

Strategy for Managing Public Park Maintenance as One Effort for the Implementation of Sustainable Green Open Space

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Abstract

The problem in managing the existence of Green Open Space in Indonesia, especially Jakarta lies in the management of maintenance. Efforts to maintain open green space, especially public parks, do not run optimally. Public parks that have been well built, ultimately cannot function optimally. This study aims to provide an alternative strategy for managing public park maintenance that can maintain and enhance the role of parks in a sustainable manner. The research method used is descriptive analysis and comparative study methods. Sampling is done by purposive sampling. Data collection is done by spreading the two-way assessment matrix from the Leopold Method in a limited manner to the parties involved in the relevant agencies followed by in-depth interviews and observations. Data analysis will be carried out descriptively and the Delphi Analysis of the assessment matrix is matched with the results of comparative maintenance management studies in Europe. The results of the study show that the involvement of parties non-government (private and local communities) can optimize the maintenance of public parks. Thus, the function of public parks as one of the forms of green open space as a forum for social interaction and providing a balance for local ecosystems can work.

Keyword: Maintenance Management Strategy, Public Park, sustainable Green Open Space

Introduction

The issuance of Law (Undang-undang) No. 26 of 2007 concerning Spatial Planning, changed the paradigm of the city government towards the quantity of Green Open Space (RTH). Article 29 of the Law explains that green open space from an urban area is required to have a minimum proportion of 30% of the total area, which consists of green open space of 20% and private green open space of 10%. DKI Jakarta's Green Open Space in 2011 based on actual conditions was only 59.25 km² (8.9%) of its area. The needs of DKI Jakarta's Green Open Space based on the provisions of the Law, which is 30% of the total area, 198.70 km². So the shortfall is still 134.45 km² (21.1%), both in the form of public and private green open space (Novianty, Neolaka, & Rahmayanti, 2012).

However, the importance of green space for a city is not only in terms of quantity but also the quality of green space itself. Good quality green open space can only be achieved if maintenance measures are carried out continuously. For private green space, maintenance is the responsibility of their respective owners. Maintenance of public green space, meanwhile, is the responsibility of the government.

As a public green space that also serves as a forum for interaction and activities for city communities without pay, making it very important for improving the quality of urban areas. According to Law No. 26 of 2007 concerning Spatial Planning, precisely Article 28, explained that the form of green open space in a city developed as a public space is an Environmental Park which is an RT Park, RW Park, Village Park, Subdistrict Park, City Park, Funeral Open Space, Small Open Green Space Neighborhood, RTH on a narrow Neighborhood Road, RTH on the river border, and Urban Forest. This research is focused on green open space in the form of parks and is more active (can be used as a forum for people to do activities, which will later be referred to as Public Parks).

The condition of existing public parks, especially in the city of Jakarta, many of which look poorly maintained and empty of visitors. Only the Public Parks located in the city center looks pretty well looked after. This situation causes the role of green space which is expected to improve the quality of the city environment and activities for city community to be less than optimal. With good maintenance, even though the area of green open space has not reached the area required by the law, it is expected that green open space can function optimally and play a role in realizing sustainable open green space. Efforts to improve the quality of maintenance require a maintenance management strategy that involves a variety of stakeholders. Related to this, the management of maintaining a Public Park should not only be the responsibility of the government but also the responsibility of parties outside the government (private and community). In some research abroad, parties outside the government are also commonly referred to as public involvement. This research is expected to provide answers related to the strategy of maintaining public green open space, especially public parks, which are needed by the DKI Jakarta Regional Government.

