DEVELOPMENT OF AFFORDABLE HOUSING PROVISION IN THE CASE OF LOW COST HOUSING THROUGH PUBLIC PRIVATE PARTNERSHIP (PPPS) IN MALAYSIA

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A dissertation submitted in partial fulfilment of the requirements for the award of the degree of Master of Science (Planning Housing)

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JANUARY 2012
Dedicated specially
To my beloved husband, Father, Mother and Brother

God bless them all!
ACKNOWLEDGEMENT

First and foremost, grateful thanks to Allah for helping me throughout the completion of this dissertation. In particular, I wish to express my appreciation and sincere gratitude to my supervisor, ASSOCIATE. PROF. DR. FOZIAH JOHAR, who always giving me lots of guidance, advice and invaluable support as well as giving lots of patience throughout the trials and tribulations in completing this project.

Furthermore I am extremely grateful to my husband SHAHAB who, cares, support and helped me, as well as to all lecturers, academic staff, and staff of built environment departments,. Special thanks to Associate Prof. Dr Nooraini Bte Yusoff who had given their support, helped and advice to me in completing my project directly or indirectly.

Finally, I would like to thank my mother, father and my brother for their support, cares, advice and loves. Also thanks to my siblings and family members for their support, care and advice in completing this master project.
To ensure social financial stability and to promote national development, housing provision for all in any country is very vital because housing is a greatest worry for all citizens in every corner of the world. The housing policy within Malaysia is towards provide Malaysians of all salary levels, especially the low-income categories, availability to affordable, adequate and quality shelter. The PPPs programme between the state and the private sector has identified as a satisfactory achievement around the world. Consequently, public-private partnership in housing provision has been embraced as a method of addressing the housing affordability issues. This research aims to promote of innovative partnerships between the Government and Private Developers for provision of affordable housing in Malaysia and to identify the weakness, issues and problems that exist in carrying out the process. Information found through the literature review and structured interview undertaken. The study showed that to solving the issues and obtain an improved partnership between the government and private developer in Malaysia, the government by set up a one-stop centre and delete and minimize unnecessary steps can speed up the process of plan approval in four to six months instead of the current practice of three to five years, the government play the role in providing free land for the private developer as most important incentive that can decrease about 10-20% of total development cost. Under this partnership, government by making a great and high cooperation with material suppliers can decrease the price of material with constant supply of materials like steel, cement and concrete on the lower priced. To sell the low cost house for RM 42, 000 as the government prescribed, a third (1/3) of the development cost will be financed by the government. Under this partnership private developer will construct and manage 80-100% of low cost houses and take its operating responsibility to complete and transfer the project to government based on agreed time. The private developer have to provide a progress report and the frequency of reporting the progress of the projects will increase from two times to four times a year that can be an effective for preventing housing abandonment.
ABSTRAK

Untuk memastikan kestabilan ekonomi social and menjana pembangunan negara, peruntukan perumahan untuk semua di semua negara adalah sangat penting kerana perumahan menjadi kerisauan utama bagi seluruh penduduk dunia. Polisi perumahan di dalam Malaysia adalah kearah menyediakan rakyat Malaysia dari seluruh peringkat gaji, terutama rakyat yang berpendapatan rendah, memiliki tempat bertenug yang mampu milik, berpatutan dan berkualiti. Program PPPs antara kerajaan negeri dan sektor swasta telah dikenal pasti sebagai kejayaan yang membanggakan di seluruh dunia. Sehubungan dengan itu, jalinan kerjasama antara badan awam dan badan swasta didalam memberi peruntukan perumahan telah dikenal pasti sebagai kaedah yang dapat membendung isu mampu milik perumahan. Kajian ini bertujuan untuk memperkenalkan kerjasama yang inovatif antara pihak kerajaan dan pemaju swasta untuk memberi peruntukan perumahan yang mampu milik di Malaysia dan juga bertujuan untuk mengenalpasti kelemahan, isu dan masalah yang wujud dalam menjalani proses tersebut. Maklumat bagi membantu menjayakan kajian ini diperolehi melalui kajian literatur dan perbualan berstruktur yang dijalankan. Kajian menunjukkan bahawa cara untuk menyelesaikan isu dan memperolehi kerjasama yang baik di antara pihak kerajaan dan pemaju swasta di Malaysia adalah dengan cara pihak kerajaan menyediakan satu pusat sehenti dan memansuhkan prosedur yang tidak perlu untuk mempercepatkan proses kelulusan pelan dalam tempoh masa empat ke enam bulan dan bukan mengamalkan kelulusan pelan dalam tempoh tiga ke lima tahun. Pihak kerajaan memainkan peranan yang sangat penting dalam menyediakan tapak percuma untuk pemaju swasta sebagai insentif kepada mereka supaya jumlah kos pembangunan dapat dikurangkan kepada 10 hingga 20%. Dengan adanya kerjasasam ini, pihak kerajaan juga telah menjalinkan kerjasama yang erat dengan pembekal bahan dan ini dapat menurunkan harga bahan dan pembekalan bahan seperti besi, simen dan konkrit dapat dibekalkan secara berterusan dan dengan kos yang rendah. Bagi menjual rumah kos rendah dengan harga RM 42, 000 seperti yang dicadangkan oleh kerajaan, satu per tiga kos pembangunan akan ditanggung oleh kerajaan. Sehubungan itu, pemaju swasta akan membina dan menguruskan 80-100% rumah kos rendah dan mengambil tanggung jawab dalam bidang pengoperasian untuk menyiapkan dan menentukan projek tersebut kepada pihak kerajaan. Sehubungan itu, pemaju swasta akan membina dan menguruskan 80-100% rumah kos rendah dan mengambil tanggung jawab dalam bidang pengoperasian untuk menyiapkan dan menentukan projek tersebut kepada pihak kerajaan. Tertaluk kepada masa persetujuan. Pemaju swasta perlu menyediakan laporan kemajuan dan kekerapan penghantaran laporan kemajuan akan meningkat dari dua kali kepada empat kali setahun dan ini dapat menghalang kepada projek perumahan yang terbengkalai.
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CHAPTER 1

