PUTRAJAYA NEW TOWN AND THE QUALITY OF LIFE

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ABSTRACT

Town planning should aimed at improving the conditions and opportunities that urban environment can present wherever possible. One of the overriding intentions of new town development is to humanise the urban environment by creating lively locations for a balanced settlement structure with residential areas and an urban diversity of shopping, services, recreational and cultural facilities. Another principle is to provide the best possible urban quality of life for every one to live, work and play. The quality of life in a particular area was a subjective phenomena and that each respondent may have different views or perceptions with regard to subject matter. The underlying aim of the Total Planning Doctrine is to develop a community that should be able to meet changes in values within society and be able to contribute to improving the quality of life, especially in new town development including Putrajaya. The paper is based on two studies that explored the social and physical characteristics of Putrajaya in order to measure their relative impacts. Perception surveys were carried out in 2001 and 2004 to evaluate the trend of quality of life experienced by the residents. The analysis sought to uncover information related to community life in Putrajaya which was specifically planned to provide a good quality of life for their inhabitant continuously until the completion of the development. The findings could be used to address the future development of Putrajaya and also other new towns. The findings will be useful in determining the physical planning and quality of life indicators for sustainable development.

Keywords: Quality of life, The Total Planning Doctrine, Community life, Sustainable development

Introduction

The Government of Malaysia has attempted to provide a policy to keep pace with the rapid economic growth so as to bring about a better quality of life to the people (Mahathir:1998). The initiatives have already been taken within the existing planning framework when the Federal Government adopted The Total Planning Doctrine in 1997. It was prepared by the Federal Department of Town and Country Planning. The application of this Doctrine has been included in the development planning of Putrajaya. The paper is based on a research sought to uncover information related to community life in Putrajaya which specifically planned to provide a good quality of life. The research was to explore the social and physical characteristics of Putrajaya in order to measure the relative impacts. A perception survey was carried out to evaluate the level of quality of life experience by the residents. The findings of this research could be used to address the future development of Putrajaya and also other new towns.

Literature Review

Town Planning, New Town Development and Quality of Life

On the whole, town planning must respond to social change, demographic trends, economic efficiency, and also user needs. Quality of life should be the common goal of urban planning, more so of new town development (Schewenke: 1999). The physical means of progressing towards a better quality of life is intended by embracing the concept of sustainable

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development. 'Physical land use planning has a major role in achieving sustainable development. The Planning Doctrine is an action plan focussing on the concept of sustainable development' (Zainuddin: 1999 p.1). To be successful, urban planning policies have to act in an holistic way rather than by implementing piecemeal solutions. The holistic approach should consider the importance of an evaluation process and continuous improvements of the area concerned (Naslund and Ericson: 1999). Brown (1999) states that the effects of development and planning guidelines on the life of communities were too often being ignored. Social improvements and well-being are enhanced through co-operation between all the participants involved in urban planning and urban development with the commitment towards the quality of the total built environment experienced by urban dwellers. The quality of life process offers an opportunity to have more input in the urban planning process. After more than a century now, we find, new towns providing living conditions, among the best in the world, are in the United States of America, Britain, Singapore and Japan. New towns have been a great experiment which are highly successful in providing decent housing and healthy environment for the communities. Nevertheless, we also note that there have been mistakes and problems made by new towns but through research these could be resolved. The planners and developers need to address each new town as an individual unique set of characteristics with its own particular characters and needs.

The new model of urban residential development known as new towns was brought into the English Planning and Development concept by the 1946 and 1965 New Town Acts (Morris: 1997). New town is design to be self sufficient. After more than fifty years Howard's social cities' size proved valid when the new town committee produced a suggestion that the optimal normal range of population in a new town is between 30,000 to 50,000 people (Danang: 1997). The first generation of new town development in Britain consisted of 15 new towns with 175,000 houses, 35,000,000 sq. ft of factory space, 350 schools, 4,000,000 sq. ft. office space, 100 pubs, public buildings, several thousand acres of parks and arranged with playing fields and open space (Morris: 1997). By 1970 British followers of Howard succeeded in getting government to build new towns. The ideas also spread to United States as early as 1930. In both countries the new town experiments enjoyed modest success in providing a relatively high quality of life (Nancy: 2005). As for Hong Kong, although residential living space in new town is limited, much thought was given to enhancing the quality of life outside the home (Julie and Dinah: 2002). The quality of life process offers an opportunity to have more input into the urban planning process (Besleme, Maser and Swain: 1999). In addition, urban areas are planned as public areas and it is important for urban planners to adjust urban equipment and services to avoid problems for users and providers. To illustrate this point, Wing (2000) in his research on Hong Kong and Singapore found that there is much to improve upon in the provision of the overall quality of life, cost of living, infrastructure, urban amenities, recreational facilities as well as entertainment, culture and arts. Therefore we can see here that planning and developing a new town is concerned with the human and social elements in relation to the built environment.

