

RESPONSIVENESS TO THE MARKET MECHANISMS : A WAY TO STRENGTHEN THE MALAYSIAN HOUSING PLANNING PROCESS

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ABSTRACT: *The land use planning system particularly through development plan and development control mechanisms were recognised as a tool in forecasting housing requirement, formulate housing policies, determine land area and identify suitable locations for future housing development. The planning system also plays an important role in facilitating and controlling the housing production process. In relation to the management of housing supply in Malaysia, besides faulty market system, there is an argument which states that ineffectiveness of the current planning practice to respond to the market mechanisms also contributes to the existence of housing supply issues. It was identified that the current housing planning process is only focuses on meeting broad housing needs, neglects the element of effective demand in housing forecasting and other housing planning activities. While, inefficient development control process by the planning authorities in 'filtering' and assessing the housing applications may also contribute to the housing supply issues. This paper will discuss on the importance of incorporating the market demand mechanisms in Malaysian housing planning process. Prior to that, this paper will clarify on the housing supply issues in Malaysia, especially on overhang, unsold and oversupply of housing, discuss the theoretical perspective on the relationship between the planning system and housing supply and also explains about the background of Malaysian housing planning system and its effectiveness in managing housing supply.*

Keywords : Housing Planning Process, Housing Development, Housing Supply.

INTRODUCTION

The land use planning system plays a pivotal role in housing sector to achieve sustainability, efficiency and effectiveness in the housing development process. Generally, the role of planning system in this sector is not only to fulfil the fundamental objective of meeting population housing needs, but also to recognise housing as an important economic sector by providing and encouraging an efficient housing market (Einsiedel, 1997). In Malaysia, the current planning mechanisms, particularly development plan and development control were recognised as an important tools in the housing planning process (Alias et al., 2006a; Alias, 2007). In the preparation of structure plan, the housing policies will be formulated to guide other housing planning activities. Prior to that, the future housing requirement for the planned areas will be forecasted. During the preparation of local plan, the land area, housing quantity and suitable areas for future housing development will be determined. The housing planning process completed at the development control stage, where each housing applications will be assessed before it is approved by the planning authorities. By conducting all the processes, the housing planning objectives, such as meeting population housing needs, considering households housing demand and balancing supply with the actual demand should be fulfilled. However, in actual situation, the capability of the process to properly manage the housing supply as well as to achieve other housing development objectives still can be argued.

In relation to the management of housing supply, theoretically, the market system should operate to achieve an equilibrium between demand and supply (Bramley et al., 1995). However, in housing market system, particularly in Malaysian context, it often fails to provide a balanced

situation between demand and supply. Imperfection of housing market system and unethical speculation by housing developers are amongst the factors contributing to the market failure, resulting in an overhang, unsold and oversupply of housing (Alias et al., 2006a). Besides postulation that the housing supply issues were caused by housing market failure, there is an argument which states that it also contributed by the weaknesses and ineffectiveness of planning system in conducting the housing planning process (Government of Malaysia, 1999; Chin, 2003; Mohd. Fadzil, 2005). Generally, as described by Alias et al. (2006a), ineffectiveness of the planning system can be seen at each housing planning activities from forecasting of future housing requirement as conducted either in the structure or local plans to the determination and identification of land area and suitable locations for future housing development in the local plans. Meanwhile, inefficient of development control process by the planning authorities in 'filtering' and assessing the housing development applications also contributes to the ineffectiveness of planning system (Alias, 2007).

Identification of ineffectiveness of planning system is not only can be perceived from the angle of weaknesses in the housing planning process, but also from the perspective of the nature of housing planning system itself. As described by Ratcliffe (1981) and Golland and Gillen (2004), the failure of housing planning system is also originated from the nature of housing planning and development policy which basically merely focus on meeting the population housing needs, neglects other criteria which are also important in achieving sustainable housing development. In Malaysian context, the aspects related to the market mechanisms, such as effective housing demand, households housing choice and the housing market demand criteria was given less consideration in the housing planning process (Alias et al., 2006a; Alias, 2007). Against this background, this paper will discuss on the importance of incorporating the market mechanisms in Malaysian housing planning process. Prior to that, this paper will clarify on the housing supply issues in Malaysia, especially on overhang, unsold and oversupply of housing, discuss the theoretical perspective on the relationship between the planning system and housing supply and also explains about the background of Malaysian housing planning system and its effectiveness in managing housing supply.

