

Available online at www.sciencedirect.com





Procedia - Social and Behavioral Sciences 35 (2012) 412 - 419

## AicE-Bs 2011 Famagusta

Asia Pacific International Conference on Environment-Behaviour Studies, Salamis Bay Conti Resort Hotel, Famagusta, North Cyprus, 7-9 December 2011

# Characteristic of Public Small Park Usage in Asia Pacific Countries: Case Study in Jakarta and Yokohama City

Sari Mutiara\* and Kinoshita Isami

Chiba University, Graduate School of Horticulture, 648 Matsudo, Matsudo City, Chiba 271-8510, Japan

### Abstract

This study concerned with the phenomenon of low use, and abandoned public small parks in Jakarta City particularly in neighborhood level. Learning from Yokohama, community participation into park management system becomes the key feature for the existence and attractive parks. The city also assists the installation of flower garden in the parks where the community group can be able to grow the flowers at the same time bring the neighbors together to enjoy the nature. This paper clarified that Jakarta needs to improve the parks by involving community and providing the communal space for participation.

© 2012 Published by Elsevier B.V. Selection and/or peer-review under responsibility of Centre for Environment-Behaviour Studies(cE-Bs), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia Open access under CC BY-NC-ND license.

Keywords: Urban; public parks; community; participatory; Asia Pacific.

## 1. Introduction

Asia Pacific has the characteristic as the most populated in the world with the higher population densities in its major cities. With the high urban growth rate, the public places such as parks, street, and squares become eyes of the city and play the vital roles for urban residents who cannot afford private amenities. Urban parks are the place where almost uniquely, ecological, social, cultural and economic

1877-0428 © 2012 Published by Elsevier B.V. Selection and/or peer-review under responsibility of Centre for Environment-Behaviour Studies(cE-Bs), Faculty of Architecture, Planning & Surveying, Universiti Teknologi MARA, Malaysia Open access under CC BY-NC-ND license. doi:10.1016/j.sbspro.2012.02.106

<sup>\*</sup> Corresponding author. Tel.: +81-80-3587-2457; fax: +81-47-308-8880.

E-mail address: mutiara2405@graduate.chiba-u.jp.

imperatives occurred. It been realized that the parks are valuable for urban sustainability and support quality of life. Therefore, European cities have committed to making the issue of urban parks as focal points for Agenda 21 centuries (Greenhalgh and Warpole, 1996) and both quantity and quality of the parks should become a major goal of the cities (More, 1990). There is a challenge for park managers to manage such lands in ways that provide maximum benefits to city residents by seeking shortcuts to increase productivity in the era of tight budget (More, 1990; Phillips, 1995). Generally some parks may attract greater use while the other just only the waste place islands of non use, maintained at public expense (Gold, 1972). Small parks are the key of most neighborhoods, but sometimes neglected by both local government and surrounding people (Forsyth, 2009). This condition can be seen in Jakarta City where many small parks suffered with less maintenance and usage. In some cases, people are not conscious that many small parks already shifted into other uses such as roads, gas stations, and other commerce buildings. People have low relationship and lack sense of belonging with existing parks while local government failed to involve community in planning and management system.

Yokohama as the biggest city after Tokyo can be a good practice in its urban parks systems. The community's involvement becomes an important factor for attractive and high use parks. In the effort to provide the greening to the city, foster healthy and active lifestyle, and bring people together in the neighborhood, local park's function should be maximized to fulfilled the need of people together in harmony with create more ecological benefits. Since many local parks in Jakarta have similar size with block parks in Yokohama, Jakarta could improve the park management system by taking some experiences from City of Yokohama. However, the history and current issues about urban parks particularly small parks in worldwide should be acknowledged as the comparison for Asia Pacific cases.

## 2. Theoretical Review

Parks is positive elements of the urban environment and landscape (Phillips, 1995). Japan's Urban Parks Law defines the meaning of urban parks as the public parks which include park facilities built in the park or green space by local authority who establish and own the park (Parks and Open Space Association, 1994). Among the many types of urban parks, neighborhood parks and sports grounds have an important place in perspective of urban planners and designers (Cunningham & Jones, 2000).

