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Development of Framework for the Best Practices in Maintenance Management of Public Recreation Park: Case Study in Muar Public Recreation Park

Roshartini Omar¹, Suryanee Parvin Mustafa^{1*}

¹ Faculty of Technology and Business Management, University Tun Hussein Onn Malaysia, Parit Raja, MALAYSIA

*Corresponding Author

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Abstract: Public recreation parks are one of the facilities that Local Authorities must provide to the community in a City. In the National Audit Reports, found that most of public facilities in Muar Municipal Council were unsatisfied and had way to be improved where there were some disadvantages that caused the facilities provided to be unprofitable by the public. Among the weaknesses, there are some types of public facilities and their components that are not properly maintained, the provision of public facilities are not fully utilized by the public. The objectives of the study are to understand the maintenance management of public recreation parks in Malaysia, to study the implementation of maintenance management of public recreation park in Muar and to develop the best framework in maintenance management of public recreation park in Muar. Therefore, literature review and qualitative studies were conducted involving 10 respondents of the study by 3 directors from the National Landscape Department and 2 officers from the Muar Municipal Council; and 5 officers from Local Authorities which are Majlis Bandaraya Melaka Bersejarah, Majlis Perbandaran Hang Tuah Jaya, Majlis Bandaraya Shah Alam, Majlis Perbandaran Manjung dan Majlis Perbandaran Klang. Therefore, the data were analyzed by using Content Analysis. The finding shows that, six best practices had been developed within the framework of maintenance management of Muar public recreation park. The practices are the staffing model; goal, standards and design; staff maintenance; develop staff; develop plans; and sustainable maintenance. This study is of interest to the Muar Municipal Council in enhancing the maintenance management of public recreation park in Muar which is of interest to the public.

Keywords: Maintenance, Malaysia, Management, Public Recreation Park, Qualitative

1. Introduction

Recreational park management requires a good and appropriate management style. However, each management style requires general guidelines that are usually based on the accepted theoretical frameworks (Kasim & Mohd Ghazali, 2006).

In June to July of the Muar Municipal Council Report on 2013, the financial issues for the development of recreational parks often arise (Majlis Perbandaran Muar, 2013). This is because, the allocation in the development of a recreational park requires a large budget where it covers the maintenance costs incurred during the life of the park. Moreover, in the National Audit Report, Muar Municipal Council in overall public facilities were unsatisfactory and need to be improved based on some weaknesses in maintenance management that caused the facilities in recreational park provided to be unprofitable by the public (National Audit Department, 2009). Among weakness observed is a few

public facility types and its component are not being organized properly, public facility provision is not being utilized by the public. Among which often occurs is like the invasion in public recreational park consisting of game and open ground and public facility planned were not implemented.

2. Practices in Maintenance Management of Public Recreation Park

Management is a design process and maintains an environment in which all individuals working in one group will compete to achieve the chosen goals (Koontz & Weihrinch, 1990). Management is a process of planning, managing, managing and controlling the efforts of members and other inputs involved in an organization to achieve the goals set by an organization (Stoner, James & Charles, 1986). Management is a process of using inputs in an organization to achieve the organization's objectives through planning, organizing, leadership, and controlling functions (Dubrin, 2012). Hence, management is defined as a process of achievement of organizational goals by all parties involved in an efficient and effective manner through organizational planning, organization, leadership and control.

Maintenance is defined as all technical and administrative measures taken to preserve or improve a matter (Mohamed & Wan, 1991). Maintenance is a work done to preserve and restore each building to an acceptable standard (Chudley, 1981). Maintenance can be classified into two parts, there are planned maintenance and unplanned maintenance (Leong, 2004). Maintenance is something that can be defined as a combination of all aspects of technical work as well as the actions taken by the management, which is the oversight that can provide functions to the assets needed (Wood, 2003).