The concept of "quality of life" can be a useful tool in studying and evaluating the degree of well-being and equity for living in specific circumstances (Giulietta and Paola: 1999). Milbrath (1978) states that "...if quality of life is defined as happiness or wellbeing or satisfaction, it is necessarily subjective. This is further discussed by Marans and Couper (2000). The concept of "quality of life" represents more than the private "living standards" and refers to all the elements of the conditions in which people live, that is, all their needs and requirements. This concept has been developed by social scientists to measure and evaluate people's wellbeing, satisfaction and happiness. It demands, amongst other things, available and accessible social and public infrastructure to satisfy the needs of those involved and affected by it as well as an environment (Giulietta and Paola: 1999). It is of theoretical interest to explore the relationship of the built environment and the satisfaction level of different living areas. Campbell, Converse and Rogers (1976) addressed the concept of quality of life as measuring the people's perceptions, evaluation and satisfaction. Leitmann

(1999) listed four reasons for assessing the quality of urban life: a) to make comparisons, b) to identify problems, c) to develop policies and d) to monitor and evaluate the implementation of interventions. For many researchers satisfaction was viewed as more definable, more plausible and more appropriate to measure and compare people's assessments on quality of life experience (Marans and Couper: 2000).

Possibly, decision making processes must consider views from various disciplines such as planners, urban designers, engineers, architects and other related professionals such s sociologists who have knowledge on the human quality of life values necessary for long term satisfaction. To cite, it was found that more creative planning and design elements led to greater satisfaction among residents of Singapore's new town called Tampines (Seik, Yuen and Chin: 1999). Urban planning processes have to involve public participation in creating dream homes within a safe, secure and pleasant environment. Social improvements and well being are enhanced through co-operation between all the participants involved in urban planning and urban development with the commitment towards the quality of the total built environment experienced by urban dwellers. Urban life is supported by the movement and living function provided by the urban centres which allows people to go anywhere in safety with dignity (Guillot: 1999; Harrison: 1999). Harrison states that in the list of the world's most liveable cities and various quality of life assessments the highest feature required from an urban area is security. Obviously, the government of Malaysia has attempted to provide a policy to keep pace with the rapid economic growth so as to bring about a better quality of life for the people (Mahathir: 1998). Therefore, the Total Planning Doctrine should be able to contribute to enhance the quality of life by improving the living and working environment of all people, especially in the new town communities.

Consideration of the social factors is pivotal for the success of the new town development as a social city and this very much related to the concept of self-containment. This can only be achieved by policies that take into account the society's needs and through the building of balanced new settlements rather than the single-use-unbalanced extensions to existing settlements. There is a need for a broader policy for new town development which focuses on the interests of new large communities and their future. The developers, future residents in the vicinity, local authority, state, national government and the larger public are influenced the character of the future growth throughout the state must be considered. If the new town developments were to provide a framework for better life and environment, the planning objectives and strategies must be truly inspired. There is a need to have new clearer policies to guide and build sustainable environments. Sustainability requires specific initiatives and needs to be coordinated. However, in some cases the environmentally desirable urban forms might be less desirable in economic and social terms. Wing (2000) in his research on Hong Kong and Singapore found that there is much to improve on the overall quality of life, cost of living, infrastructure, urban amenities, recreational facilities as well as culture and arts. Urban life is generated by the movement and living function provided by the urban centres which allow people to go anywhere in safety. Rogerson (1999) stated that in the list of the world's most liveable cities and various quality of life assessments the highest feature from an urban area is security.

Quality of Life in Malaysia

The Malaysia Economic Planning Unit (EPU), in its report on the Malaysian Quality of Life Index (MQLI) 2002, defines quality of life as encompassing personal advances, a healthy lifestyle, access and freedom to pursue knowledge, and attaining a standard of living which surpasses the fulfillment of the basic and psychological needs of the individual, to achieve a level of social well being compatible with the nation's aspirations. The Malaysian Quality of Life Index (MQLI) is intended to be a comprehensive measure of welfare and human well-being, from a broader perspective which includes not only income but other aspects of life

such as working life, family life, transport and communications, health, education, and public safety.