Research in several countries reveals that public park maintenance implements public involvement. For example, the Danish City involved the community in maintaining various natural areas through the 'Give Nature a Hand' project (Danmarks Naturfredningsforening, 2013); the maintenance of urban green spaces in Spain implements public involvement through cooperation with social organizations and voluntary associations which ultimately reduce the costs of financial maintenance activities (Ankestyrelsen, 2010); the activity that led to green space volunteers was also developed by the city of Copenhagen. (Natur Park Center, 2010). This strategy at a relatively low level can be implemented in schools with roots in the Spanish tradition (Artsetal, 2006). The results of the study show public sector budget funding for municipal green space management 124 (Randrup and Persson, 2009). Although maintaining green space with public involvement still has weaknesses, many good things can be applied according to the needs of this research.

Method

This research uses descriptive analysis and comparative study methods. Samples were taken by purposive sampling. For data collection, a limited two-way assessment matrix of the Leopold method is carried out, limited to the parties involved in the relevant agencies. The material included in the matrix is a combination of comparative study results from maintenance management research in several European Countries and interviews related to

comparative study results with all those responsible for maintaining public parks at the administrative level, including some inline management positions (eg Head of department), and some of the environmental observers regarding the existence of public green open space in Jakarta and their views on public involvement in managing its maintenance. Based on the Delphi analysis two-way matrices are compiled from the Leopold method. To be more focused, two study objects were chosen from each grouping to be observed. Data analysis was carried out descriptively from the existing assessment matrix and comparative studies of maintenance management in several European countries.

The two-way assessment matrix of the Leopold method is created to obtain the results of an assessment of the relationship between the functions played by public parks in accordance with the existence of the location of public parks and components that must be considered in developing public involvement in maintenance management. There are three groups of public parks related to the function played by public parks according to their location. The first group, public parks in a residential environment with a lower-middle economic level. The second group, public parks in residential neighborhoods with middle to upper economic levels. The third group, public parks in the office building or public facilities. The five components that must be considered in efforts to implement public involvement in the management of maintaining public parks, namely the rule of law, participation, synergy, transparency, and human resources.

The matrix is filled in by parties involved in the management and maintenance of public green space, including the DKI Jakarta Provincial Office, several environmental observers, community leaders, and some professional Landscape Architects

Result and Discussions

Based on comparative studies from previous research in several European countries, it appears that public involvement is an alternative that can also be applied in Jakarta. For this reason, this research focuses on efforts to maintain public parks that provide opportunities for the community to be involved. With reference to the application of public involvement that is applied to maintenance management in Europe, the management strategy of maintaining public parks with public involvement that will be pursued in Jakarta requires improvement.

Table 1 Two-Way Matrix of Linkages between Types of Maintenance Activities with the Required Device

Activities		Maintenance Public Parks in Settlements with Medium economic level down	Maintenance Public Parks in Settlements with a medium economic level to the top	Maintenance Public Parks in Office Environment/Public Facilities
Component Supporters for Public Involvement	Rule of Law	3	3	3
	Synergy	3	3	3
	Participation	1	3	3
	Private			
	Community	8	1	1
Transparent		3	3	3
Human Resources		2	2	2
Information: Value 1: ➢ Rule of Law, if clarity of rule of law is needed for the application of public involvement in the maintenance ➢ Synergy, if it is needed effective communication, fast feedback, trust and creativity ➢ Participation, if non-government participation is very necessary for the implementation of maintenance ➢ Transparent, if government transparency is needed in providing information related to maintenance				

- Human Resources, if it is needed Human Resources with expertise as needed
- Value 2:**
- Rule of Law, if a clear rule of law is required for the application of maintenance public involvement
- Synergy, if needed effective communication, fast feedback, trust and creativity
- Participation, if non-government participation is needed in the maintenance implementation
- Transparent, if government transparency is needed in providing information related to maintenance
- Human Resources, if needed Human Resources with areas of expertise as needed

- Value 3:**
- Rule of Law, if lack of clarity of the rule of law for the application of public involvement in the maintenance
- Synergy, if less effective communication is needed, fast feedback, trust, and creativity
- Participation, if non-government participation is lacking in maintenance implementation
- Transparent, if government transparency is not needed in providing information related to maintenance
- Human Resources, if very less needed Human Resources with expertise as needed

From the results of the descriptive analysis of the completed matrix (table 1), it appears that almost all components of public involvement need to be considered in all three groups of public park maintenance. The role of each component, namely the rule of law, synergy, participation, transparency, and human resources must be seriously considered to achieve optimal results. This means that public parks can function optimally and sustainably.

