. Source: Government of the City of CITY Jakata, 1985, Jakarta City Development Master Plan 1985-2005)

Based on the above description can be concluded that the existence of a green area of Jakarta faces a high risk because of the constant change / converted utilization of land more profitable economically. Reduction of green space in the city of Jakarta in connection with the economic gains that affect the city and the loss of capital investment resulting in increased environmental pollution in the city both physically and mentally.

Expansion of urban planning authorities already have Jakata City Master Plan Development since 1965, but the longer the green area of the city of Jakarta has narrowed even in the plan set a target of green space plan of Jakarta. In fact Green spaces Management authorities can not meet the target set by reason of the limited coordination between the three departments of the city Green spaces Management Jakarta, limited human resources and limited budget / finance.

III. MATERIAL AND METHODS

This research was conducted using a sample design and questionnaire design have been tested. Analysis of the results was performed using cross-sectional descriptive analysis of policy formulation and receiver Greenspace Management. Study through questionnaires is an effort to collect data (one or more variables) of the population to determine the current status of the study population (Sumanto, 1995). Survey is a study that takes a sample from a population using a questionnaire as a data collection tool. Questionnaire method with techniques appropriate sample for a study characteristics, a) a large population, b) the object of the study was defined and formulated clearly, c) studies done in the study area, and d) the availability of financial constraints and time (Singarimbun and Efendi, 1989). Donald Ary (1983) states that the method of questionnaires designed to obtain information about the current status of the implementation of the study to describe variables or conditions in a situation. Questionnaire method not only can reflect the existing situation but also to compare these conditions with features that have been previously set. Methodological approach used is based on the distribution analysis of the problem to be solved and the objectives to be achieved based on the purpose of the study.

In short, the method of research is in-depth interviews (indepth), based on the sample. The case study is a useful and reliable method capable of providing in-depth and detailed picture of the situation in the study area to the researcher.

It will involve two devices research techniques, (1) techniques in depth interview and (2) questionnaire

techniques. Technical depth interviews will be conducted to identify the problems in the management aspects of greenspace areas while technical questionnaire will be used to identify important cities and greenspace management. Primary data is gathered in depth interview to submit seventeen (17) expertist leaders community with questions openly. The questionnaire was a total 48 questions (18 questions the planning aspects, 3 questions the administration aspects, 6 questions aspects of human resources, 10 questions the coordination aspects and 11 questions the financial aspect). Data collected from the two (2) types of respondents, 20 respondents from community leaders and 260 respondents from recipient policies. Secondary data was collected the management and policy documents.

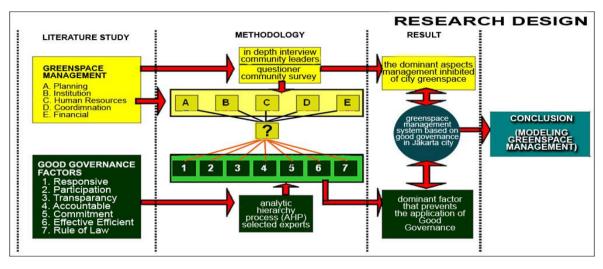


Figure 3.1: Research design Source: Field Survey, 2008

QUESSIONERS

RESPONDENT

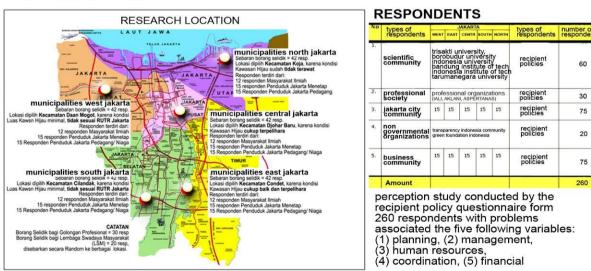


Figure 3.2: Boundary Five Regional Municipality of DKI Jakarta Distribution Area Being Questionnaire Source: Field Survey, 2008