HOUSING SUPPLY ISSUES IN MALAYSIA

Malaysian housing sector faced with various housing development issues, including issues related to housing supply. Amongst them are the high rate of overhang, unsold and oversupply of housing which occurred throughout the country (Alias et al., 2006a). Official statistics published by the National Property Information Centre (NAPIC) from year 2000 to 2005 show that the issue of overhang continuously exists in the Malaysian housing property market. A total of 51,348 housing units were identified as overhang in the year 2000 with a total worth of RM 6.6 Billion. The latest figure in 2005 also shows that there are 19,577 units or 20.45 % from the total 95,714 units launched, in the category of overhang with a total worth of RM 2.63 Billion. Further to overhang issue, statistics on the total unsold unit which comprises of completed, under construction and un-constructed housing units are also in a disturbing situation. Figure in 2005 shows that around 102,430 units which represent 32.58 % from 314,441 housing units launched were in the unsold category. The total unsold unit in 2005 also indicates an increase compared to the previous figures in 2004 and 2003.

Besides critical figures on overhang and unsold, data on housing surplus as recorded in most states in Peninsular Malaysia in the year 2000 and 2005 also describes an unhealthy housing development scenario in Malaysia. Figure in 2000 as shown in *Table 1* indicates that out of a total of 5,338,000 units of housing supply (including existing and committed housing units), essentially only 3,941,000 units are required to fulfil the households housing need in Peninsular Malaysia. This figure indicates that around 1,396,000 units which were approved by the planning authorities are actually an oversupply. The issue of oversupply also exist in year 2005, which indicates a surplus of housing at 755,000 units (JPBD Semenanjung Malaysia, 2002).

Table 1: Comparison between housing supply and housing need in Peninsular Malaysia, in 2000 and 2005

Region	Housing Supply	Housing Need		Total Surplus	
	2000	2000	2005	2000	2005
Northern Region	1,473,300	1,110,400	1,253,100	362,900	219,300
Central Region	2,108,200	1,503,000	1,830,700	605,200	277,500
Southern Region	956,600	583,100	671,000	373,500	285,600
Eastern Region	799,900	744,700	828,100	55,200	(28,200)
Peninsular Malaysia	5,338,000	3,941,200	4,583,000	1,396,800	755,000

Source: Adapted from Housing Technical Report, National Physical Plan (2002).

The existence of housing supply issues have sparked lively discussions and debates. From the government perspective, the National Economic Action Council (NEAC) has identified that the process of speculative demand and supply by the private developers and loop-holes in the planning system as the major factors which contribute to the issues (Government of Malaysia, 1999). In similar tone, the Ministry of Housing and Local Government also viewed that besides failures in housing market activities, the housing supply issues occurred due to the weaknesses in the development approval process, where housing applications were being permitted without taking into due consideration the actual demand (Chin, 2003). Meanwhile, the Federal Town and Country Planning Department has identified the non-compliance practices to the housing planning policies and guidelines in the development plans as a contributing factor to the above issues (Mohd. Fadzil, 2005). It was found that the critical figures are not only on the high rate of overhang and unsold property, but also the high rate of unoccupied of current housing stock (Mohd. Talhar, 2005). In overcoming these issues, Mohd. Talhar (2005) viewed that there is a need for the approving authorities to manage the housing supply by defining target population and specific occupation and introduces the priority scheduling for new housing development.

PLANNING SYSTEM AND HOUSING SUPPLY : A THEORETICAL PERSPECTIVE

The planning system plays an important role in housing development process to achieve the social, physical and economic goals by providing sufficient housing (Golland & Gillen, 2004), encouraging sustainable housing development (Golland & Blake, 2004) and ensuring an efficiency in housing delivery system (Einsiedel, 1997; Chan, 1997). In discussing the relationship between planning system and housing supply, it is important to understand about the role of planning system as well as the market system in the housing supply and production process. Following that, the housing planning objectives to be achieved and the importance of other elements, such as housing demand and market demand criteria in the housing planning process should also be appreciated.

Relationship Between Planning and Market System in Housing Supply

The planning system through land use planning mechanisms and the market system as operated in the housing development and production process are among the elements which exist in the system and the structure of housing supply (Bramley, 1995; Golland, 1998). By looking at the relationship between planning and the market system in the process of housing supply, Einsiedel (1997) argued that although the determination of housing supply is shaped by the market forces, the planning system also has a specific role especially in governing the housing supply process. Einsiedel also clarifies that both of the demand and supply in housing market are affected by the regulatory, institutional process and policies set by the planning system. In relation to this argument, Bramley (2003) identified that housing supply as determined at the planning stage is clearly of central importance to the operation of housing market. While Rydin (1993) argued that

the interaction between the housing markets and the land use planning activities will determine the extent to which the housing policy goals can be successfully met. These statements basically described that there is a close interaction between the planning and the market system in the structure, operation and the process of housing supply.