1. Rule of Law

Taman Mataram Merah is a public park located in Selong Village, Kebayoran Baru District, South Jakarta, where planning, design, implementation, and maintenance management utilize public involvement, in this case, the private sector. Based on the results of in-depth interviews with various parties involved ranging from planning, design, implementation, and management of the maintenance of the Red Mataram Park obtained information that can be used as input. This park was built at the expense of Prudential's Corporate Social Responsibility (CSR).

During the design process, the consultant made the design based on input from the funders, so that the design of the Red Mataram Park became a thematic park with the theme 'Financial Literacy Park'. The existence of this park is expected to provide education related to insurance. The location of the Red Mataram Park which is in a residential environment with middle to the upper economic level, the theme of Financial Literacy is not suitable. This is because basically a theme park with the theme of Financial Literacy will be more useful if applied to parks located in settlements with a lower-middle economic level. However, in the end, the park construction process can be carried out.

The park development process must go through several stages of bureaucracy to have a license for the implementation of less comfortable designs. Likewise, at the handover of the Mataram Park after the design was completed. This causes CSR Prudential, which is a funder, to feel deterrent from applying it to other public parks. In addition, when maintenance actions will be implemented, the same thing also happens. The accumulation of all these events caused the funding party, namely CSR Prudential and the maintenance sub-contractor, to no longer want to extend their maintenance contract.

In relation to public involvement as a management strategy for maintaining public parks, it is necessary to improve existing governance. This governance involves representatives from all parties involved in maintenance management. In addition, the new government must also have clear the role of law, division of authority and responsibilities, which in turn will

regulate the division of labor and clear work procedures. This is because to realize a public park, it requires the involvement of various parties, including the government, consultants, project implementation contractors, maintenance contractors, and supervisors. The rule of law is a just legal framework, carried out indiscriminately, especially laws relating to human rights Sedarmayanti (2003). With this, the existence of a clear organizational structure, as well as the clarity of the dimensions of the rules focusing on interaction/coordination between various parties involved, related to formal procedures and informal routines will cause the distribution of tasks to be clearer and decision making to be faster. Thus, budget efficiency can be achieved.

2. Synergy

Ruang Publik Terbuka Ramah Anak (RPTRA) Taman Pendongkelan, Cengkareng is a public park that is managed jointly by the community and the local government. At the beginning of planning, local communities were involved to obtain input on their hopes for the park to be built. This is intended so that community expectations can be realized in the design of the park. Thus, the form of a public park which is the hope of the local community is expected to increase affection and ownership of the park. Through community and government involvement from the beginning, the community will also be motivated to maintain it. This can facilitate the process of technical outreach related to public park maintenance activities. With a smooth and communicative socialization process, maintenance management will also run well.

Najiyati and Susilo, (2011) interpret synergy as a combination or combination of elements or parts that can produce better and bigger outputs. So synergy can be understood as a joint operation or a combination of various elements to produce a better output. synergy can be formed through two ways namely communication and coordination.

The above description shows that synergy is needed to produce optimal public involvement. This requires effective communication, fast feedback, trust and creativity in its implementation. All this can be achieved by conducting Focus Group Discussions (FGD) to the parties involved (private and public) to socialize everything needed related to maintenance activities. The socialization must also be carried out systematically and periodically, it is hoped that it can broaden the knowledge of the parties involved in the implementation of maintenance activities which in turn can produce creativity, strengthen self-confidence and trust. In addition, it can speed up feedback to improve the quality of maintenance activities.