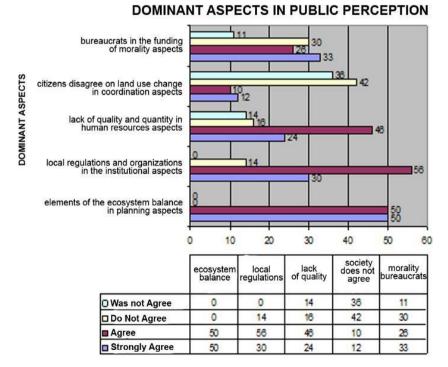
IV. RESULTS AND DISCUSSION

Result in depth Interviews

		MANAGEMENT ASPECTS									
	TYPES of	Planning	Institution	Human Resources	Coordination	Financia					
Code	COMMUNITY LEADERS	RATINGS PROBLEMS									
1.	Site Planner	4	3	1	2	5					
2.	Site Planner	1	3	2	4	5					
3.	Site Planner	5	2	4	3	1					
4.	Environmental Planner	1	3	5	2	4					
5.	Environmental Engineer	3	2	4	1	5					
6.	Head of neighborhood (RW)	3	5	2	1	4					
7.	Head of neighborhood (RW)	4	2 5	1	3	5					
8.	Head of Distric (Camat)	1	5	3	2	4					
9.	Head of Distric (Camat)	2	4	3	1	5					
10.	Head of Distric (Camat)	1	4	5	2 1	5 3					
11.	Social Leader	2	3	4	1	5					
12.	Social Leader	3	2	1	5	4					
13.	Culture Leader	5	3	2	4	1					
14.	Culture Leader	3	2 5	4	5	1					
15.	NGO	1	5	2	3	4					
16.	Lawyer	2	5	3	4	1					
17.	Landscape Architect	1	5	2	3	4					
18.	Landscape Architect	4	5	3	2	1					
19.	Bussinesman	1	4	5	2 2 2	3					
20.	Economy Lead	1	4	5	2	3					
	TABULATION RESSULTS										
	RATINGS	1 = 8	1=0	1=3	1=4	1=5					
	RATINGS	2=3	2=5	2=5	2=7	2 = 0					
	RATINGS	3=4	3=5	3=4	3=4	3=3					
	RATINGS	4=3	4=4	4=4	4=3	4=6					
	RATINGS	5=2	5=6	5=4	5= 2	5=6					

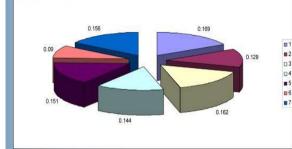
Twenty person (20) community leader in interviews to note that aspects planning and management of green space, not involving participation of the community. Thus, it can be said that the decision makers approve the plan a green spaces decided unilaterally by the government. The authorities assess that land of green spaces has no economic value. Dominant aspect of this study are the design aspect is the balance of the ecosystem elements, the maintenance aspect is the element of local regulations and organizational improvement, in the aspect of alignment is to change society's disapproval element soil functions, in the aspect of human resource is the human resource shortage elements quality, and the funding aspect is the element morality bureaucrats.

Result of Public Perception



Result of Analytics Hirarchy Process (AHP)

PROSES HAP RESPONDEN 1											
Kriteria	1	2	3	4	5 6	6	7	Eigen Vector	Bobot		
1	1	2	1	0.5	2	2	1	1.219014	0.169		
2	0.5	1	1	1	2	1	0.5	0.905724	0.129		
3	1	1	1	1	2	2	1	1.219014	0.162		
4	2	1	1	1	0.5	2	0.5	1	0.144		
5	0.5	0.5	0.5	2	1	2	2	1	0.151		
6	0.5	1	0.5	0.5	0.5	1	1	0.67295	0.09		
7	1	2	1	2	0.5	1	1	1.10409	0.156		
Jumlah			2		S			7.120791	1		



The principle of inclusion is the biggest influence factor in the implementation the principle of good governance.

Value ratio of the first respondent data is 12:08. The first respondent data is consistent.