According to government policy in Queensland Australia, maintenance is defined as the existing construction work carried out with the aim of re-installing physical conditions to standard provisions; prevent damages and failures, restore proper operation within certain parameters, replacing components at the end of its use or economics with modern engineering; make temporary and immediate repairs for health, safety and control (Queensland Government, 2012). California study by Schwarzenegger suggests that maintaining good gardens and recreational facility facilities can help reduce the criminal activities that occur among the communities where recreational activities or activities can be done during leisure time (Schwarzenegger, 2005).

Based on the definitions set by the parties, the formulas obtained on the maintenance of recreational parks are a measure of achievement to the required standards and are received through remedial and recovery measures to obtain satisfactory benefits and value for an asset and meet key objectives to maintain the value of the investment, keep the building in a state of continuing to function properly and be able to provide quality appearance or image. Maintenance management is divided into three, namely maintenance objectives, maintenance organization and maintenance management practices.

Maintenance management is the arrangement of maintenance work according to the established policy based on the maintenance and management work performed to handle maintenance work and it is involved in maintenance management such as setting out the objectives, policies and maintenance quality aims to ensure that it is aligned with the goals of an organization (Lee, 1987). Maintenance management has a systematic and systematic approach to planning, managing, monitoring and evaluating maintenance activities and costs.

Figure 1 shows the proposed conceptual framework for the maintenance management practices of public recreation park. The maintenance management practices are the staffing model, goal, standards and design, staff maintenance, develop staff, develop plans and sustainable maintenance.

The staffing model aims to evaluate different staff models, including internal staff, contract services, and private or public partnerships (US Department of Interior, 2007). The staff model is part of the maintenance management organization in carrying out maintenance operations. Organizational structure is one of the important resource management in creating long-term maintenance management of recreational park. Used of staffing expertise and volunteers are to improve the work of staff and contractors (Tsang, Jardine & Kolodny, 1986). In the staff model, maintenance management is a set of maintenance work in accordance with policies and management that creates objectives, policies and maintenance quality aimed at developing an organization's goals (Lee, 1987).

The need for maintenance management practices is to create goal, standards and design that encompass a policy document aimed at understanding the specific processes and practices that are responsible for maintenance (Queensland Government, 2012). In addition, maintenance management practices need to set standards for standard assessment requirements for each asset, and review periodically and update the definitions. This is to familiarize the maintenance staff and contractors in strengthening the quality and protection of resources through the observation of public recreation parks, monitoring maintenance performance, rewarding staff who perform consistently high and overcome immediate weak staff performance (US Department of Interior, 2007). According to Queensland Government, monitoring and evaluating maintenance performance is critical to achieve maintenance results in accordance with government policies and supporting service delivery (Queensland Government, 2012). According to the US Department of Interior, this practice should also be encouraged to approach zero tolerance for waste overwhelming the land and of containers of garbage, graffiti, and other forms of vandalism in which to dispose of garbage every night and clean up graffiti immediately, public recreation park management will show respect to visitors (US Department of Interior, 2007).



Fig. 1 - Proposed Conceptual Framework for the Maintenance Management Practices of Public Recreation Park

Maintenance management practices will create maintenance staff and expertise for the purpose of creating staff by geographic zone, managing standards landscape zone, and creating a special team that works in all zones (US Department of Interior, 2007). When staff organized the geographic zones, it will develop expertise and establish sense of pride in one's work. Reward consistently high performance and address poor performance immediately.

In the US Department of Interior, the maintenance management practice focuses on the staff development, especially in the view of work experience, attitudes, education, skills and capabilities of a staff to interact with the public (US Department of Interior, 2007). The strength and willingness to carry out the task is highly potential to determine longer working period. Staff advancement also aims to support the professional development and mobility of employees to improve the morale and satisfaction of workers. Worker motivation is continuous with increasing employee responsibilities, employee mobility, increasing training to employees, enhancing skills, and providing mentors to employees to create committed staff. Additionally, by holding annual events to employees will also show appreciation in which help employees improve their achievement. Professional development, such as industry certification and license need to be encouraged, along with support to attend classes, workshops, lectures and seminars from local landscapes and organizations. Manager roles are also important in staff advancement to ensure that managers are constantly observing the daily activities of employees that help control communication constraints between staffing and management.

