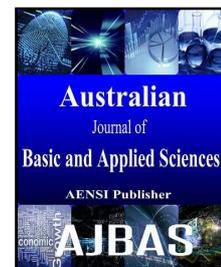




## AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

ISSN:1991-8178 EISSN: 2309-8414  
Journal home page: www.ajbasweb.com



### Sustainability Of Street Furniture Design In Malaysia

<sup>1</sup>Sara Zavari, <sup>1</sup>Nangkula Utaberta, <sup>2</sup>MdAzreeOthumanMydin

<sup>1</sup>Architecture Department of Architecture, Faculty of Design and Architecture, Universiti Putra Malaysia.

<sup>2</sup>School of Housing, Building and Planning, Universiti Sains Malaysia, 11800, Penang, Malaysia.

**Address For Correspondence:**

NangkulaUtaberta, Architecture Department of Architecture, Faculty of Design and Architecture, Universiti Putra Malaysia  
E-mail: nangkula\_arch@yahoo.com

**ARTICLE INFO**

**Article history:**

Received 12 February 2016

Accepted 12 March 2016

Available online 20 March 2016

**Keywords:**

Sustainability, Street Furniture, Urban Areas

**ABSTRACT**

Urban open space is a natural and cultural resource, synonymous with neither 'unused land' nor 'park and recreation areas which are the element that defines the city's unique points. Street furniture is the elements that could play an essential role it is where the building meets the sidewalk which creates stimulating and exciting open spaces. Street furniture gives the first true impression of the town about its identity. In the 4th thrust of the 10th Malaysian Planning (RMK 10), mentioned to improve the standard and sustainability of our quality of life. Therefore this paper presents the role of street furniture and its significances toward sustainability and quality of living in urban areas and cities.

**INTRODUCTION**

The study is an exploration of design criteria issues that that could introduce sustainability into the design of street furniture in urban public open space in Malaysia. The open spaces that present society is, the more time people spend in public areas. The street is no more just a way, it became a living area. Street furniture turns to be rather furnishing with emphases on design and quality.

The agreement with Malaysian National Urbanization Policy mission which is "to create a visionary city with a peaceful community and living environment through sustainable urban development" (Significances of Sustainability) can be improved by appropriate public activities in streets and other public spaces with providing safety, comfort, aesthetic design quality of street furniture's, which improves the urban design. This paper will focus on literature review and document analysis regarding issues in adopting sustainable design for urban street furniture in Malaysia. About what are the roles of street furniture and their influences will be discussed further.

**Street Furniture Role In Urban Public Open Spaces:**

From this time to now, alot has changed. In 1950 there were 86 cities on earth with more than one million inhabitants, but today there are 400, and in 2015 there will be more than 550 (Street Furniture By David Karasek). Cities are developing at a rapid pace, and it is clear that this growth poses challenges for designers. New demands on the design of public spaces are evolving and the professionals must be prepared to create products that satisfy the users' new needs. Wireless Lan hot spots allow us to work and communicate anywhere within public areas" and "plasma screens and other façades transform high rises into communicative structures (Sustainable Urban Street Design).

The new demands also affect the objects that occupy the urban areas: the urban elements. Back in 1996 Creus defines urban elements as "objects which are used and which are integrated to the urban landscape". Expression of 'street furniture' is normally used to designate these objects as well. In this category one can include benches, chairs, streetlights, planter boxes, bus shelters, bicycle racks, and bins among rest of elements.

**Open Access Journal**

Published BY AENSI Publication

© 2016 AENSI Publisher All rights reserved

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

**ToCite ThisArticle:**Sara Zavari, NangkulaUtaberta, MdAzreeOthumanMydin,Sustainability Of Street Furniture Design In Malaysia. *Aust. J. Basic & Appl. Sci.*, 10(6): 119-121, 2016

The importance of the urban elements to cities is evident. People are sometimes so accustomed to having them around that they do not even notice the role these elements play in their daily life (Ismail, A., *et al.*, 2015). The significance of street furniture is strongly connected to accessibility. Urban elements make “the city accessible to everybody and easier to get around in” ((Co-design in public Spaces By Maria Gabriela Sanche). Sign panels properly placed can facilitate the public’s locomotion and orientation. Street furniture also helps people effectuate their everyday activities. Bus shelters, streetlights, and bicycle racks can be cited as necessary elements to support their common needs.

### ***Street Furniture/ Sustainability For Urban Design:***

Urban Design is about city building, place making, and community design through the integration of land use, built form. Good urban design contributes to the economic vitality and health of a community, and to vibrant and successful public spaces. «When public spaces are successful (Urban Design and Sustainable Development) they will increase opportunities to participate in communal activity. People from different cultural groups in places like parks, plazas, markets, waterfronts, and natural areas of our cities can come together in a supportive context of mutual enjoyment. As these experiences are repeated, public spaces become vessels to carry positive communal meaning. (Utuberta, N., *et al.*, 2014)

In response to these definitions, urban design therefore can be defined as the multidisciplinary activity of shaping and managing urban environments, interested in both the process of this shaping and the spaces it helps shape (Utuberta, N., *et al.*, 2015). This interdisciplinary perspective suggest that urban public space reflects the cultural order, not through a one to one correspondence between spatial arrangements and meaning, but through a complex “culture making” process in which cultural representations are produced, manipulated and understood by designers, politicians, users, and commentators within changing historical, economic and socio-political contexts (Utuberta, N. and A. Abubakar, 2014).