RESULT AHP

RES PON DENT	RATINGS													
	1	2	3	4	5	6	7							
11	Responsive	Accountable	Efektif dan efisyen	Transparant	Commitment	Participation	Rule of Law							
12	Transparant	Accountable	Commitment	Efektif dan efisyen	Responsive	Participation	Rule of Law							
13	Participation	Rule of Law	Efektif dan efisyen	Transparant	Responsive	Commitmen	Accountable							
14	Transparant	Participation	Efektif dan efisyen	Commitment	Accounțable	Rule of Law	Responsive							
15	Participation	Efektif dan efisyen	Rule of Law	Transparant	Accountable	Responsive	Commitmen							

Expert implementers putting basic principle transparancy, participation and responsiveness as subjects that should take precedence in greenspace Jakarta. The principle of public participation, and responsiveness transparancy selected as the virtue and greenspace perceived that inclusion efforts bahawa various segments of society such as NGOs and academic groups can help provide oversight and thoughts that are positive to the negative implementation regional development of greencity

FORMULATION

Based on the average estimate of schedule characteristics ballast, ballast factors that affect the implementation of the principle good governance system according to the basic decision makers is like sequences in the table below.

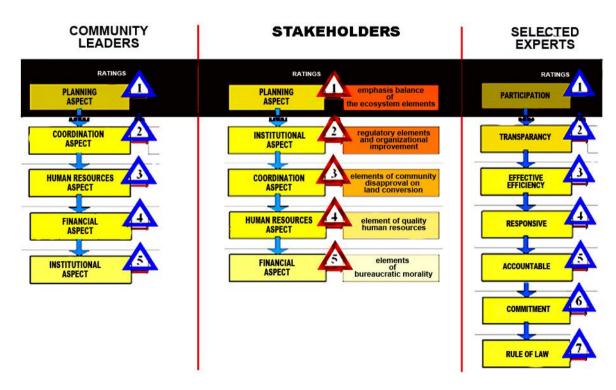
FAKTOR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Rata-rata
Partisipa tory	0.23 6	0.18 i 6	0.202	0.181	0.224	0.232	0.14	0.182	0.266	0.191	0.106	0.142	0.157	0.191	0.169	0.187
Respons if	0.10 6	0.16 9	0.136	0.146	0.097	0.088	0.259	0.168	0.115	0.154	0.186	0.114	0.135	0.103	0.129	0.140
Effective dan Efficient	0.13	0.16 S	0.116	0.098	0.184	0.185	0.085	0.178	0.104	0.15	0.168	0.118	0.156	0.144	0.162	0.143
Account able	0.10 1	0.13	0.122	0.159	0.135	0.122	0.134	0.119	0.166	0.092	0.181	0.166	0.128	0.125	0.144	0.135
Trans parant	0.19 4	0.12	0.185	0.168	0.148	0.15	0.113	0.174	0.15	0.124	0.16	0.226	0.138	0.193	0.151	0.160
Consen sus	0.13 7	0.10 2	0.125	0.124	0.102	0.124	0.136	0.095	0.099	0.174	0.129	0.132	0.129	0.135	0.09	0.122
Rule of Law	0.09 6	0.12 5	0.113	0.124	0.108	0.1	0.134	0.084	0.101	0.115	0.071	0.102	0.157	0.108	0.156	0.113
Jumlah	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Selected based on the expert opinion is basically the principles of good governance systems have been applied in the planning of the expansion of green areas of Jakarta, but the strength of influence of each of these principles varies up to affect the smooth planning.

From the analysis of the opinion of the three groups of respondents principle of participation has been placed as a priority in the system of good governance that influence Green spaces Management of planning by the three groups of respondents. Jakarta is a city of complex ecosystem consisting of the composition of the natural environment, social, economic and knowledge subsystems. Participation of all stakeholders and coordination between the institutions involved in the planning is the way to achieve success for expanding and sustaining the urban green areas (Landelma et al., 2000; Tahvanainena et al., 2001).

Theoretical studies in the second chapter of Green spaces Management summarizes key aspects of the Green spaces Management, the first being Green spaces Management stressed the importance of stakeholders including community and all agencies involved in the implementation of the planning process; second, the Green spaces Management is a decision and action focused on the development of all aspects of public well being, which accounted for the social, economic, physical. environmental and legal/regulatory requirements; third, Green spaces Management responsible to the factors that influence the internal and external development both of a city; fourth, Green spaces Management allow monitoring and evaluation of effective internal and external; fifth, Green spaces Management require funding covering cooperation between all the authorities, the private sector and the community. This encourages and route Himself to all stakeholders and interest groups to participate in all the steps of the municipal system management. Thus the principle of participation is an important part that can not be ignored in the Green spaces Management.