INTRODUCTION

1.0 Introduction

To most people around the world, housing is an essential wealth component. Welfare of the people depends on housing trends whether directly or indirectly and in financial activity, housing construction is an important component. (Grimes et al., 2003) Actually the attitude of one’s dwelling reflects the wealth status and their current economic situation (Dullah Mulok, 2008). It can be said; housing is a productive activity that can forms an important and integral part of either developed or developing countries.

In Malaysia, provision of housing for all has been a purpose of national policy. To increase the homeownership rate in the country, especially for the low-income people housing policies and schemes are expanded and implemented (Arku, G, 2006).
In the development process particularly in supplying accommodation to those who are less fortunate and the lower income group, low-cost housing has a crucial role. Nowadays, low-cost housing has ended up being essential require and the changes in community number will absolutely affect the plan for provision of low-cost housing. By the way, the administration might as well be ready to encounter the population policy challenge which is targeted at 70 million people in the year 2020 by providing more low-cost housing in the future and consequently, achieve the non squatter status (Dullah Mulok, 2008). Obviously, the public sector alone cannot meet the housing needs for all people in the country hence in provision of housing to all levels of society in the country the licensed private developers also play an important role. Before, the Government of Malaysia has relied on the private sector as the catalyst of economic growth. Now the social responsibility in providing the housing for masses needs to be shared between the Government and the private sector.

Based on (Wan Nor Azriyati, et al 2007), that public-private partnerships (PPPs) and other forms of collaboration are used frequently around the world for a kind of reasons between the private sector and public sector.

According to (Ong & Lenard, 2002) by including the private sector a lot products and facilities can be brought ahead more efficiently. Involving the private sector is recognized as bringing stronger managerial capacity, access to unique technology, and specialized skills that governments cannot afford to develop on their own. More significantly is that forming public-private partnerships to assume functions that were formerly public sector responsibilities has potential profits for both citizens and governments.

This is especially important in enhancing the performance of the housing market by encouraging public institutions, private developers and Non-Governmental Organizations (NGOs) to be involved in joint decision making and management of housing provision (World Bank, 1993; UN-HABITAT, 2006), which can contribute to sustainable housing development (Smith, 2006; Shelter Afrique; 2008).
The Malaysian Government is dedicated to supply all Malaysians, particularly for the low-income groups, access to adequate and affordable housing. There is still a shortage of affordable homes for the low-income people even with the many housing programmes which implemented over the various five-year Malaysia Plans. Rapid expansion of squatter settlements in urban areas is due to lack of low-cost dwelling units, along with the high price of limited land (Wan 2006).

1.1 Problem statement

Under Five-Year Malaysian Plans, housing achievement for the poor has not been sufficient and satisfactory. Thus it can be said that there is a little attention paid to the public low-cost housing schemes and the low achievement levels are due to a complicated and ambiguous relationship between federal, state and local levels. The delays in the processing and approval of applications for land development, subdivision, conversion and issuance of titles is the most common problem of the public sectors (Agus, 1989). Furthermore, the public sector’s involvement in the medium- and high-cost housing is high and this high involvement has diverted resources in the public sector from low-cost housing allocation (Yahaya, 1989).