In relation to the role of market system, theoretically in *laissez-faire* economy, the market system should be operated to achieve an equilibrium by interplay between demand and supply, where the price becomes a determinant factor (Adams, 1994; Einsiedel, 1997). However, in the housing market system, it often fails to provide a balanced situation between demand and supply (Bramley, 2004). Imperfection of housing market system which is distorted by external influences, such as unethical speculation by housing developers has contributed to the market failure (Adams, 1994). As a result of imperfection and failure, housing market is in a perpetual state of disequilibrium, where a balance between supply and demand is difficult to be achieved. As addressed by Adams (1994), the housing market is always move from shortage to overprovision and back to shortage. In the situation of imperfection and failure of the housing market, Rydin (1993) and Einsiedel (1997) stressed that it is justified for the land use planning to rectify the failure by properly governing the housing planning process.

Role of Planning System in Housing Supply Process

The planning system consists of three main activities, that is forward planning, development control and implementation of particular development (Bramley et al., 1995; Greed, 1996; Ratcliffe et al., 2004). For housing development, it also has to go through similar process from conducting housing planning activities to controlling of housing development applications. It ends with developing the housing schemes, either by the government bodies or private developers (Alias, 2007). In relation to the role of planning system in housing supply process, Short *et al.* (1986) generally viewed land use planning as a system of negotiation which results in a set of rules governing access to land and to housing before surrender it to the market operation. While Rydin (1993) looked that one the main tasks faced by the planning system in housing supply process is to allocate sufficient land for future housing development and then responding to each housing planning applications.

In relation to the management of housing supply, although the operation of market system governs most part of the housing production process, as argued by Einsiedel (1997), the role of planning can be seen in a broader perspective. As shown in *Figure 1*, it begins with the forward planning process to examine and determine the existing and future housing requirement which is carried out during the preparation of development plans. It also can be managed during development control process, which play as an important stage in the housing production process. At this stage, housing development application will be assessed by the planning authorities, before it is permitted to be developed. In discussing the planning role in managing housing supply, the debates on how effective and responsive are the housing planning system play its role is always arise. Pearce (1992) raised several questions, that is how effective is the planning system in achieving its goal? To what extent it is successful and to what degree is it failure? Hull (1997) also questioned on how effective are the role that the land use planning system has in deciding the housing amount and in identifying suitable locations for new houses?.

In answering the above questions and to have a greater understanding about the role of planning system in housing supply, it is important to understand on how the housing planning was conducted and what are the elements should be fulfilled and incorporated in that process. The subsequent discussion will clarify these matters which touch on the housing needs and housing demand and the importance of market demand criteria in housing planning process.