V. CONCLUSION



The findings of this research show that implementation planning is very important to maintain the sustainability of urban green areas of Jakarta.

Therefore a good administrative system approach with application Principles Of Community Participations is required for planning Green spaces Management controlled and handled in order to maintain a balance of urban ecosystems. This is in line with the statement of Jessop (2000) Report of the World (World Report) stating that the approach through the concept of good administration system will provide a solution to the failure of the authorities.

From the above several conclusions can be made here, namely;

Vol. 4 Issue 11, November-2015

- 1. Principles of Participation society in good governance system, an important part to improve the quantity and quality of green areas in the city of Jakarta. It should be noted by the manufacturer, monitor and implementing policies/policy Green spaces Management. Community participation should be open and all the given opportunities and the opportunity to acquire information about the Green spaces Management. The involvement of all elements of the management of community participation in camping can solve all the problems in a more democratic.
- 2. Planning in Green spaces Management very important to maintain a balance of urban ecosystems. Plans include setting intended purpose and action and rational decision making. Green spaces Management with an integrated planning approach and focus on the diversity of interests to be based on the importance of green areas and local conditions.

REFERENCES

- Amati, Marco., Makoto, Yokohari. (2006). Temporal Changes and Local Variations in The Functions Of London's Green Belt. Journal Landscape and Urban Planning 75, 125–142.
- [2] Ann, C. W., Bernard, D., Gunilla, L., Bettina, O., Stephan, P., Sybrand, T. (Eds) (2005). Green Structure and Urban Planning Final report. Luxembourg: Office for Official Publications of the European Communities
- [3] Bell, S. and Morse, S. (2000). Sustainability Indicators: Measuring the Immeasurable. London: Earthscan, 175.
- Boentje. and Blinnikov. (2007). Post-Soviet Forest Fragmentation and Loss in The Green Belt Around Moscow, Russia (1991–2001): A Remote Sensing Perspective, Journal Landscape and Urban Planning. 82, 208–221.
- [5] Bolitzer., Netusil. (2000). The Impact of Open Spaces on Property Values in Portland, Oregon, Journal. Environmental Management. 59, 185–193.
- [6] Chakrabarty, B. K. (2001). Urban Management: Concepts, Principles, Techniques and Education, Journal Cities 18, 331-345.
- [7] Clarke, G. (1992). Towards Appropriate Forms of Urban Spatial Planning, Journal Habitat International 16 (2), 149–165.
- [8] Davidson F. (1996). Planning for Performance: Requirement for Sustainable Development, Journal Habitat International 20 (3), 445– 462.
- [9] Diamantini. and Zanon. (2000). Planning The Urban Sustainable Development The Case of The Plan for The Province Of Trento, Italy, Journal Environmental Impact Assessement 20, 299–310.
- [10] DKI Jakarta. (2008). Rencana Pembangunan Jangka Menengah (RPJM) DKI Jakarta 2007-2012. Peraturan Daerah Provinsi Daerah Khusus Ibukota Jakarta Nomor 1 Tahun 2008
- [11] Fernando, J. L. (2003). The Power of Unsustainable Development: What is to be done, The Annuals of the American Academy of Political and Social Science 590 (1), 6–34.
- [12] Garnham., Harry Laurence. (1985). Maintaining The Spirit of Place: A Process for The Preservation of Town Character. Arizona: PDA Publishers Co.
- [13] Harts et al., 2003 J.J. Harts, K. Maat and H. Ottens, (2003), Planning support systems: an introduction. In: S. Geertman: and J. Stillwell, Editors, Planning Support Systems in Practice, BerlinSpringer, 315– 329.