3. Participation

Every citizen has the opportunity to have an opinion in making decisions, both directly and indirectly, Sedarmayanti (2003). The participation component is divided into participation from the private sector and the community, or both. To stimulate optimal public involvement is to involve the local community from the beginning of the planning of the park. This is because they already have a simple knowledge of the whole park creation process, such as

planning, design, and management. This fact is consistent with Van Herzele's (2004) research on the use of local resources in urban park planning in Belgium, where local community members also think of an overall process that is no different from conventional stages such as planning, design, and management. This process has a picture that is almost the same as the stage in the project cycle (Soeharto, 1995), namely the conceptual stage (the stage for compiling and formulating ideas); the planning and consolidation stage (the continuation stage of the conceptual stage, which prepares the design and discusses the parties to be involved); and implementation phase (implementation phase); and the operation phase (routine operations and maintenance). With full involvement, the sense of belonging to the park that has been planned and designed becomes even greater. This can reduce the desire to damage the park or vandalism.

The extent of involvement in the conventional stages of creation (planning, design, and implementation) and management of public parks cannot be equated in each public park maintenance group. In public park maintenance groups in the middle to lower level settlements, community involvement starting from the planning, design, and management/maintenance stages can be more optimal. For public park maintenance groups in upper-middle-class settlements, community involvement is more common at the beginning (planning), but at the design and management/maintenance stages, private involvement can be encouraged. While for the maintenance of public parks in an office / public facility environment, community/manager involvement in the environment can be carried out starting from the planning, design, and management/maintenance stages.

4. Transparent

Public involvement requires government openness in providing information related to maintenance. Transparency is built on the validity of information flow. Various processes, institutions, and information can be directly accepted by those who need it Sedarmayanti (2003). In the socialization of maintenance activities that will be carried out, it requires government transparency.

Various information about regulations related to maintenance management, quality of maintenance actions, and maintenance activities, as well as the technical implementation of maintenance activities, must be accessible to the public or community organizations or private parties involved. In addition, in the distribution of authority and responsibility of maintenance activities to the private sector and the community involved, there is also expected to be openness.

In the FGD process also must always maintain openness, so that discussions can be carried out so that consultants can find out exactly the community's needs for facilities in the park. The extent and limited funds, causing consultants to be able to filter, select, and place priorities in determining the facilities that best suit the needs of the local community.

5. Human Resources

Regarding public involvement, research by Molin, Julie Froik and Cecil C. Konijnendijk van den Bosch (2014) states that the perspectives, experiences, and views of managers responsible for maintenance activities are an important focus. This is because in many cases citizens can initiate activities, but it is the manager who can make decisions if and how citizens can be involved. Therefore, key positions in the government or authorities who are handed over responsibility for maintenance activities in an area require an educational background in the area of expertise, to provide guidance on their professional knowledge for the implementation of these activities. In addition, it is for park maintenance officers in the field, it should also have a background in skills education in their field. This is because usually, the skills that park maintenance officers provide to residents involved in maintenance activities are the result of their personal experience that results from time to time. The results of in-depth interviews with those directly involved in maintenance activities obtained input that to obtain optimal results from maintenance required skilled and skilled human resources in their fields. This is because, in certain circumstances, a lack of professional knowledge and expertise from citizens can endanger themselves. This fact is consistent with the facts found in Jones's (2002) research, namely that park officials base their work relationships with citizens on their skills and experience resulting from time to time, so training is needed.

Conclusion

Based on the discussion, it can be concluded that related to the management strategy of maintaining public parks with public involvement is urgently needed as an effort to achieve the sustainability of the role and existence of green open space. Public involvement in the management of maintaining public parks should be done from the beginning of the park creation process. That is, public involvement should be carried out throughout the project cycle. So that the implementation is optimal, it needs supporting devices for its implementation. The supporting device components, related to the existence of the rule of law, the need for synergy, participation, transparency, and human resources. In addition, the application of Occupational Health and Safety (K3LH) is also needed.