The Malaysian Quality of Life 2004 is the third report to describe the progress and for the first time examined the quality of life at the state level. The Malaysian quality of life, as measured by the Malaysian Quality of Life Index improved over the 1990-2004 period, increasing by 10.9 points. This improvement in the quality of life is also reflected in the achievement of all of the Millennium Development Goals ahead of the target date of 2015 (Fong Chan Onn: 2007). In year 2004 Malaysia has gone up 15 positions to rank 36th among 101 countries in the New York Economist Intelligence Unit's quality of life index for 2005. The determinant used by included cost of living, leisure and culture, economy, environment, freedom, health, infrastructure, risk and safety and climate. The overall improvement in the economic development of the nation was also reflected in the increase in the quality of life of the population at the state level. This is attributed to various strategies at the federal and state levels. In line with this, the Ninth Malaysia Plan (2006-2010) sets out to achieve a stronger and more value-added economy, while giving substantial focus to socio-economic issues and uplifting the quality of life for all. The government remains committed towards improving the quality of life of all Malaysians.

The Total Planning Doctrine

The Total Planning Doctrine is a new approach to the planning and design which is expected to guide the physical planning system focusing on the concept of sustainable development. This is a paradigm shift that should enable physical and social planning to be integrated with moral and spiritual values that will not separate economic growth from social needs and justice that will contribute towards sustainability and increase the quality of life for society. The urban sustainability concept is absorbed into the Total Planning and Development Principles. This has given rise to new emphases in planning practice especially when government started building the new towns where man is the focus of development. This Doctrine calls for the maintenance of the trinity of the relationships between Man and his Creator, Man and Man, and Man and Environment. It has been translated and spatialised to be the underlying principle in the formulation of planning guidelines and other planning activities. There are 14 main values and 77 principles in the implementing guidelines and they have been applied holistically in the development of Putrajaya (Wan Muhamad Mukhtar: 2001; Zainuddin: 2000).

The Federal Government has also endorsed the concept of holistic development for land use planning which is known as The Total Planning Doctrine. This Doctrine calls for the maintenance of the trinity relationship between Man and his Creator, Man and Man, and Man and Environment in order to attain balanced and sustained development economically, socially, spiritually and environmentally. It postulates that man is the focal point for development. This Doctrine has given rise to new emphasis on planning practice and it sets out guidelines in physical planning terms. It is a new approach to the planning and design which is expected to guide the physical planning system focusing on the concept of sustainable development. This is a paradigm shift that should enable physical and social planning to be integrated with moral and spiritual values that will not separate economic growth from social needs and justice that will contribute towards sustainability and increase the quality of life for society. The application of this Doctrine has been included in the development planning of Putrajaya, the new Federal Government administrative centre. Hence, the future planning and development, including the new towns, must be based on this Doctrine to achieve Vision 2020. The Doctrine has embedded the underlying premise of attaining sustainable communities.

Traditionally, planning was based on physical planning criteria. However, with The Total Planning Doctrine, the future cities and new towns require a new set of planning standards

and the final outcomes will be reflected in the design of human settlements. The Doctrine has embedded the underlying premise of attaining sustainable communities. Planning and development need to provide a living environment that is socially beneficial with sufficient and optimum provision of infrastructure, utilities such as clean water supply, amenities such as cleansing, electricity and drainage systems; public facilities, recreational spaces and commercial and industrial centres. The underlying aim of the Doctrine is to develop a community who should be able to meet changes in values within society and be able to contribute to improving the quality of life, especially in new town development.

Research Aim

The research is to evaluate the trend of quality of life satisfaction experienced by the residents. The first research was carried out in 2001 that was the first year of settlement in Putrajaya and the second research was in 2004.

Research Objectives

The objectives of the research are:

- a) to identify the physical characteristic of Putrajaya
- b) to evaluate the residents' trend of quality of life satisfaction level
- c) to develop related policies

Research Methodology

The research sought to uncover information related to trend of quality of life in Putrajaya experienced by the community. From 1500 questionnaires distributed there were 222 respondents for the first study. For the second study a total of 2500 questionnaires were distributed and received 123 respondents. Both research applied the mail survey method with the self addressed envelope of the researcher were distributed into the mail box of the randomly selected residents. This paper presents the data analysis from both perception surveys. The results and the major findings pertaining to the trend of quality of life in Putrajaya development are presented. The discussion in this paper focuses on the components of the built environment which contribute to the quality of life as experienced by the residents of Putrajaya. The analysis is presented in two parts. Part one is on physical characteristics of Putrajaya, followed by the general analysis that discusses the background of respondents and the overall perceptions on the quality of life achieved in part two.