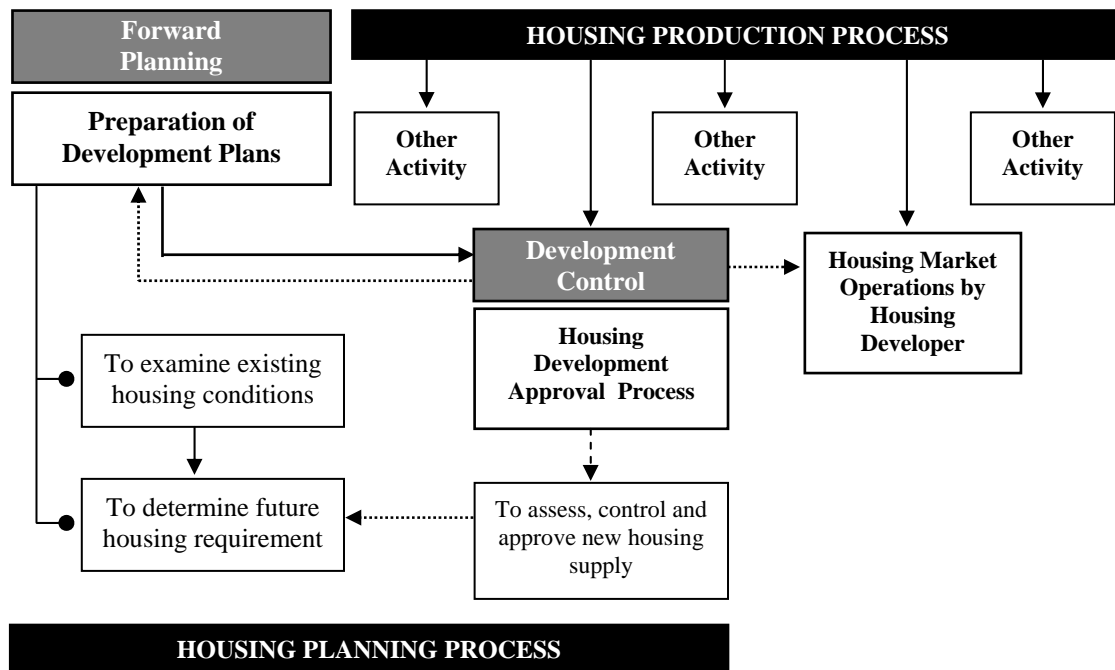


Figure 1: The role of planning system in housing supply process

Fulfilling Housing 'Needs' and 'Demand' in Housing Planning Process

In conducting the housing planning activities, either during the preparation of development plans or at the development control stage, it becomes a nature of housing planning system to fulfil the objective of meeting population housing needs (Ratcliffe, 1981; Golland & Gillen, 2004). Housing needs in this context is defined as the quantity of housing that is required to provide an adequate housing to the population without taking into consideration of individual household's ability to pay (Chander, 1976; Ratcliffe, 1981; Noraini, 1993; Golland & Gillen, 2004). Generally the housing planning goals are considered as fulfilled, if the planning decision ensures an adequate and continuous supply of housing (Pearce, 1992).

The nature of housing planning system which focuses on meeting housing needs has raised several arguments. Nicol (2002) clarifies that by only looking on meeting housing needs, it is insufficient to achieve a more integrated and responsive housing supply. Nicol suggests the housing planning process should fulfil both objectives of meeting housing needs and housing demands as required by the population. Housing demand is usually associated with the requirement of individual households over and above the basic or minimum level of provision or 'needs' (Golland & Gillen (2004), supported by the household willingness to pay for housing (Noraini, 1993). By considering the ability to pay which actually back up by the purchasing power of each households, it reflects the situation of actual demand for housing which is technically defined as effective demand (Chander, 1976; Golland & Gillen, 2004). Determination of housing demand is also associated with the housing choice as required by the population (Golland & Gillen, 2004). As explained by Golland & Gillen, demand for choice can be distinguished by housing tenure (e.g. social-rented sector or private-rented sector), type and form of housing and the choice of method of new homes to be developed.

In order to ensure the local housing requirement is adequately met, Golland & Gillen (2004) stressed that the housing planning process should recognise the housing requirements are not only driven by the population trend but also by the affordability of the population. Golland and Gillen also clarified that in estimating the overall need for housing, it is necessary to take account of households income, their ability to pay, their preference in terms of price and location and their choice in terms of tenure, types, form and method of housing to be developed. The significance of

these elements has been recognised in the housing planning process in United Kingdom. Since early 1980s, the formulation of housing policies has changed from previously focused on meeting broad housing needs to one which is focusing and addressing the specific demands of households (Golland & Gillen, 2004).

The Importance of Market Demand Criteria in Housing Planning Process

Besides factors related to the effective demand and housing choice, the criteria of market demand can also be considered as a significant factor in the housing choice planning process. As discussed by Bramley et al. (1995), the housing market demand criteria consists of several elements, such as local housing market conditions and the expected house buyer preferences in terms of price, location and type of housing. The importance of these criteria has attracted support from Hull (1997), who argued that the process of forward planning and production of housing still suffers from lack of reliable information on the market indicators and current flow between the housing market and the levels of investment in the housing stock. Related to that, Hull also stresses that apart from playing a role in meeting housing needs and housing demand, the forward planning and development control process should also look at the importance of the market demand criteria, especially on the aspect of marketable location. This statement is in line with view by Pearce (1992) who clarified that although the planning goal in meeting an adequate housing needs is considered as has been fulfilled, any planning decision in supplying new houses also has to respond to the situation of current market demand.

The importance of incorporating the market demand criteria in the planning process was also addressed by Bramley (1995), who suggested that planning system should have a greater degree of awareness of the housing market by incorporating policies and procedures in a way that sensitive to the need of the market. Pearce (1992) and Nicol (2002) also highlighted that it is a responsibility of a planning authorities to have an adequate understanding of housing market before making any decision in releasing new housing supply. While, Golland & Gillen (2004) clarified that it is necessary for the housing planning process to understand a consumer's 'taste' of the housing market. Further to the above arguments, Healey (1992) stressed that in strengthening the housing planning process and in achieving its development goals, three approaches should be applied by the planning system, that is following the market, managing the market and creating the market.

The above discussions clarify that the planning system through its mechanisms play an important role in managing housing supply. As summarised in **Figure 2**, it begins with forward planning activities in the development plans and followed by development control activity. Principally, the operation of these activities should be done not only to meet the population housing needs, but also to fulfil the households housing demand. Besides that, the market demand criteria should also be incorporated in housing planning process. Ultimately, the housing planning process should also play its role to balance the housing supply with the actual demand.