This maintenance management practice can develop planning for periodic maintenance and emergency. According to the Queensland Government, the implementation of the maintenance requires allocating sufficient funds in accordance with the budget to enable the recreation area to be maintained in accordance with the maintenance standards (Queensland Government, 2012). Additionally, according to the US Department of the Interior, this practice can develop systems for dealing with emergency and regular complaints where it responds to complaints within the stipulated time, and develops and maintains the system to convey the action that has taken place (US Department of Interior, 2007). Submitting the maintenance reports and the state of the portfolio of the buildings indicates for transparency and accountability by computerized system (Queensland Government, 2012). In the maintenance management practice encompassing the formation of information systems, records systems and communications is intended to facilitate maintenance work being carried out. Information on maintenance work will be easily and quickly known through the information system used efficiently (Lee, 1987). The record system is information about maintenance and stored maintenance work (Abdullah, 1994). This record systems covers records of current and past maintenance records by two systems of information records; there are computer systems and file systems. Developing a

Strategic Maintenance Plan as part of the strategic asset planning process should take into maintenance management of the public recreational park and function of the facilities and issues that may affect the potential of emerging services (Queensland Government, 2012).

Sustainable maintenance management practices start moving towards organic practices where the expertise and support of organic management had been developing organic fertilizer that can be purchased from suppliers in public recreational park areas (US Department of Interior, 2007). The use of commercial fertilizers, pesticides, and weeds should be limited and used as needed. Instead of using chemicals to treat grass, trees, flowers, and other natural resources in public recreational parks, other scientifically supported practices to mitigate the negative impact of fertilizers, weeds and pesticides that need to be taken into account (Bell & Moss, 2006).

In addition, the maintenance management practices of public recreation parks require determination of compaction of soil using grass or turf closures. Covering the exposed turf areas due to wet or frozen conditions can safeguard investments in landscapes such as managing seasonal and seasonal logistics, requiring rainy days and allocating for seasonal shutdowns to enable recovery and maintenance. The implementation of maintenance can produce annual maintenance work programs based on the assessment of the situation, existing programs, historical data and their Strategic Asset Plan based on appraisal of conditions, existing programs, and historical data (Queensland Government, 2012).

3. Methodology

Figure 2 shows the stages of research in conducting a study on development of the framework for best practices in maintenance management of Muar public recreation parks.



Fig. 2 - Research Stage

First stage is initial discussion for researcher to get an overview of the overall research title on study topic comprehensively namely maintenance management best practice development for public recreational park in Muar. Second stage is literature review for researcher to collect information related to the best practice in maintenance management for public recreation park.

Third stage is data collection level on all information will be pooled according to objective of the study to analyze

information achieved by researcher. Through this third stage, researcher produces 3 part of questions for interview process. Part A is to understand the maintenance management of public recreation parks in Malaysia, Part B is to study the implementation in management maintenance of public recreation park in Muar, and Part C is to develop the best framework in maintenance management of public recreation park in Muar.

Forth stage is data analyze stage that collected data will be analyzed according to predetermined section to facilitate researcher to achieve the research's objective. This data collection is analyze by using Content Analysis method. Fifth stage is the final stage for research conclusion and suggestion to carry out further research to achieve adaptation in development of the framework for best practices in maintenance management of public recreation park in Muar.

4. Data Analysis

From the outcome of data collection by interviewing between 10 of respondents, the researcher attempt to develop the framework for the best practices in maintenance management of the public recreation park was established. The 10 respondents of the study were 3 directors from the National Landscape Department and 2 officers from the Muar Municipal Council; and 5 officers from Local Authorities which are Majlis Bandaraya Melaka Bersejarah, Majlis Perbandaran Hang Tuah Jaya, Majlis Bandaraya Shah Alam, Majlis Perbandaran Manjung dan Majlis Perbandaran Klang. Figure 3 shows the framework for the best practice in maintenance management of public recreation park with the results of research conducted by researchers.