First, the rule of law requires improvement in governance related to the management of maintaining public parks. With governance that houses various parties involved in managing public park maintenance, it is hoped that there will be a clear division of authority and clear responsibilities. This clarity can help the implementation of optimal maintenance management.

Second, synergy, basically in an activity that involves several parties, there needs to be good coordination. This is intended so that communication can run effectively and feedback can be conveyed quickly. To make this happen, it can be done through the implementation of Focus Group Discussion (FGD). This will ultimately increase trust between parties, and the creativity of the parties involved.

Third, participation is needed to increase community ownership of public parks where they will be involved in maintenance activities. Therefore, participation from public parties that

will be involved needs to be done starting from planning, design, and subsequent maintenance. This involvement can also be done by the government through the implementation of Focus Group Discussions (FGD).

Fourth, transparency is needed to provide clarity on all information related to the implementation of maintenance activities. Thus, maintenance activities can be carried out smoothly and correctly. The socialization is related to all applicable regulations, the implementation process, the technical implementation, and the quality of maintenance which is expected to be very good to be informed to all parties involved, especially to those involved technically in the field.

Fifth, human resources, are the key to all supporting components that must be considered in maintenance activities. That is why it is better if the position that is responsible for maintenance management and maintenance supervisors in the field is placed by people who are experts in their fields. This is because this position is a liaison and director for parties outside the government/public (public and private) in the implementation of maintenance activities. By placing people with the right areas of expertise, it is expected that the division of labor, technical implementation of maintenance, and guidance in the field can be done appropriately.

References

- Ankestyrelsen, 2010. Det kommunale samarbejde med frivillige sociale foreninger. §18-redegørelsen Socialministeriet, København (in Danish).
- Arts, B., Leroy, P., van Tatenhove, J., 2006. Political modernization and policy arrangements: a framework for understanding environmental policy change. *Public Organ. Rev.* 6, 93–106.
- Danmarks Naturfredningsforening, 2013. Giv naturen en hånd, <http://www.dn.dk/Default.aspx?ID=20621> (retrieved 12.08.13) (in Danish).
- Julie Froik Molin, Cecil C. Konijnendijk van den Bosch. 2014. Between Big Ideas and Daily Realities – The roles and perspectives of Danish municipal green space managers on public involvement in green space maintenance. *Urban Forestry & Urban Greening*. Article Number 25426. Published by Elsevier GmbH.
- Najiyati, Sri dan S.R. Topo Susilo. (2011). Sinergitas Instansi Pemerintah Dalam Pembangunan Kota Terpadu Mandiri (The Synergy of Government Institutions in The Transmigration Urban Development). *Jurnal Ketransmigrasian* [Internet], 28 (2) Desember, pp.113-124 available from: <http://puslitbangtrans.depnaakertrans.go.id/pdf/SINERGITAS_INSTANSI_PEMERINTAH_DALAM_PEMBANGUNAN_KOTA_TERPADU_MANDIRI.pdf>[diakses pada tanggal 17 Maret 2014].
- Randrup, T.B., Persson, B., 2009. Public green spaces in the Nordic countries: development of a new strategic management regime. *Urban Forest. Urban Green.* 8, 882 31–40

Sedarmayanti. 2003. Good Governance (Kepemerintahan yang Baik) dalam Otonomi Daerah Upaya Membangun Organisasi Efektif dan Efisien melalui Restrukturisasi dan Pemberdayaan. Bandung: Bandar Maju.

Socharto, Iman, 1995. Manajemen Proyek: dari Konseptual sampai Operasional. Jakarta: Erlangga.

Undang-undang Republik Indonesia No. 26 Tahun 2007 tentang Penataan Ruang.

Van Herzele, A., Collins, K., Tyrväinen, L., 2005b. Involving people in urban forestry a discussion of participatory practices throughout Europe. In: Konijnendijk, C. C., Nilsson, K., Randrup, T.B., Schipperijn, J. (Eds.), Urban Forest and Trees. Springer, Berlin, pp. 207–228.

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