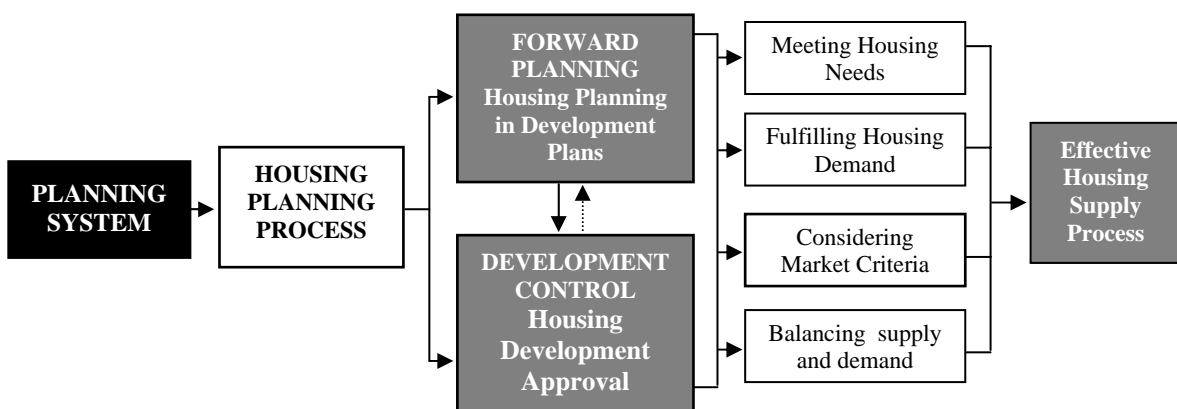


Figure 2: The framework of housing planning process in managing housing supply

MALAYSIAN HOUSING PLANNING PROCESS

The government of Malaysia recognises housing as a basic population needs and an important component in urban development. This has led to the formulation of policies and programmes aimed at ensuring all Malaysians have an access to adequate housing. Generally, housing development programmes are carried out by both public and private sector. The public sector concentrates mainly on low-cost housing programmes, while the private sector (housing developers), apart from complying on the 30 percent of low cost housing policy, concentrates on medium and high-cost housing schemes. The Malaysian government has formulated various housing policies to encourage continuous involvement of private sector, especially in developing low-cost housing (Asiah, 1999) and also to strengthen the housing delivery system (Alias et al., 2006a).

The Management of Housing Supply in the Planning Process

Besides responsibility of federal government, the current planning mechanisms as enacted in the Town and Country Planning Act, 1976 (Act 172) also provides a statutory power to the state and local planning authorities to formulate a housing planning policies and to control the housing development process (Alias et al., 2006a). As shown in *Figure 3*, the housing development policies will be formulated during the preparation of structure plan. The structure plan begins with examination of current housing status and followed by forecasting of future housing requirement for the whole structure plan's area. The broad housing policies in the structure plan will be detailed out during preparation of local plans. The local plan will also begins with the projection of future housing requirement for certain local plan's area. It's then followed by the determination of land amount and housing quantity and distribution of suitable areas for future housing development.

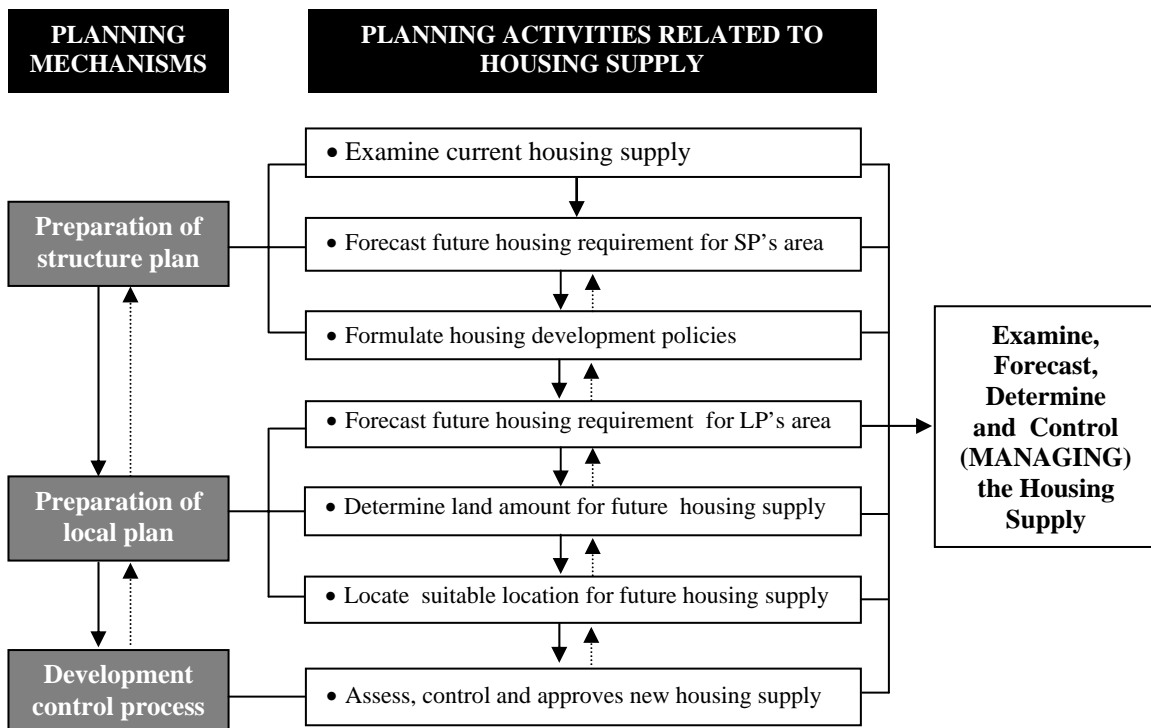


Figure 3: The framework of Malaysian housing planning process in managing housing supply