Physical Characteristics of Putrajaya

Malaysian Federal Government planned Putrajaya as a new administrative capital city as early as 1981. It was the first major intelligent garden city developed in the country. Putrajay has a total area of 14,780 hectares where about 30 per cent of the area is for the administrative centre. The physical planning was to ensure that it is a sustainable city providing high quality living to its population. The Federal Government set up Putrajaya Corporation in 1996 to monitor the mega project implementation. Putrajaya Corporation Act 1995 (Act 536) came into effect on January 5, 1996 and listed the power of the Corporation which is to administer and manage the Putrajaya Corporation Area on behalf of the Federal Government. The corporation functions like a local authority to ensure the success of Putrajaya. It is expected to have 570,000 population where 250,000 will live in the core area and the remaining 320,000 in the surrounding residential areas upon completion.

With the Garden City concept, the area is into twenty precincts, of which five are in the Core Area included Government, Commercial, Civic, Mixed Development, and Sports and Recreational. The remaining 15 are precincts of various sizes also known as peripheral area.

Twelve of the 15 precincts make up the residential neighbourhoods. Each unit was planned for some 3,000 dwellings or 15,000 population with a mix of low, medium and high cost housing and a variety of designs. A total of 67,000 homes of varying ranges, sizes, types and densities have been planned. Each neighborhood is equipped with necessary public facilities and amenities. Among the facilities provided in the residential areas are schools, hospitals, shopping centres, mosques, multipurpose halls, learning centres and parks. This fulfilled the underlying principle of the doctrine towards more sustainable communities and a better quality of living environment.

Trend Analysis of the Quality of Life

General Analysis

Both research based on the same survey questionnaire. The first part is to demonstrate the results of data gathered from Section A of the original survey questionnaire. The data retrieved includes age, race, gender, length of stay, types of houses, employments by occupation, problems faced by respondents and suggestions for improvements. The summary of the results from the respondents to the survey questionnaire is tabulated and discussed below. The analysis was considered important because their perceptions would demonstrate trend of the quality of life there as they experienced living there.

The 2004 research found that more than 78 percent of the total respondents were married compared to 73 percent in 2001. The majority of respondents from both studies were having a family size of four which are lower than the national standard of five. This is important in relation to the housing design and community facilities standards. Both studies found that majority of respondents were in the age group of between 20-40 years old. In terms of duration of stay in Putrajaya, it was found that for 2001 study majority were with two months stay. However in 2004 the highest percentage which was about 30 percent found to have been staying for about two years.

Respondents' Perceptions

In the second part, the analysis is focused on Section B of the original survey questionnaires which retrieved information on respondents' perceptions. This is concerning the community facilities, infrastructure services, commercial facilities, open space and surrounding areas, feeling safe in the living area and safety of property, feeling about living in the particular new town, sense of neighbourhood community, adequate comfort in housing, mobility and public transportation service. Their perception is assumed to be an important indicator for a particular new town as an ideal or unsatisfactory place to live in. The respondents had freedom to make choices regarding the environment. The residential environment is important in the analysis of the quality of life because of the role it plays in human experience. This part of the research attempts to measure the effect of the environment on the respondents' life and to compile and compare the quality of life to be achieved in future years. Perceptual evaluation of the indicators was tabled to illustrate quality of life dimensions.

The findings from residents' perceptions may become one of the ways in getting people involved so as to ensure the continued success of their community. The survey questionnaire asked whether the respondents' perceptions were completely satisfactory, satisfactory, average, unsatisfactory and completely unsatisfactory with regards to the indicators used to quantify the quality of their living environment. Tables 1-6 show the findings of both research. Quality of life encompasses the fulfillment of all human needs such as a satisfactory standard of material life, health, education, security, the satisfaction of living in a clean environment as well as the enjoyment of the aesthetic and the spiritual.

Table 1 shows in 2001 research, seven of the public facilities listed were rated as completely satisfactory by the respondents compared to only place of worship in 2004. These were important facilities provided by the government to ensure good living environment for the communities. In 2004 the research found that majority of respondents were satisfied with the provision of primary schools, secondary schools, smart school, police service, fire service hospital and clinics. They rated entertainment center, religious schools and higher learning institution as unsatisfactory. These three facilities were not available during the time of both research.