Forsyth (2009) defined that existing parks less than 5-6 acres (2-2.4 hectares) called small parks and they included basic and neighborhood parks. As a key part of most neighborhood, small parks mostly recreational benefits (Forsyth, 2009), and represent the most accessible and democratic fragment of nature in an urban setting (Brown, 2008; Machabee, Oleson, & Kinzig, 2004; Phillips, 1995). However, sometimes small parks are relegated to the status of stepchild of municipal and metropolitan open space system (Forsyth, 2009). Previous studies affirmed that certain populations perceived to be less likely to use public parks in neighborhood level than in larger parks (Gold, 1977). Some parks just as wasteland that is not attractive enough for people to visit and spend their time to enjoy the nature or engage with community. Less usage becomes one of the park issues that need further thinking how to maximize every single public expense for community benefits. The need to incorporate social and ecological factors into park planning becomes essential to be done toward attractive park.

People's relationship with the parks is different based on some factors such as socio-economic, gender, type of activities and park facilities. Machabee et al. (2004) argued that based on socio-economic factor, the residents of high income neighborhood tend to use their local park more than resident in the middle or low income area. Bedimo, Mowen, and Cohen (2005) affirmed that older adults, racial/ethnic minorities and females tend to be non-frequent or non-users of parks and both women and elderly who had observed in small family groups reflected traditional gender with their family roles (Hutchinson, 1994). Observation in the City of Chicago, Tampa and Los Angeles found that park users engage mainly in

sedentary behaviors such as picnics, sittings and talking (Cohen, 2007). Francis (1987), also stated that people in the parks more likely to engage in passive recreation rather than active recreation like walking or jogging. The way people value the parks also varied. Taylor (1993) argued that young people ages 16-19 years old attracted by the aesthetics of the park while the respondents over 45 concerned with the feature and valuing maintenance. Urban people also prefer park with a variety of recreation activities instead attractive natural areas.

Park is positive channel for people engagement. Department of Park and recreation of New York City stated that open space in the early 20th century began to be used not only for rest and recreation, but also to foster a sense of belonging and community. As the subject of this paper, people's involvement believed can increase the sense of belonging among people, to public space and increase the degree of neighborhood attachment. In case of park, people are likely to participate if parks are 1) identifiable rather than boundary community, 2) small and have clear local identity than park for the whole city, 3) varied and have clear potential to appeal different interest, and 4) park overlooked by housing and used as a short cut (People, Park and Cities, 1996). Park with good management will be high attendance, life and utilized by the users. Therefore, park managers should be maximizing the values of parks for community benefits.

In the context of Asia Pacific countries, Japan is more advanced in urban park system than Indonesia. Besides that, Yokohama City has good practices where the city entrusts the community or park friends group for taking care their local parks and created the management system to support the existing parks. In the result, local parks are becoming well maintained and more sustainable. This paper will describe more clearly about the condition of small parks in Jakarta and then more focus with park management system in Yokohama City.

## 3. Methodology

This study been done by doing field observation, study literature, and interview with stakeholders in both Jakarta and Yokohama City. We did an interview with local government, local leaders, and some residents to examine the efforts to achieve the attractiveness and high use parks, community participation in the park and neighborhood, kind of problems and desires for park improvement in the near future planning.

## 4. Result and Discussion

## 4.1. Condition of Small Parks, Usage, and Community Participation in Jakarta City

Jakarta city is the capital city of Indonesia has special territory enjoying the status of the province and commonly called DKI (Daerah Khusus Ibukota). It located on the northern coast of west java and its center of government, commerce and industry with very rapidly city development. The provincial administration of Jakarta divided into 5 municipality (Kotamadya) regions, Jakarta Pusat (Central Jakarta), Jakarta Utara (North Jakarta), Jakarta Selatan (South Jakarta), Jakarta Barat (West Jakarta), Jakarta Timur (East Jakarta) and 1 district area of Kepulauan Seribu (Seribu Island). The Jakarta's census on 2006 reported that more than 8.9 million people resided in Jakarta with a population density of 13.54 people per square kilo meters and it will be more crowded in the day.