Besides role of structure and local plans, the development control stage also plays a significant role in Malaysian housing planning process. Through development control process, all housing development applications will be assessed before it is approved by the local planning authorities. At this stage, the findings in both structure and local plans will be used as a basis in considering any housing development applications. After obtaining planning approval, the housing development application also has to go through the land approval process as enacted in the Malaysian National Land Code, 1965 (Act 56). At this stage, planning permission given under the Act 172 will also be used as a basis for any land development approval (Alias, 2007).

Effectiveness of Malaysian Planning Process in Managing Housing Supply

Fundamentally, by conducting the above processes, an effective management of housing supply should be achieved. However, in Malaysian context, due to the various loopholes and weaknesses in the current planning practice, as clarified by NEAC (1999), Chin (2003), Mohd. Fadzil (2005) and Mohd. Talhar (2005), the housing planning process is also seen as contributor to the existence of housing supply issues. This statement basically describes that the Malaysian housing planning process is still ineffective to properly manage the housing supply. As explained by Asiah (1999), Alias et al. (2006a; 2006b) and Alias (2007), the weaknesses of the housing planning process can be examined through each housing planning activities, either during the preparation of structure and local plans or at the stage of development control process by the planning authorities.

In relation to the implementation of planning mechanisms, several questions arise especially on the extent to which the planning mechanisms play its role in managing the housing supply. First, how effective are the preparation of structure plan in forecasting future housing requirement and formulating housing development policies? Second, how effective are the preparation of local plan in determining and identifying land area and suitable locations for future housing development? Third, do the housing approval process complies with the development plans and how effective are the process in assessing and controlling the housing supply? Fourth, how effective are the housing planning process in meeting housing needs, fulfilling households housing demand, incorporating market demand criteria and balancing supply with actual demand?

In answering the above questions, an empirical study has been conducted in Johor Bahru Conurbation area to evaluate the effectiveness of planning system in managing housing supply. By applying the method of content analysis, three types of planning documents, that is structure plan (N=8), local plan (N=7) and housing development applications (n=82) has been thoroughly studied. Meanwhile, views from the government and private town planners (N=61) whose directly involved in the housing planning process in study area was also be gathered through the perception survey. By applying these methods, various findings related to the effectiveness of each housing planning activities in managing housing supply has been produced. However, for this paper, only several major findings will be presented, as follows:

- i. **Forecasting of future housing requirement in structure plan** – All the structure plans (N=8) in study area only forecast future housing requirement in a form of total amount of future housing needs with no consideration at all to the criteria of effective housing demand as well as the household housing choice. This finding is in line with the town planner's perception, where 98.3 percent of them agreed that the housing forecasting activity in structure plan only focusing on housing needs and less consideration given to the aspect of actual housing demand.
- ii. **Formulation of housing policies in structure plan** – Basically all the structure plans (N=8) only formulate a policies related to physical planning aspects and focus on meeting population housing needs. There is no specific housing policy was formulated in all structure plans to ensure that the element of actual demand and supply should also be considered during the development control process. The current approach in formulating housing policies has implicitly affected the efficiency of housing control process, where any housing

applications will be permitted as far as its complied with the above policies, although there is no demand in the housing market. The significance of policy related to demand and supply was also addressed by the town planners, where 90.1 percent of them agreed that due to no specific policy on demand and supply formulated in the structure plan, it contributes to surplus of housing development approval in study area. In achieving an effective housing development control process, most respondent (96.8%) viewed that there is an urgent need for the structure plan to formulate a specific housing policy which consider the element of demand and supply before housing applications can be approved by the planning authorities.