- [14] Harris and Batty. (2001) Locational models, geographic information, and planning support systems. In: R.K. Brail and R.E. Klosterman, Editors, Planning Support Systems, Redlands: ESRI Press, 25–57.
- [15] Heuken, Adolf S. J. (2000). Sumber Sumber Asli Sejarah Jakarta Jilid II, Jakarta: Yayasan Cipta Loka Caraka.
- [16] Johnson, Peter S and Gary L. Christop. (2005). Using the Analytic Hierarchy Process to Create a Wildfire Model, Paper Presented at the Twenty Fifth International Annual ESRI User Conference, July 25–29, 2005 - San Diego, California
- [17] Kakonge, J. O. (1998). EIA and Good Governance: Issues and Lessons from Africa, Journal Environ Impact Asses Review 18, 289–305.
- [18] Khalid, Zakaria., El Adli Imam. (2006). Role of Urban Greenway Systems in Planning Residential Communities: A Case Study From Egypt, Journal Landscape and Urban Planning 76, 192-209.
- [19] Landelma. (2000). Using Multicriteria Methods in Environmental Planning and Management, Journal Environ Management. 26 (6), 595–605.
- [20] Lautso, K. (2003) The SPARTACUS system for defining and analyzing sustainable urban land use and transport policies. In: S. Geertman and J. Stillwell, Editors, Planning Support Systems in Practice, Berlin: Springer, 453–463.
- [21] Li and Wang. (2003). Evaluation, planning and prediction of ecosystem services of urban green space: a case study of Yangzhou City. Journal Acta Ecol. Sin. 23(9), 1929–1936
- [22] L'utz, M., Bastian, O. (2002). Implementation of landscape planning and nature conservation in the agricultural landscape—a case study from Saxony. Journal Agriculture Ecosystem Environment. 92, 159– 170.
- [23] McGill, R. (2001). Urban Management Checklist, Journal Cities 18 (5), 347–354
- [24] Nas, P.J.M. (2002). The Indonesia Town Revisited, Singapore: Institute of Southeast Asean Studies.
- [25] Nas, P.J.M and Kess Grijns. (2000). Jakarta Batavia, Esai Sosio Kultural terjemahan dari Jakarta Batavia Socio Cultural Essays. Leiden: KITVL Press.
- [26] Ong, B. L. (2003). Green Plot Ratio: An Ecological Measure for Architecture and Urban Planning, Journal Landscape Urban Planning 63, 197–211.
- [27] Rakodi, C. (2001). Forget Planning, Put Politics Priorities for Urban Management in Developing Countries, International Journal of Applied Earth Observation and Geoinformation 3.
- [28] Repetti, Alexandre and Gilles, Desthieux. (2006). A Relational Indicatorset Model for Urban Land-Use Planning and Management: Methodological Approach and Application in Two Case Studies, Journal Landscape and Urban Planning 77(1-2), 196-215.
- [29] Saaty, T. L. (2001). Decision Making For Leaders, Pittsburgh, USA: RWS Publications.
- [30] Savard, J., Clergeau, P. and Mennechez. (2000). Biodiversity Concepts and Urban Ecosystem, Journal Landscape Urban Planning 48, 131–142.
- [31] Susanto. (2003). Pengaruh Faktor Kontinuitas Spasial dan Waktu dalam Pola Penutupan Lahan Aktivitas Perkotaan di DKI Jakarta. Riset terbatas. Jakarta: Dinas Pertamanan.
- [32] UNCHS. (2000). The Global Campaign for Good Urban Governance. Nairobi: United Nations Centre for Human Settlements (Habitat).
- [33] UN-Habitat. (2004). The Global Campaign on Urban Governance, Retrieved Juli 2004, from http://www.unhabitat.or/campaigns/governance
- [34] Van Kamp et al., (2003), I. van Kamp, K. Leidelmeijer, G. Marsman and A. de Hollander, Urban environmental quality and human wellbeing; towards a conceptual framework and demarcation of concepts; a literature study, Landscape Urban Plan. 65, 5–18.
- [35] World Bank. (2002). Local Economic Development. Washington: World Bank Publications.
- [36] Zhang. (2000). Land Market Forces and Government's Role in Sprawl – The Case of China, Journal Cities 17, 123–135.