As megapolitan city, Jakarta has an insufficient number of urban parks even though data from Department of Park and Funeral of DKI Jakarta shows the trend of increasing park per year. In the middle of citizen's demand to add more green space area in the city, the fact is many existing urban parks are not well maintained, less usage, and unloved particularly small parks in neighborhood area.

Field observation in the high income neighborhood showed that most of park visitors were not the residents but outsiders. The residents of the low income neighborhood use parks more frequently than high income people. They also enthusiastic to use park with their children or together with their friends. Some respondents stated that they do not involve in any park management except in neighborhood cleaning day once in a month. In other way, they could participate by collecting the money to pay park's staff to clean more often. Questionnaires result showed that many factors such as cleaning, lack maintenance, safety concern and condition of children playground were the top lists that should be concerned. Those factors also affected the level of park satisfaction in Jakarta city (fig.1).

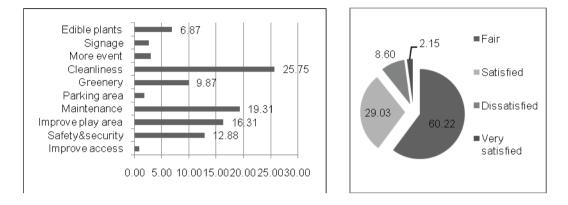


Fig.1. (a) Park use constraint; (b) Park user satisfaction

Interview with local leaders and local government indicated that there is the lack of coordination and cooperation to maintain the local park. Even the small parks existed in the residential area, but residents still depended on local government to manage their local parks. Local government had argued that those problems caused of lack of budgets through the years, lack of operational staffs and low awareness of people. Government of DKI Jakarta mainly focuses with parks in the main roads or protocol areas rather than spend more budgets to maintain parks in the neighborhood (Joga & Antar, 2008). Besides that, local government chose to over hand the management to the third parties rather than involve local communities. From the interview, we found that residents are not directly involved in maintaining the parks but they collect the money and then give it to park staff for taking care the parks. In fact, questionnaire results showed that the residents of Jakarta City have high interest to manage the parks with their neighbors. Therefore, Jakarta city maybe need the system that able to facilitate people's demand for participating in park management.

## 4.2. Lesson Learned from Park Management System in Yokohama City

Yokohama is the capital city of Kanagawa Prefecture. It been known as the second largest city in Japan after Tokyo where It lies on Tokyo Bay, in the Kanto region of the main island of Honshu. Yokohama is covering the area of 434.98 square km which located in 139°28'04" - 139°43'43" East Longitude, 35°18'33" - 35°35'22" North Latitude. The Yokohama city includes 18 wards there are Tsurumi, Kanagawa, Nishi, Naka, Minami, Konan, Hodogaya, Asahi, Isogo, Kanazawa, Kohoku, Midori, Aoba, Tsuzuki, Totsuka, Sakae, Izumi, and Seya.

The Yokohama's population in 2008 reported that more than 3.6 million people resided in this city with a population density of 8.348 people per square kilometers and the ratio of the day to night

population is 90.4 in 2005. As the second largest city after Tokyo, Yokohama city known as a major industrial area, serving as a port and a "bedroom community" for people who commute to Tokyo for work. Similar with Jakarta City, Yokohama also suffered with environmental problems and less greenery because of rapid development of factories, modern buildings, and other built areas. Nevertheless, in harmony with the population growth, the number of urban parks are gradually increasing.

Yokohama city has realized that people power and creativity are the keys toward a wonderful and attractive city. The cooperation among the citizens, organizations, and authorities of the city to work together in the city's development had supported since the first Yokohama General Plan in 1973. The advanced and innovative policies such as environmental strategies through citizens' participation have resulted the city had selected as an "Environmental Model City". This has pioneered environmental action by cooperating with citizens, to protect the environment at all levels ranging from the daily life to the urban and global environment.

