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Students Feedback in Selected Campus Facilities: A Case Study of Universiti Kebangsaan Malaysia (UKM)

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ABSTRACT

The National University of Malaysia (UKM) is committed to create a sustainable campus. Facilities provided are one of the important agenda in contributing to campus sustainability. This paper looks into the aspect of students perception towards selected facilities provided. Their feedback is important since students are the main clients in the campus and they are the largest group that study and live on campus. The concept of facilities management itself emphasizes on the client feedbacks in providing the continuous quality improvement. The method used to obtain the required data is through 5-point Likert scale questionnaires survey. A total of 200 sets of questionnaires were distributed to student of UKM Bangi campus. The responses are in relation to facilities aspect of convenience and comfort, landscape and environment, circulation system, accessibility, transportation, security, and lighting. The result shows that the overall scale obtained from the questionnaire is 3.17, which is at moderate level. This result indicates that the selected facilities provided in UKM Bangi campus is at moderate level. The impact of this finding is to the UKM Department of Development Management, in which they can use the finding in prioritizing the management of physical development of UKM Bangi campus in reaching the student needs

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INTRODUCTION

The issue of sustainability is the oft-discussed topic since the Earth Summit held in 1992 and 2001 [1]. The conference in 1992 also became the forerunner to the establishment of Agenda 21; an action plan contains comprehensive principle to help government and other institutions to the implementation of sustainable development. As such, UKM committed to creating a sustainable campus, particularly through campus physical development plan. One of the important components in the development planning process is the facilities management and maintenance.

University campus refer to an institutional space that designed for learning and residential uses [12] which consists of the building and surrounding physical elements [26]. The campus physical development usually done by stages according to current needs [34]. There is approximately a total of 1.2 - 1.5 million students in Malaysian higher education institutes at one time [22]. Similarly, the UKM campus also developed through three phases; UKM Campus Development Plan 1973, UKM Bangi Campus Development Plan 1996-2010 and UKM Sustainable Campus Master Plan 2007-2020. Each development plan was carried out by different approaches.

This paper discussed the evaluation of the facilities provided in the UKM campus based on the view point of the main users of campus (students). Their feedbacks, views and suggestions are very important in campus planning process. The contents of this paper are introduction, literature review, research method, results and discussion and conclusion. In this research, a sustainable campus is defined as a campus that provided a comfortable environment for living through their facilities.

Literature reviews:

According to the Bruntland Report [4], sustainable development means the development that meets current needs without compromising future generation's needs. Although the sustainable development has been

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accepted around the world, its implementation remains a major challenge at present [8]. This is because sustainable development is not only environmentally friendly alone, but more to the successful development as a whole [15] and must meet the three aspects of social, ecological and economic [28].

As a center of knowledge and development of human civilization, the issue of sustainability has become an important issue for universities around the world [3]. Hence, many universities have responded by implementing sustainable campus strategy [6]. The same scenario happened in Malaysia when there are a number of universities working to create a sustainable campus. However, the effectiveness of this effort is questionable because there are studies that found the universities in Malaysia is still fail to provide an environment that offers a sustainable or comfortable living [26]. In addition, the campus physical planning in Malaysia is less sensitive and failed to meet the needs of students as the main users if the campus [19] as well as the supervisory system of maintenance in Malaysia is weak [35].

Le Corbusier (1936) stated that the campus is its own world, a temporary paradise and a pleasant stage in life. This statement is prompted to create a campus that provides a comfortable life or in the context of this study means a sustainable campus. It was realized since 75 years ago. This is because the university is a center of ideas and innovation, a perfect place to develop the ideas of sustainability [13]. At the same time, universities can also be an example to the community in sustainability strategies, policies and practices in their daily lives [10,21,13]. According to Dober [7], the campus consists of three main elements, namely buildings, external spaces and supporting element such as utilities and circulation.

Campus planning effect on the environmental, social and economic aspects [24] and it is important in achieving the organization objective [31]. In addition, campus planning should also focus on the university's mission and its implications in designing and building the physical characteristics of the campus, particularly in allocating, integrate and accommodate the academic, residential and commercial facilities [24]. Besides providing a comfortable life, sustainable campus also provide environmental that stimulate and increase the availability of learning (Campos 2008). One of the key components of campus planning is the facilities management and maintenance. This is because the facilities management has an impact on the lives of its inhabitants because of the comfort and productivity aspects have a close relationship with performance-occupied facility or environment [23].