- iii. **Forecasting of future housing requirement in local plan** – Similar to structure plan, all local plans (N=7) in study area are also forecast future housing requirement in a form of total amount of future housing needs. There is no consideration to the criteria of effective housing demand as well as the household housing choice. The result from content analysis of local plan is also in line with the views by the town planners, where 98.3 percent of them also agreed that the housing forecasting activity in local plan only focusing on housing needs. Besides that, most respondents (95.1%) also perceived that any weaknesses or ineffectiveness in forecasting future housing requirement in the local plan will be affected and create a mistake in the process of determination of land area and at the stage of development control process.
- iv. **Determination of land area for future housing supply in local plan** – Based on the content analysis of local plan, only 57.1 percent (n=4) from the local plan in study area has determined the total land area for future housing supply. The other three (n=3) local plans was not determined it although this activity is a major housing planning process which should be conducted during the preparation of local plan. Meanwhile, through content analysis, it also reveals that all the four local plans are not exactly translated the total land area into the future land use proposal maps. This finding shows that there is a clear weakness in conducting the activity of determination of land area for future housing supply. The results from content analysis are also in accordance with view by respondent, where 86.9 percent of them are agreed that the determination of land area future housing supply is commonly exceed than what has been forecasted in the local plan.
- v. **Distribution of suitable locations for future housing supply in local plan** – Based on content analysis, only several factors was considered during preparation of each local plans, such as availability of land adjacent to current housing development, accessibility from main roads, follow the alignment of development corridor and avoid from developed housing in restricted area. With regard to the aspects of future demand and supply and market conditions in distributing the locations for housing, its were not considered in all local plans. The existence of weaknesses in conducting this activity has attracted attention of town planners. All of them (100.0%) viewed that the suitable locations for future housing supply will be better distributed if the aspects of future demand and supply and local market conditions are also be considered during preparation of local plan.
- vi. **Housing development control process** - As mentioned above, eighty-two (n=82) housing development applications which were approved from the period of 1985 to 2006 in study area has been evaluated using the method of content analysis. Through this method, it reveals several important aspects related to the effectiveness of development control process. In terms of degree of compliance to the land use planning zone, only 47.6 percent (n=39) of approved housing applications in study area were complied with the housing zone as determined either in the structure or local plans. While 52.5 percent (n=43) of housing applications which were approved by the planning authorities are inconformity with the land use planning zone. This finding shows that the development control's practices in study area are inconformity with the provision of Act 172, which states that the local planning authority should take into consideration the development plan's provisions and conformity with the local plan as a basis in granting or rejecting any planning applications, including for

housing development. This finding is also in line with the town planner's view, where 80.3 percent (n=49) of them are agreed that the development control's practice by the planning authorities in study area are not really comply with the legal requirements as enacted in the Act of 172.

Besides results related to the weaknesses of each housing planning activities, as discussed above, through the content and perception analysis, its also reveal that the fundamental of housing planning in study area is only focused on the achievement of policy of meeting housing needs. It was found that the market demand mechanisms, such as effective housing `demand', household housing choice, current and future market demand and local market conditions were given less consideration. These findings is in line with the perception of town planners. Besides clarify that the housing supply issues (overhang, unsold and oversupply of housing) occurred due to the weaknesses in the housing planning and approval process, they also stress that the existence of these issues were originated from the fundamental nature of housing planning and development policy, that is meeting population housing needs.

CONCLUSION

The preceding discussion clearly shows that the housing supply issues in Malaysia, especially on the high rate of overhang, unsold and oversupply are in the disturbing situation. In overcoming these issues, it requires a profound understanding of numerous internal and external factors which contributes to the existence of the issues. Besides looking that these issues were contributed by the imperfection and failure of the operation of housing market, identification of weaknesses in the housing planning system as broadly clarified by the NEAC (1999), the Ministry of Housing and Local Government (2003) and the Department of Town and Country Planning (2005) and as stated in the empirical study conducted by Alias (2007), are also need to be explored in great detail.

By considering that there is a close interaction between the planning and the market system in the process of housing supply, any efforts to strengthen the housing planning process should give due attention to the market mechanisms. In this context, the current and future development plans as well as the development control process should recognised that the housing requirements are not only driven by the population trend but also influenced by other factors, as follows:

- i. Effective housing demand (household's affordability and their willingness to pay for housing).
- ii. Households housing choice (choice by housing tenure, dwelling type, form of housing and method of new homes to be developed).
- iii. Market demand criteria (conditions of local housing market and buyers preference in terms of price, location, type of housing, etc).

Besides incorporating the above criteria in housing planning process, the fundamental nature of housing planning system which is conventionally only focused on meeting population housing needs is also need to be changed. By incorporating or responsive to the market mechanisms together with the alteration of the fundamental nature of housing planning and development policy, it is not only lead to strengthening the housing planning process but also will increased the role of planning system in providing sufficient housing, encouraging sustainable housing development and ensuring an efficiency in housing delivery system.