Urban park system in Yokohama city allows their residents to get involve in park completion started from plan design, construction until management (Yokohama City office). Based on the history of urban parks in Yokohama city, it had mentioned that the people's involvement into park management started on 1961. The city entrusted the park users either individual or groups such as park friends namely *Koen Aigokai* to maintain their closest local parks. In harmony with the number of urban parks in the city, the number of park groups also increasing.

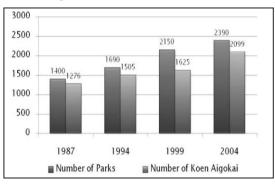


Fig. 2. The Number of urban parks and koen aigokai in the city

Koen Aigokai has important roles as the bridge between users and the government. Yokohama City is the pioneer of voluntary activity and nowadays many cities have a similar system in their urban parks. City of Yokohama entrusts the park's caretakers to maintain and improve those parks and networks of green paths. The activities not limited to clean up the parks, safety patrol, create the event for children, make the compost, but also in some local parks they do community gardening by planting and caring flower beds.

Koen Aigokai system in Yokohama city has known very well organized. The members are coming from residents who are living near from the park and open to everyone. The city supports them with financial and skill assistance, gardening tools, sponsorship, group coordinator, and seedling and flowers. The amount of financial support by the city is depending on the size of park for example, park with size 3,500 (m2) will get 30,000 Yens per year and if less than 3,500 (m2) may get 20,000 Yens. Besides that, the city will install the flower bed or garden if required by the community. Koen Aigokai has the responsibility to report their activity and financial record to the city. Besides holding some regular meeting with the government, there is also annual event where local government and all members of Koen Aigokai held the meeting for sharing experiences, solving problems and acquaintances.



Fig. 3. (a) Cutting Grasses; (b) Naming the Trees; (c) Manage Flower Bed

Practically, Koen Aigokai in Setagaya Neighborhood, Kanazawa Ward can be as good practice for another park groups. In park management, they are involving all residents in the park cleaning days, arrange the schedule and rotation based on blocks, hold some neighborhood events and facilitate some activities in the park such as gate ball for the ageing society, soccer for youth and many more. This group also maintains the flower garden every day and create park more beauty and lovely. The existence of flower garden within the park can be a media for participation in gardening activity and create another leisure recreation for park users such as enjoy the flowers and green.

#### 5. Conclusion and Recommendation

Park is an important element and has many benefits as urban nature, recreation asset and venue for community engagement. In the era of tight budget, local government been expected to share their responsibility for taking care public space with other parties. Involving community into park management will be valued for strengthen people relationship with their local park, urban neighborly relations and toward attractive park together with growing the community. In case of Jakarta City, many residents argued that their local parks were not interesting enough for them. Some demographic backgrounds tended to be non frequent parks such as old people, higher economic status, and shorter period of stay. Low level of people's attachment to the neighborhood also positively correlated with less relationship with their parks. Less Community's involvement into park management also as the main factor the lack of

sense of belonging for the existence parks. These findings proved that urban parks still not utilized in maximum ways.

Learning from Yokohama City where they entrusted the Koen Aigokai in every type of urban parks to be actively involved in the park management, we found that people who participate in that group will socialize with neighbors more often than non participants. They also have good neighborly relationship, high level of neighborhood and park satisfaction, and happier and healthier feeling. Park with a high level of community participation has resulted that park more beauty and neat and garden within it has create alternative activities in the park such as gardening, and exploring the flowers and green for park users.

Jakarta city has potency from its people while almost 90% respondents agree to participate in park management if existed on their park. Some community based organization such as Youth Organization, Women Organization, can be as trigger actors for their environment. The increasing numbers of the ageing society and retirement people who still active should be perceived as the community asset. In Yokohama city, the most active age group is ageing society where they want to be a part of their neighborhoods, share the experience, communication with others by actively participate in some activities especially greening activity. Local government of Jakarta city may entrust and encourage the people into park management. Therefore, it will increase the sense of belonging to their park and create lively neighborhood. Since the number and size of neighborhood parks not many and small, it is become important to connect park with the neighborhood to create greener environment and consider the neighborhood as part of the park that can be called "Park in the whole neighborhood".