Fig. 3 - Framework for the Best Practices in Maintenance Management of Public Recreation Parks

The maintenance management start with the implementation stage. The implementation stage is carried out by the parties, the tasks and the process to develop the maintenance management of public recreation park. Next is management practice stage that have 6 elements. There are staffing model; goals, standards and design; staff maintenance; develop staff; develop plans; and sustainable maintenance.

The first element refers to staffing model practices which means to use a staffing model that works for the organization involving the volunteers to enhance staff and maintain an adequate level of expertise in specialty skills on the park staff especially in landscape architecture. The second element refers to the practice of goal, standards and design means to ensure the goals, standards and design of the organization intent are understood. This element involve the maintenance policies and objectives of the organization; the monitoring of work performance against landscape quality standards; staff rewards annually; the party making the standard assessment; maintenance strategy; and policy documents.

Next is the third element of staff maintenance practices means the organization organize staff maintenance by zones and specialties. This element involves developing geographic zones to the staff to develop expertise and to instill pride in one's work and manage zones to landscape specific standard and develop special team. The fourth element is developing the staff who also play an important role which means the organization need to hire the staff based on the both aspects of experience and attitudes; education and skills; ability and strength and will. In addition, there is also professional development and mobility in enhancing work experience and innovation; as well as improving teamwork and positive assessment.

The fifth element is developing the plans for the organization regular and emergency maintenance that includes monitoring the management of day-to-day activities, develop and maintain the record systems, management costs, reports and complaints, rules or manuals, and strategic plan maintenance. This element is important in designing an annual plan and emergency plan in developing the best practice framework for managing the public recreation park in Muar.

The sixth element is the last element, sustainable maintenance practices that involves the limitation of the use of chemicals when necessary and maintenance strategies that serve as an annual program. As a result of overall research shows that all six elements are staffing models; goal, standards and design; staff maintenance; develop staff; develop plan and sustainable maintenance are the best practices of the maintenance management of public recreation park in Muar.

5. Data Analysis

To achieve first objective, the researcher used the literature review and face-to-face interviews with 10 respondents, namely 3 directors at the National Landscape Department, 2 officers from the Muar Municipal Council and 5 officers from the Local Authorities. Interviews were conducted first and then researcher made additional literature studies in reinforced literature reviews. All problems can be identified by researcher in ensuring that the Muar Municipal Council can understand the management practices of maintaining public recreation parks. The public recreation park in Muar as a whole was unsatisfactory and had time to improvement referred to maintenance management weaknesses in managed the public facilities where there were convenience to the public. From the findings of the literature and respondents, the maintenance management of public recreation parks were stated. However, maintenance management is limited with the lack of allocation at each Local Authority (LA). From the findings, the lack of allocation is not a barrier to the practice of managing public recreation parks in Muar. This practice can be developed with the efforts of an organized professional management that must be practiced in local authorities.

The second objective was identified in the implementation of the practice of managing the public recreation park in Muar through interviews with 10 respondents involved, namely 3 directors in the Department of Landscape, 2 officers from the Muar Municipal Council and 5 officers from the Local Authorities. The results of the study were conducted in Chapter 4, analysis and data finding. Respondents of this study support 6 elements that are staffing model; goal, standards and designs; staff maintenance; develop staff; develop plans and sustainable maintenance. From the findings, researcher was be able to utilize these six elements in developed the best practice framework for manage the public recreation park in Muar.

The third objective was achieved with the support of 10 respondents by interviewed namely 3 directors in the National Landscape Department, 2 officers from the Muar Municipal Council and 5 officers from the Local Authorities involved in managed the public recreation park maintenance. Within the framework of the practice there are six elements were developed which required maintenance management especially from the Landscape Section in Muar Municipal Council to manage them.

Therefore, the results of this research can give a real result of the problems and the findings of this study can help the organization of the local authority, especially for the landscape department to develop the framework for best practice in maintenance management of public recreation park. This is to ensure that the practice provided been used by local authorities in the maintenance management of public recreation parks.

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