Table 1: Public Facilities

Public Facilities	Perceptions in 2001	Perceptions in 2004
Primary Schools	Completely satisfactory	Satisfactory
Secondary Schools	Completely satisfactory	Satisfactory
Smart Schools	Satisfactory	Satisfactory
Religious Schools	Completely unsatisfactory	Unsatisfactory
Higher Learning Institution	Completely unsatisfactory	Unsatisfactory
Place of Worship	Completely satisfactory	Completely satisfactory
Entertainment Centre	Unsatisfactory	Unsatisfactory
Police Service	Satisfactory	Satisfactory
Fire Service	Satisfactory	Satisfactory
Hospital	Completely satisfactory	Satisfactory
Clinic	Completely satisfactory	Satisfactory

Based on the findings there is a need to provide more and better facilities for the communities in order to change their perception to reach the completely satisfactory level.

As for shopping facilities the majority from respondents were unsatisfied with the provision of lower and higher order commercial services as shown in 2001 study. (Please refer to Table 2). However in 2004 the perception on for the lower order goods improved. As for the higher order goods majority of them had to go to nearby towns. The research found that their living situation were harder after moving into Putrajaya because many of them were used to living in Kuala Lumpur where shopping facilities were abundance and within easy reach.

Table 2: Shopping facilities

Shopping facilities	Perceptions in 2001	Perceptions in 2004
Lower order goods	Unsatisfactory	Satisfactory
Higher order goods	Unsatisfactory	Unsatisfactory

Table 3: Infrastructure facilities

Infrastructure	Perceptions in 2001	Perceptions in 2004
Electricity	Satisfactory	Satisfactory
Water supply	Satisfactory	Satisfactory
Telephone	Satisfactory	Satisfactory

Both studies shows that infrastructure facilities (refer to Table 3), open space/playground facilities as shown in Table 4 and environment (refer to table 5) were well served in Putrajaya and are at the satisfactory level.

Table 4: Playground and Open Space Facilities

Open space/playground	Perceptions in 2001	Perceptions in 2004
Children's playground	Satisfactory	Satisfactory
Public open space	Satisfactory	Satisfactory
Other open spaces	Satisfactory	Satisfactory
Landscaping	Satisfactory	Satisfactory

Table 5: Environment

Environment	Perceptions in 2001	Perceptions in 2004
Safety of self and properties	Satisfactory	Satisfactory
Aesthetics of the surrounding area	Satisfactory	Satisfactory
Cleanliness of the area	Satisfactory	Satisfactory
Landmarks	Satisfactory	Satisfactory
Signage	satisfactory	satisfactory

Table 6: Social Aspects

Social aspects	Perceptions in 2001	Perceptions in 2004
Social activities	Average	Satisfactory
Sense of community	Average	Satisfactory
Feelings about living in Putrajaya	Satisfactory	Satisfactory

Table 6 demonstrated that in 2001 majority of respondents rated their social activities and sense of community to at the average level. This may be due to the length of stay, whereby most of them were new to each other and also lack of social programmes and activities being organized for the community. However, the 2004 study found that they were satisfied with all the social aspects of life.

Conclusion

The paper was intended to demonstrate the trend of quality of life through the perceptions of those staying in Putrajaya.. The perception study of the quality of life was considered as a significant role in Putrajaya for being the first city development in the country to be guided by the Total Planning Doctrine. The findings of both studies showed that there are several planning and implementation issues that need to be reviewed in order to achieve the planning goals and objectives which lead towards a better quality of life. It is recommended that more research to be done on how to integrate quality of life dimensions into overall Putrajaya development as well as another new developments. It is hoped that town planners could devise better strategies to enhance the quality of life in the communities.

References

Berry, B.J.L., et.al (1974). *Land use, Urban Form and Environmental Quality*, Research paper 155, Department of Geography, University of Chicago.

Besleme, K., Maser, E. & Swain, D. (1999). *Community Indicator Projects: Practical Tools For Addressing Quality of Life in Communities*, In Yuan, Yuen & Low, eds., Urban Quality of Life, Critical Issues and Options, National University of Singapore.

Capbell, A., Converse, P., & Rodgers, W. (1976). *The Quality of American Life*, New York: Sage.

Cullingworth, J. B. and V. Nadin (2006). *Town and Country Planning in the UK, 14th Edition*, Routledge, Madison.

- Danile, T., (1990). Measuring the Quality of the Natural Environment: A Psychological Approach, American Psychologist, May 1990, Vol. 45 (5).
- Dasimah Bt Omar (2004). *Quality of Life in Putrajaya: Trend Analysis*, Research paper, IRDC, UiTM, Shah Alam.
- Dasimah Bt Omar (2001). *Quality of Life in Putrajaya: Trend Analysis*, Research paper, IRDC, UiTM, Shah Alam
- Dasimah Bt Omar (2002) New Town Development in Peninsular Malaysia: Case Studies of New Town Development by State Economic Development Corporations, PhD Thesis (unpublished), Universiti Teknologi MARA, Shah Alam, Malaysia.
- Dissart, J.C. and Deller S.C. (2000). *Quality of Life in the Planning Literature*, Journal of Planning Literature (FJPL) Vol. 15, 1 (August).
- Edward, H.R. (1993). *The Role of the Residential Environment in Defining the Quality of Life*, University of Illonois, (Ph.D Thesis).
- Esa Hj. Mohamad (1997). *Putrajaya: The Administrative Capital City in the 21st Century*, in Malaysia Today, (ASLI), Pelanduk Publication, Petaling Jaya.
- Fong Chan Onn (2007). *Statement by Honourable Datuk Seri Dr Fong Chan Onn*, Minister of Human Resources, Malaysia ASPAG Ministerial Meeting ILC 96, 13 June 2007, Geneva.
- Government of Malaysia. (2005). Ninth Malaysia Plan, 2006-2010.
- Government of Malaysia. (2005). *Malaysian Quality of Life 2004*, Economic Planning Unit, Prime Minister's Department, Malaysia.
- Government of Malaysia (2004). Putrajaya Development Corporation, Briefing Notes.
- Government of Malaysia (2001). *Eighth Malysia Plan*, Kuala Lumpur, Percetakan Negara Berhad.
- Government of Malaysia (2001). *Total Planning and Development Guidelines*, Department of Town and Country Planning, Peninsular Malaysia, Kuala Lumpur, (2nd Printed).
- Government of Malaysia (1999). *Malaysian Quality of Life*, Economic Planning Unit, Prime Minister's Department, Malaysia.
- Guillot, X. (1999). *Urbanisam as a Way of Life in the Age of the Electronic City*, World Conference on Model Cities, Singapore.
- Gwilliam, M. (1993). *Sustainability in Action*, in Blowers, R. (ed) Planning for Sustainable Environment, A Report by the Town and Country Planning Association, London, Earthscan Publication.
- Hall, P. (2002). Urban and Regional Planning, Routledge, Madison.
- Julie Brown and Dinah Gardner (2002). *Hong Kong and Macau*, Rough Guides, Hong Kong. Leitmann, J. (1999). *Can City QOL Indicators be Objective and Relevant?* Towards a Tool for Sustaining Urban Development, National University of Singapore.
- Mahathir B. Mohamad (1998). The way Forward, London: Weidnfeld & Nicolson.
- Marans, W.R. and Cooper, M. (2000). *Measuring the Quality of Community Life: A Program for Longtudinalmand Comaparative International Research*, Quality of Life in Cities: 21st Century QOL, The Second International Conference, Singapore, March 2000.
- Nancy Kleniewski (2005). Cities and Society, Wiley, Blackwell.
- Philip Berke, David R. Godschalk and Edward J. Kaiser (2006). *Urban Land Use Planning*, University of Illinois Press.
- Rogerson, R.J. (1999). *Quality of Life, Place and Global City*, Yuan, Yuen & Low, eds., in Urban Quality of Life, Critical Issues and Options, National University of Singapore.
- Wan Muhamad Mukhtar Mohd Noor (2001). *Planning for an Urbanising Nation: Towards a Better Quality of Life*, National Symposium on Malaysian Community: Issues and Challenges for the 21st Century, University Malaya, Kuala Lumpur, 22-24 July 2001.
- Wing, H.C. (2000). *Planning Policies and Quality of Life in Hong Kong and Singapore*, Quality of Life in Cities: 21st Century QOL, The Second International Conference, Singapore, March 2000.
- Zainuddin bin Muhammad (2001). *Towards Strengthening the Planning System in Malaysia*, Keynote Paper, Towards Strengthening the Planning System in Malaysia, Universiti Teknologi Malaysia, Johor, 19-20 March 2001.