Maintenance is not only for old building or facilities, but it is important for the new facilities as well. This is because although some of the newly facilities still in good condition and able to upgrade the educational facilities and provide a better quality environment, it will not always remain new during its lifetime [2]. This is because all facilities will become older and has always been the process of renovation and refurbishment [23]. At worst scenario, problems related to maintenance also sometimes occur before the facilities were completed [23]. Schneider (2002) added that the physical aspects of the environment can affect teaching and learning, either help or inhibit the process. These factors include aspects such as the configuration of space, indoor air quality, ventilation, thermal comfort, lighting and sound. This view is supported by Uline *et al*. [33] who found that certain personality of different space able to promote and create a sense of commitment to shared learning goals. Therefore, the assessment of the condition of campus facilities is important because according to Uline and Tschannen-Moran [32], the facilities have a significant influence on student's achievement.

Extracts from a report issued by the United States Government Accountability Office (GAO) in March 2011, the operational and maintenance costs typically is between 60% to 80% of the cost of a facility during its lifetime. Meanwhile, the cost required to design and build facilities, only about 5% to 10% [11]. This number reflects the difference between the cost required for the operation and maintenance of a facility over the cost to design and build the facility. In addition, the report also revealed that there were weaknesses in the business of asset maintenance carried out by the government [11].

Structured and organized facilities management potentially to improve physical performance and condition of the facilities and its systems [14]. In addition, it cans give satisfaction to consumers and increase the effectiveness of facility operations if it is properly maintained [14]. Therefore, maintenance is required for all facilities to ensure they are safe and able to provide a conducive environment to assist learning. In Malaysia, the practice of the facilities management and maintenance is limited to the minimum percentage prescribed by the performance compared to other Asian countries. In addition, each organization has a different role and policy of maintenance, because it depends on the amount, quality systems and building design [30].

Based on *Dasar Pengurusan Aset Kerajaan* (DPAK-Government Asset Management Policy) and *Manual Pengurusan Aset Menyeluruh* (MPAM-Total Asset Management Manual), asset assestment is one of the activities in *Model Pengurusan Aset Menyeluruh* (PAM-Total Asset Management Model) that must be implemented by government organization. This process is part of the activities at occupancy phase and closely related to asset performance management. Figure 1 shows the activities in PAM. Campus also is one of the assets, and it contains buildings, infrastructures and others facilities.

Therefore, to ensure that the campus development plan successfully meet the objective of creating a sustainable campus, an assessment of the present condition of the campus should be implemented. This is a part of facilities performance assessment that included in *Manual Pengurusan Aset Menyeluruh*. One of the

initiatives can be implemented is by using the 'community participation' [25]. The process of community participation is a process that involves the community that inhabited the area. Feedback, views and suggestions from the community is very important because they have life experience within the area under study. Such information is needed to evaluate the effectiveness of previous plans. According to Sulong Mohamad [29], it is important to plan a development that meets the needs, hopes and aspirations of society.

Research methodology:

The questionnaire survey was chosen in this study. The questionnaire is one technique that can be used to study the public perception of their environment [27]. Through this technique, researchers can assess the respondent's background information, perceptions and opinions towards specific aspect under study.

The question requires respondents to give their views on the aspects that are reviewed based on the existing state of the campus. The answer to each question group consists of five options based on Likert Scale, which consists of the ratings of very bad, bad, medium, fairly well and good. The aspect under study is about convenience and comfort; landscape and environment; circulation system; accessibility; transport and security and lighting.

The targets group for this questionnaire is the students, since they are the largest group in the campus community and the main users of the campus. The students that become the respondents are those who study and live on campus.

A total of 200 sets of questionnaires were distributed to students at UKM Bangi. To get the response that reflects the opinion of the entire campus community, the respondents divided equally based on the residential colleges. There are 10 residential colleges on the campus of the University. This means that each residential college is represented by 20 respondents. Gender of the respondents was divided equally between men and women. The data is analyse using the software of Statistical Package for Social Sciences (SPSS).

Discussion and Conclusion:

The establishment of a sustainable campus is one of the important efforts, according to the current situation where sustainability issues widely discussed and practiced around the world. It is clear that the formation of a sustainable campus can be realized by implementing the campus physical development plan base on the principle of sustainability. One of the key components in campus planning is facilities management and maintenance. To implement the campus development plan, the study of past and existing planning should be done so that planners can gather the information needed to improve and increase the effectiveness of the plan to be implemented. One method to obtain the information is through the participation of students who give opinions, feedback and suggestions.

In the case study of UKM Bangi campus, feedback obtained from students successfully shows the actual scenario of campus facilities. Responses received indicate that the living condition of students in the campus is at moderate level. There are some weaknesses that need to be improved to enhance students' life on campus, thus able to create a sustainable campus. UKM Sustainable Campus Master Plan that to be implemented should take into the account on the views and suggestions from the students so that their needs can be met because they are main users of the campus, as well as the client to UKM.

This paper provides a significant contribution to the management of campus facilities by identifying students' needs and feelings about campus facilities. It is important as to improve management performance in order to create a sustainable campus. In addition, it also provide insight for future studies to be carried out in more detail for each aspect of facility performance of sustainable campus.

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