

Available online at www.sciencedirect.com

SciVerse ScienceDirect

Procedia Engineering 20 (2011) 230 – 237

Procedia Engineering

www.elsevier.com/locate/procedia

The 2nd International Building Control Conference 2011

Campus Sustainability: Student's Perception on Campus Physical Development Planning in Malaysia

M.Z. Abd-Razak^a, N.K.F Mustafa^{b*}, A.I. Che-Ani^a, N.A.G. Abdullah^a, M.F.I Mohd-Nor^a

^aDepartment of Architecture, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia, Malaysia ^bSchool Of Architecture and Built Environment, Kuala Lumpur Infrastructure University College, Malaysia

Abstract

Campus physical development plan is an effective tool to shaping campuses' life, especially among students to promote a sustainable living community. The purpose of this study is to asses and evaluates student's perception about the physical development planning of their campuses. The case study conducted in four public research university campuses. The quantitative and qualitative methods have been use in this study. Quantitative method involved data collection by using questionnaire distributed to 100 students for each campus. While the qualitative methods involved behavioural observation and visual study. The findings from qualitative methods clarified the quantitative data. The overall findings revealed that all campuses had a similar typical problem. However, there are differences about the extent or severity of the problems in each campus. The result shows that the most compact campus (USM) among these campuses, have a minimal problems in term of physical development planning that affect student's life compared to others campuses.

© 2011 Published by Elsevier Ltd. Selection and/ or peer-review under responsibility of Universiti Teknologi MARA Perak and Institution of Surveyors Malaysia (ISM)

Keywords: Sustainable campus; physical development; planning; case study; Malaysia.

1. Introduction

Sustainable development means development that meets current needs without compromising the needs of future generations [1] by focusing on a balance of environmental, social and economic [2]. In the other hand, the number of students who further their studies at universities is increasing every year. Thus,

E-mail address: nurkhairul@kliuc,edu.my.

^{*} Corresponding author.

universities must have a long term development plans for their campuses [3] or better known as sustainable development nowadays.

The importance of sustainable development can be seen on many campuses when many universities have established the 'green campus'[4], promoted its implementation [5] and making sustainability a priority in the campus planning and development [6]. This is because there are many benefits that can be achieved through the development of a sustainable campus [6] when there is a balance in the three aspects of economic, social and environment [7]. However, there are still many who view sustainable development from the aspect of environmental alone [7,4].

From the view of physical development planning, a wide and disperse planning contrast to the concept of sustainability as it increases the distance between areas; increasing reliance on vehicles; increasing air pollution; create accessibility problems, constrict infrastructure and facilities management, reduce energy efficiency, create poor social life and many more [8]. In term of campus planning, [9] stated that there are three (3) aspects that should be emphasized; accessibility, safety and social engagement. Research on compact planning practices found that the approach providing a suitable environment to support all the three aspects. In addition, this planning approach also provide various advantages in other aspect such as circulation, transportation, provision of facilities and other related aspects. Analysis by [10] found that there are seven advantages when implementing the compact development, such as:

- a) Minimized land used
- b) Reduce vehicle reliance
- c) Reduce resource consumption and pollution
- d) Encourage the usage of public transport, walking and cycling
- e) Increasing accessibility to facilities and services areas
- f) More efficient provision of infrastructure and utilities
- g) Redevelop used area.

[10] analysis showed that compact development planning affect all three aspects in sustainability; social, economy and environment. Besides [10], there are some researchers recognized the benefit of compact development planning such as [11], [12] and [13].

The study was conducted to examine the effectiveness of the approach of campuses' physical development in Malaysia on cam0us sustainability. Assessment was undertaken on the perception of students about the environment and life on their campuses. The result of this assessment was then compared between the campuses. This paper will discuss a part of the research including campus layout structure, accessibility, safety and lighting.

2. Research Methodology

Case study was conducted on each campus by using quantitative and qualitative methods to collect all the data needed. The methods used in this research are questionnaire survey, behavioral observation and visual study. The selection of campuses is based on the status as research universities. First four research universities in Malaysia has been selected; Universiti Kebangsaan Malaysia (UKM), Universiti Sains Malaysia (USM), Universiti Malaya (UM) and Universiti Putra Malaysia (UPM). The study was limited to the campus physical development planning.

The instrument of quantitative method used in the study is questionnaire. The purpose of questionnaire is to obtained students' feedback about their campuses. Subjects for this method were students who live on campus. [14] stated that students are encouraged to criticize the activities of the campus because they are 'client' and allowed to demand reform on issues of environment and sustainability. In

دريافت فورى ب

ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
 - ✓ امكان دانلود نسخه ترجمه شده مقالات
 - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
 - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
 - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
 - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات