



Available online at www.sciencedirect.com

ScienceDirect

APCBEE Procedia 10 (2014) 311 - 315



www.elsevier.com/locate/procedia

ICESD 2014: February 19-21, Singapore

The Importance Aspects of Landscape Design on Housing Development in Urban Areas

Fitrynadia Mohd Shahli*, Mohd Ramzi Mohd Hussain, Izawati Tukiman and Nurbazliah Zaidin

Department of Landscape Architecture, Kulliyyah of Architecture and Environmental Design, International Islamic University
Malaysia (IIUM), 53100 Jln Gombak Kuala Lumpur MALAYSIA

Abstract

It has been proven that proper landscape planning and designs with the sustainability concept and approach help to create a conducive and responsive environment of housing development. This paper presents a brief of conceptual view on the important aspects of landscape design on housing development in urban areas. The review is based on the theoretical framework of the relationship between landscape design in planning and designing the housing development in urban areas as well as how it acts as an added value to the sustainable residential landscape design. A review on previous researches and journals are doing in providing a theory on the importance aspect of landscape design in housing areas. It is hoped that this paper may possibly provide significant information on landscape design towards influencing the prices and values of the house. This paper also can become an indicator towards enhancing the sustainability of living environment.

© 2014 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

Selection and peer review under responsibility of Asia-Pacific Chemical, Biological & Environmental Engineering Society

Keywords: Landscape planning and design, conducive and responsive, housing development, sustainability

1. Introduction

A good quality of housing area can be highlighted as an important issue in creating a sustainable living environment. According to Kuala Lumpur Structure Plan 2020 [1], the city must be functional, live and impart a sense of community and belonging. In addition, it must also provide a clean, healthy, safe and caring

^{*} Corresponding author. Tel.:006-03-61964000 ext 6286; fax: 006-03-61964864. E-mail address; fitrynadia@gmail.com.

environment that caters to the needs of all. Innovative designs, provision of the latest conveniences and facilities, variety of choice, quality of finish and attractiveness of the layout, shall become a priority concern especially in landscape design. Therefore, the concern about the importance landscape design in supporting a quality of life is needed especially in the context of housing development. Meanwhile, the little attention has been given to landscape design in prospect of buyers. Thus, based on the issues highlighted, the effectiveness of landscape design which can help in increasing house prices and values need to be studied in order to attain the sustainable housing development.

This conceptual-review paper will focus on the importance of landscape design in influencing housing development. The review will develop a theoretical understanding of landscape in housing areas with a compatible used by its elements and characters that can give positive impact toward prices and values of the house.

Since landscape design becomes a new branding for housing development nowadays, this review will deliver a conceptual understanding in promoting landscape design in sustaining living environment in the country. It is also important in order to achieve the National Landscape Policy [2] action plans which are to require at least 30% of urban development areas as green areas as well as to reach the vision of National Landscape Policy to transform Malaysia into The Beautiful Garden Nation by Year 2020Landscape Design for Housing Areas.

2. Landscape Design for Housing Areas

Landscape is an essential part of the environment. Landscape, which includes topography, vegetation and associated plants and soil, water bodies, and their spatial configuration, is one of the most visual needs of people [3]. They add that human-nature interactions lead human beings to have contrasting preference on the surrounding landscape and environment because a pleasing landscape can bring mental and physical benefits to people. The understanding and preference by people on their surrounding landscape provide a challenge for policy-making and implementation in housing property. According to Williams and Tilt [4], landscape design is the art of developing property for its greatest use and enjoyment. Thus, an effective landscape design can become integral part of a good community environment.

This view is also supported by VanDerZanden and Rodie [5] who state that landscape design blends arts with environmental, physical and biological of science which mainly focus on outdoor space. They also further explain that well-defined landscape space can enhance the quality of living areas which meet people's preferences. Besides that, according to VanDerZanden and Rodie [5], landscape design is not only limited to plant material only. It also focuses on the hardscape that complement the plants in order to create a successful design. A well-defined landscape space can create a quality of an environment and provide a conducive living space in residential. This landscape design might be able to become a factor influencing the price and value of the property. In relating to landscape design and housing properties, Smith et al., [6] suggests that housing is an activity that is deeply connected to a sustainable environment. The connections are as follows:

- Housing is a basic human need and its quality; price and availability are crucially important to a quality of life.
- The location, planning, layout and landscape design of the house make an important contribution to the community spirit.
- The siting of the houses and the materials from which they are made, and the uses their occupants make of such resources as energy and water, all have major environmental implications.

Thus, housing can be seen as the central element which can link together economic development, the environment and social welfare in achieving a sustainable environment and society (Fig. 1). According to Gause et al., [7], landscape design can be used as a tool to make a community more sustainable and contribute

to a balanced environment. Natural and constructed landscape design can modify the residential community to become a better living environment and also increase the value of the house property.

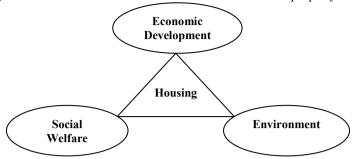


Fig. 1. The importance of housing in a sustainable society (Source: Smith et al., [6], p.5)

3. The Importance of Landscape Design in Housing Areas

The main emphasis of this paper is to examine the importance of landscape design in the planning and designing of a housing property in urban areas. Therefore, the elements of a housing landscape are important in order to support the need of a community to have a better living environment in their residential area. According to Ye [8], there are three factors that can support residential landscape elements which are the natural factor, the artificial factor, and the cultural factor. The used of plants is important to support all the beneficial impact of landscape design in housing areas. The significant of plants can give a beneficial effect for residential. According to Tyrväinen et al. [9], plants are a benefit of its social, aesthetic, climatic and physical, ecological and economic in housing areas. In providing social benefit, plants can be used to enhance a quality of neighborhood by providing green spaces and recreation areas. This will lead to an improvement of interaction, physical and mental health of the society surrounds [9]

Apart from that, plants also importance in provide aesthetic and pleasant environment of the community. According to Williams and Tilt [4], plants offer qualities that help to direct foot traffic in the landscape, moderate the environment around the home, hide objects, or lead the eye and stimulate other senses like smell and feel. Plants should be used together to enhance the best features of a property. The basic elements that plants contribute to the landscape in order to express the principles of design are formed, texture, and color [4]. This means residential landscapes can provide an opportunity for people experience the nature in the middle of urban and create a beautiful visual image of the community areas. Besides that, plants give a beneficial impact in term of climate and ecological benefit for housing areas. Since urban areas are full of hard surface, this leads to high temperature to the surrounding. Therefore, shaded trees are important to protect the residential area from sun radiation and also provide a comfortable environment. The plants also can become an indicator to protect wildlife habitat, protection against soil erosion, and microclimate control through shade and windbreaks and reduce the pollution [9]. Moreover, the economic values also can increase by providing a landscape design in the properties. The prices of the landscape material are higher in the market which can contribute to becoming a selling point for the house [9]. Thus it will attract prospect buyers and increase property value.

Landscape design has become a significant effect in humans as well as all living things in order to provide a conducive living environment. The aggregate effects of landscape design can influence social, aesthetic and environmental qualities of the overall housing areas. As a result, an innovative landscape that incorporates ecologically beneficially is very important to be reviewed in creating a sustainability of living environment as a whole.

4. The Elements of Landscape Design for Housing Areas

The elements of landscape design such as softscape, hardscape, and water elements are important to create balance in landscape designs. Mohd Hussain and Ahmad [10] mentioned that the function of hardscape and softscape especially in the housing area in Malaysia give a sentimental value and contribute to creating images and character of the contemporary landscape. It can be visualized through the use of varied type of plants such as ornamental plants, herbs / kitchen garden, shaded plants and palm in most of their lawn and front yard area. In the other hand, hardscape also plays a role in the landscape setting as attractive components that balance the natural environment. Among the hard landscape elements that commonly used in the landscape in a housing area including gazebo as a place to meet, pergola, concrete pots, water features, fountains, swings and benches. Furthermore, the use of these elements will increase the benefit and value to the house property. The element that used in landscape design normally is different based on culture and the life of society. According to Ismail [11] landscape design that could be applied in the housing area is different based on the culture of the ethnic group in Malaysia. Ismail [11] adds that landscape can be influenced through religion and belief, values and norms and custom and behavior of the culture. As an example Malay culture prefers to have ornamental and decorative style of landscape. Other than that, Malay culture usually uses native and exotic plants as softscape elements in their house. Apart from that, the Chinese cultural landscape is based on believed to bring good fortune for the residents. The red color becomes significant and dominant for them for landscape design. Therefore, they prefer to have plant materials which chosen from species with red colors and artificial plants like 'bonsai' in their garden. In terms of Indian culture, they believed in sacred thing and prefer to have gardens with sacred plant species together with ornamental flower plants for religious ceremonies.

The elements of landscape design that have in housing also influenced by demographic factors of the user. A specific design based on demographic factors needs to be emphasized in landscape design for housing areas. Focusing on age and group of people, there are several types of people that identified using landscape facilities which are children, teenagers, adults, elderly and disabled. Marcus and Francis [12] highlighted that children like to have activities which can entertain themselves and play together with other children. For that reason, the tot lot and playground often become a social place for children and at the same time have a seating place where parents can supervise their children. This shows that adults prefer to have leisure activities that can relax their mind and simply enjoy watching their children play. The benches that overlook to the play area are needed for parents more comfortable. In terms of teenagers, their preferences towards landscape design more focus on the activities that can create an excitement and privacy for them. Sense of privacy and eager to learn something new is factored that make teenagers have problems in using landscape design as their preference to do activities [12]. For elderly and disabled group, they prefer to have a comfort, safety, security and easy access in their housing area. In addition, Marcus and Francis [12] mentioned that the opportunity for meeting others, enjoy the nature and exercise are equally important to their health and socializing. Thus, the landscape plan that connected to their house usually has a functional component such as parking, ramps, walkway, railings, signage, guiding tactile that support them in accessibility from one place to another.

5. Conclusion

This paper has explored the overall view of landscape design in housing areas in relation to the idea of a sustainable environment and the importance of landscape design as added value to the real estate property. With the understanding of landscape design in terms of definition, elements and importance in the context of housing properties, it hoped that would give a beneficial impact toward a sustainable environment of the landscape industry for housing in our country. The combination of hardscape and softscape elements of

landscape design is important in creating a pleasing built environment for residential properties. Furthermore, the factor that influenced landscape design become benchmarks in order to understand the basic need of landscape design in the housing area. Thus, the roles of landscape architects are very important to be introduced and promoted with regards the importance of landscape design in neighborhood societies.

Acknowledgements

The authors would like to thank to the International Islamic University Malaysia (IIUM) for supporting this research under the Research Acculturation Grant Scheme (RAGS).

References

- [1] Kuala Lumpur Structure Plan 2020 (KLSP 2020), (online). Available at: http://www.dbkl.gov.my/pskl2020/english/index.htm
- [2] National Landscape Policy. (2011). National Landscape Department, Ministry of Housing and Local Government.
- [3] Zheng, B., Zhang, Y., And Chen, J. (2011). Preference to home landscape: wildness or neatness? *Landscape and Urban Planning*, 99: 1-8.
- [4] Williams, J.D. And Tilt. K. (2006). *Residential Landscape Design*. [Online] Alabama Cooperative Extension System. Available from: ANR-813. www.aces.edu.
 - [5] VanDerZanden. A. M., and Rodie, S. N. (2008). Landscape design; Theory and application. Canada: Thomson Delmar Learning.
- [6] Smith, C., Clayden, A., and Dunnett, N. (2008). Residential Landscape Sustainability; a Checklist Tool. United Kingdom:Blackwell Publishing.
- [7] Gause, J., Franko, R. A., Heid, J. J., Kellenberg, S., Kingsbury, J., Mcmahon, E. T., Schweitzer, J. G., and Slone, D. K. (2007). *Developing Sustainable Planned Communities*, Washington D.C.: Urban Land Institute.
- [8] Ye, J. (2009). Research of Landscape Design in Residential Area. Blekinge Institute of Technology. *The European Spatial Planning Programme*. Sweden
- [9] Tyrväinen, L., Pauleit, S., Seeland, K., and de Vries, S. (2005) In Cecil C. Konijnendijk, C.C., Nilsson, K., Randrup, T.B., and Schipperijn (Eds.), Urban Forests and Trees (pp. 81-114). New York: Springer.
- [10] Mohd Hussain, N. H., and Ahmad, S. (2010). Malay Landscape: Typical Design for Contemporary House at Desa Wawasan. *Asian Journal of Environment-Behavior Studies*, 1(3): 37-47.
- [11] Ismail, N. A. (2010). Landscape Alteration in Urban Residential Areas of Selangor, Malaysia. Unpublished Ph.D Thesis. Lincoln University.
- [12] Marcus, C.C., and Francis, C. (1998). People Places: Design Guidelines for Urban Open Space. Canada: John Wiley & Sons, Inc.