In Yokohama city, park with community garden gives the opportunity for residents to work together or enjoy the variety of flowers. Gardening in the park can be the good experience for people to get closer to each other or even children are able to participate and learn more about the nature near from their home. Community garden also can be expanded not only in public space like the park or vacant lot, but also can be done through neighborhood such as along the road to connect houses with park, or in private yard where the owner permit their neighbors to gardening together on their yard. By involving neighborhood as a part of the park will result, park, people and neighborhood become a unity and greening activity can be spread out to other neighborhoods. In the result, city become more sustain because the need of amenities is close to people's home, change the face of the grey city turning into green.

In Jakarta, many residents like gardening activity but some are not able to do gardening in their yard because of the limited space. Women Organization in Jakarta City also has a program to plant the herbal plants, but the program is not running well because of no-available space. By giving the chance and opportunity for community participation to manage the park and create their communal plot will be valuable for parks, neighborhood and the community itself in the future. Parks will become more attractive than before and at the same time enhancing the community.

Lesson learned from Koen Aigokai in Hanamushiro Park with active participation are the rotation system and share responsibility among residents to take care that park. Parks also be utilized to held man kinds of activities to gather neighborhood together. In summary, the main factors toward attractive parks are community participation, support from Local Government by entrusting the people for actively participate in greening activity, and strong community will in voluntary activity such as holding some events or neighborhood festival in the park.

## Acknowledgements

We would like to give thanks to Monbukagakushou for supporting this study. High appreciation to all respondents in Jakarta and Yokohama City. We thank Koen Aigokai leaders and local government of Yokohama and Jakarta city for valuable data and explanations.

#### References

Bedimo-Rung, A.L., Mowen, A.J, & Cohen, D.A. (2005). The Significance of parks to physical activity and public health: A conceptual model. *American Journal of Preventive Medicine*, 28(2S2), 159-168.

Brown, G. (2008). A Theory of urban park geography. Journal of Leisure Research, 40(4), 589-607.

- Cohen, D. A. (2007). Contribution of public park to physical activity. American Journal of Public Health, 97(3), 509-514.
- Cunningham, C. J., & Jones, M. A. (2000). How a community use its parks: A case study of Ipswich, Queensland, Australia. *Leisure/Loisir*, 24(3-4), 233-253.

Francis, M. (1987). Some different meanings attached to a public park and community garden. Landscape Journal. 6(2), 101-112.

Freestone, R., & Nichols, D. (2004). Realizing new leisure opportunities for old urban parks: the internal reserve in Australia. Landscape and Urban Planning, 68(1), 109-120

Gold, S. (1972). Nonuse of neighborhood parks. Journal of the American Institute of Planners, 38(5), 369-378.

Greenhalgh, L., & Warpole, K. (1996). People, park & cities: A guide to current good practice in urban parks. HMSO. London.

Hakim, R. (2007). The alternative of green open space management in Jakarta city, Indonesia. In Post-Graduate Seminar Semester 2 Session 2006/2007, Rumah Alumni, Universiti Teknologi Malaysia.

Hutchinson, R. (1994). Women and the elderly in Chicago's public parks. Leisure Sciences, 16(3), 229-247

Joga, N., & Antar, Y. (2007). Komedi lenong: Satire ruang terbuka hijau. Jakarta, Indonesia: Gramedia Pustaka Utama.

Machabee, L. G., Oleson, J. J., Kinzig, A. P. (2005). Neighborhood parks uses by phoenix residents: an exploration of socio demographic differences. *People, Places, and Parks: Proceedings of the 2005 George Wright Society Conference on Parks, Protected Areas and Cultural Sites.* Hancock, Michigan: The George Wright Society

More, T. A. (1990). Factors affecting the productivity of urban parks. Research Paper, NE-630, Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station.

Parks and Open Space Association of Japan (1994). Parks and Recreational Green Space Administration in Japan (pp. 2-4). Phillips, E. L. (1996). Parks: Design and management. New York, US: McGraw-Hill.