What is sustainability? There are a variety of definitions, but all share similar tenets. The Wikipedia definition says, sustainability is “a means of configuring civilization and human activity so that society and its members are able to meet their needs and express their greatest potential in the present, while preserving biodiversity and natural ecosystems, and planning and acting for the ability to maintain these ideals in a very long term.” It is achieved through an integrated design and delivery process to enhance the natural and built environment by using energy sensibly with a goal towards carbon neutrality, improves air and water quality, protects, and preserves water and other resources. Furthermore it also and creates environments, communities, and buildings that are live able to be more comfortable, productive, and safe (Ismail, A., *et al.*, 2015). The importance of sustainability has become a recognized driving force in determining society’s course of development. Increased pressure on natural ecosystems, rapid industrialization in emerging countries, the continued and increasing demand for raw materials, water shortages, and an aging civil infrastructure all serve as examples of strain to the planet.

### ***Research Methodology:***

The study starts with identification of existing image and design that characterized urban public space in Malaysia. The method of data collection is observation technique. The first phase of the study is about understanding the issues and how they have been adopted in the environment. Towards the end of the study there would be explanation of how sustainable design of street furniture’s has applied in public spaces in Malaysia.

### ***Issues And Scope:***

An issue of sustainability design in Malaysia Urban Public Open Space, focusing on street furniture design. Urban design is the comprehensive, integrated approach to the design and development of the public realm and its relationship to built form. It is the art of organizing and expressing elements in our built environment to shape the interaction between people needs and their surroundings and to influence the processes which lead to successful communities (Ismail, N.A., *et al.*, 2015; Ismail, N.A., *et al.*, 2015). In this way urban design is as much a process as it is an end product; a process that engages the community and stakeholders to develop a vision and an implementation scheme that creates functional, attractive and sustainable public places.

Although urban areas in Malaysia is often upgraded for the purpose of serving the need for business, entertainment and satisfying urban life style of young urban generation but few is concern about moulding the culture of this country I believe furniture designs are not simply structures but are both expressions and moulders of culture while considering the sustainability of design.

However, the existence of street furniture in Malaysia is in most cases of unplanned. As a result, most of current street furniture designs do not have sustainable principles (Ismail, N.A., *et al.*, 2015). This is supported by Designers spend little time and effort on studying how design relate to needs and design aspects (Utuberta, N., *et al.*, 2015).

**Conclusion:**

This study will contribute in awareness in providing street furniture by considering sustainability of the design. Understanding of sustainability includes understanding the economic, environmental and social benefits in order to create balance between the physical developments and human developments. The finding of this research express the center on people needs and societal needs in design practice. The next step of the paper is providing a recommendation, which is “Engaging people in the development of urban elements (street furniture’s) they will use and with which they never used before and did not have any previous relationship, might be a solution for the areas with good potential that are under-used and been avoided for too long.

**REFERENCES**

- Co-design in public Spaces By Maria Gabriela Sanche
- Ismail, A., N.A. Ismail, S. Bin Safiullah, M. Yazid, M. Yunos, N. Utaberta and S. Ismail, 2015. “Identifying Natural Playscape Elements in a Neighbourhood Park: A case Study of Kuantan, Malaysia,” *Adv. Environ. Biol.*, 9(95): 504-513.
- Ismail, N.A., N. Utaberta, M. Yazid, M. Yunos and S. Ismail, 2015. “‘Ruralizing’ Urban Residential Landscape: A Paradigm Shift in Urban Landscape Design,” *Adv. Environ. Biol.*, 9(5): 345-349.
- Ismail, N.A., N. Utaberta, M. Yazid, M. Yunos and S. Ismail, 2015. “Malaysia Going Greens: A Study on Community Commitment towards a Greener Urban Living Environment,” *Adv. Environ. Biol.*, 9(95): 498-503.
- Significances of Sustainability Street Furniture design in Malaysia By Arnis Aziz, Osman Mohd Tahir and Mohamad FakiZakyJaafar
- Street Furniture By David Karasek
- Sustainable Urban Street Design and Assessment By SklenarMckenzieDeryy Bevan
- Urban Design and Sustainable Development By Markham Official Plan
- Utaberta, N. and A. Abubakar, 2014. “Evaluating Ornamentation of Twelve Pillared House in Kelantan and Terengganu,” *J. Environ. Sci. Technol.*, 7(4): 236-244.
- Utaberta, N., A.N. Handryant and M.A.O. Mydin, 2015. “Post Modern Cross Comparative Analysis on the Mosque Ornamentation in Malaysia: (A Case Study of Charles Jencks),” *Appl. Mech. Mater.*, 747: 48-51.
- Utaberta, N., A.N. Handryant and N.S.N.A. Wahab, 2014. “Redefining Mosque Ornamentation in Malaysia, Cross Comparative Analysis On Post-Modern Perspective: (A Case Study Of Charles Jencks And Michael Graves),” *Recent Trends Soc. Behav. Sci.*