REFERENCES

- Alias Rameli, Foziah Johar and Ho, C.S (2006a). The Management of Housing Supply in Malaysia : Incorporating Market Mechanisms in Housing Planning Process. *Proceedings of the International Conference on Construction Industry 2006*. June 22-23. Universitas Bung Hatta, Indonesia.
- Alias Rameli, Foziah Johar and Ho, C.S (2006b). Responsiveness of the Malaysian Planning System in Managing Housing Supply. *Proceedings of the International Conference on Sustainable Housing 2006*. September 18-19. Universiti Sains Malaysia. 190-196.
- Alias Rameli (2007). Application of Method of Content Analysis and Perception Survey in Evaluating the Effectiveness of Planning System in Managing Housing Supply. *Proceedings of the 2nd. Post Graduate Seminar on Research of Built Environment 2007*. March 6. Faculty of Built Environment, Universiti Teknologi Malaysia.
- Asiah Othman (1999). *The Effect Of The Planning System On Housing Development : A Study Of The Development : A Study Of Developers Behaviour In Kuala Lumpur and Johor Bahru, Malaysia*. University of Aberdeen : Ph.D. Thesis.
- Bramley, G. (2003). Planning Regulation and Housing Supply In a Market System. In : O'Sullivan, T. and Gibb, K. eds. *Housing Economics and Public Policy*. United Kingdom : Blackwell Science Ltd.
- Bramley, G., Bartlett, W. and Lambert, C. (1995). *Planning, The Market and Private Housebuilding*. London : UCL Press Ltd.
- Chan, K.T. (1997). Housing Delivery System. *Proceeding of The National Housing Convention*. Kuala Lumpur : 26-27 May, 1997. ISIS Malaysia.
- Einsiedel, V. (1997). Towards A Sustainable Housing Strategy. *Proceeding of The National Housing Convention*. Kuala Lumpur : 26-27 May, 1997. ISIS Malaysia.
- Golland, A.(1998). *System of Housing Supply and Housing Production in Europe : A Comparison of the United Kingdom, the Netherlands and Germany*. England : Ashgate.
- Golland, A & Gillen, M (2004). Housing need, housing demand and housing supply. In : Golland, A and Blake, R, eds. *Housing development : Theory, process and practice*. London : Routledge. 45 – 70.
- Healey, P. (1983). *Local Plans in British land use planning*. England : Pergamon Press.
- Ho Chin Siong (1994). *Evaluation Of Housing Estate Development In Relation To Housing Supply In Malaysia (With Reference To Urban Management and Housing Approval System*. University of Tokyo, Japan : Ph.D. Thesis.
- Hull, A (1997). Restructuring The Debate on Allocating Land for Housing Growth. *Housing Studies : July 1997, Vol. 12 Issue 3*. Great Britain : 367 – 382.
- Jabatan Penilaian dan Perkhidmatan Harta (2000 - 2006). Property Report, 1999 - 2005. Kuala Lumpur : Percetakan Nasional Malaysia Berhad.
- Malaysia (2000). National Land Code, 1965 (Act 56). The Commissioner of Law Revision, Malaysia.
- Malaysia (2005). Town and Country Planning Act, 1976 (Act 172). The Commissioner of Law Revision, Malaysia.
- Malaysia (2005). *National Physical Plan*. Kuala Lumpur : Federal Department of Town and Country Planning.
- Mohd. Fadzil Mohd Khir (2005). Isu dan Cabaran Dalam Pembangunan Hartanah. *Seminar Kebangsaan Perancangan dan Pembangunan 2005*. Majlis Perbandaran Sepang. 1 Jun 2005.
- Mohd Talhar Abdul Rahman (2004). Johor Property Investment Outlook and Redefining Property Development Strategies and Portfolios for Competitiveness in Real Estate Investment. *The Proceeding of Johor Property Investment Outlook 2004 And Beyond : Monetising Assets, Balancing Supply and Demand*. Johor Bahru : Institute of Sultan Iskandar, Universiti Teknologi Malaysia.

- Monk, S. and Whitehead, C.M. E. (1996). Land Supply and Housing : A Case Study. *Journal of Housing Studies*. Volume 3. United Kingdom : 407 – 422.
- Nicol, C. (2002). *The Formulation of Local Housing Strategies : A Critical Evaluation*. England : Ashgate.
- Noraini Yusoff (1993). *A Culturally Appropriate And Economiccally Sustainable Housing Delivery System For Malay Urban Low-Income Households In Malaysia*. Texas A&M University : Ph.D. Thesis.
- Pearce, B.J. (1992). The Effectiveness of the British Land Use Planning System. *Journal TPR*. Volume 63.
- Ratcliffe, J., Stubbs, M. and Shepherd, M. (2004). *Urban Planning and Real Estate Development* (Second Edition). London : Spon Press.
- Rydin, Y (1985). *Residential development and the planning system : A study of the housing land system at the local level*. Diamond, D & McLoughlin J.B. (eds.). Britain : Pergamon.
- Rydin, Y. (1986). *Housing Land Policy*. London : Gower Publishing Company.