On the other hand, the private developer are not willing to construct low-cost houses due to a low level of profitability and this has led the completed low-cost houses by private developers fell below the targeted level. Whereas the building medium- and high-cost housing by private sector has exceeded targeted level. Especially, during the seventh and Eight Malaysian plan the achievement levels of medium- and high-costs houses by private developers were much higher than targeted units (Plan 2001 – 2005).
Private developers usually prefer to build middle- and high-cost houses, particularly in urban centers because of various reasons. Generally, they can gain greater profits and benefits because middle- and high-cost houses in urban centers offer greater benefits and few risks. On the other hand, because financial institutions are likely to finance housing projects in urban centers and they can access to finance facilities easily. With an over constructing of medium and high cost housing by both private and public sectors has contributed to the problem of property overhang in the country. (Ministry of Finance’s Valuation & Property Service Department, 2006).

The majority of these units remain unsold for reasons beyond price factor, ranging from poor location, and to unattractive houses with lack of adequate amenities and facilities. The development of property in the wrong location is the most important factor that contributed to the overhang. These unsold houses do not attract the target market and cater to the housing needs of the target group. It is important for both public and private house builders to know the housing needs before constructing houses. The problem of abandoned housing projects is another issue that undermines the success of meeting housing needs. There are many housing projects, mostly low-cost housing, that have been abandoned (Ministry of Finance’s Valuation & Property Service Department, 2004).

Owning a house is every person’s dream. But, their dreams have turned into nightmares after the homes they bought are left uncompleted. The low and middle income groups are victims in most cases are hey carry a large portion of the risks involved when purchasing a house. They continue paying progressive payments until such time when the houses are completed. They are the ones, who bear the stress if the construction of the houses are disrupted or abandoned, and in the end, they are no houses for them to take over to occupy and they continue to pay rents to shelter their families.

To overcome these problems, the government involvement or intervention is needed to ensure that housing supply is sufficient for the public and distributed
democratically among the ethnics and income groups. The involvement or intervention of the government in solving the housing issues can be done through policies and development strategies either in short or long term.(Aminah Md 2004).

To encourage private housing developers to play an active role in the provision of low-cost housing, the federal government promised various incentives. The incentives given include faster plan approval, lower land premium, infrastructure cost subsidisation, relaxation in planning and housing standards and concession from financial contribution to utility authorities. These incentives have to be implemented at the state and local government levels as they involve land matters as well as numerous approvals for planning and building control (Aminah Md 2004). To provide evidence to the private sectors that they will gain a better return from this type of public-private partnership than in other investment opportunities, the incentives provided by the government must be attractive and sufficient enough.

1.2 Research aim and objectives

The aim of this research is to promote of innovative partnerships between the Government and Private Developers for provision of affordable housing in Malaysia and to identify the weakness, issues and problems that exist in carrying out the process. In achieving the aim and answering the questions of the research, the following objectives are set:

- To examine the roles played by government and private developer in the regard of low cost housing provision
- To decrease issues and problems that were encountered in constructing low cost housing by private developer
- To achieve an improved partnership between government and the private sector that ensures proper provision of low cost housing
1.3 Research questions

The existence of the problems attracted this research to further explore the extent of the current public private partnership system and practice in affordable housing supply. In relation to this, several questions are necessary to be explored. The main questions are as follows:

- What is the most important role of the government and private developers in the process of public private partnership in provision of affordable housing? How can this process solve the problems of low cost housing supply in Malaysia?
- How can the government encourage the private developers to provide more low cost housing in Malaysia?

1.4 Scope of the study

With the purpose of provision adequate and low cost housing for all particularly low income people and on the other hand increasing concerns of housing affordability, it is necessary to focus and think outside of current housing policy and expand public private partnership in terms of affordable housing provision. Partnerships between organisations from the public, private and non-profit sectors provide expanded models for provision affordable housing. We can learn from experiences with partnership models in other countries to identify key characteristics of these models that might be appropriate for use in local housing markets. The scope of this study is to provide a general overview of some of the different types of public private partnership that have been utilized successfully overseas for affordable housing and identify ways forward for an improved partnership for low cost housing provision in Malaysia.
1.5 Importance of the study

Housing has been made realistic for the people by the participation of the private and public sector. The housing policy of Malaysia is in line with government agenda “Adequate shelter for all”. To ensure that all her citizens, particularly the low-income groups, have access to decent and adequate shelter is the primary objective of Malaysia’s housing policy.

The PPPs programme between the state and the private sector has identified as a satisfactory achievement around the world. In Malaysia the provision of housing for low-income group is a matter of both the public and the private sector. The government cannot meet the all housing needs alone hence PPPs have been a tool in encouraging private sector to participate in fulfilling this social obligation. The private sector to a great extent understands the role to be played in meeting the housing needs of low income people, and the public sector understands the implication of subsidized cost to be borne by the market. Under this partnership the private sector is able to reap its profit and the public sector to fulfill the obligations to achieve democracy in the home ownership particularly for the poor in Malaysia.

But In regarding of housing PPP, little study has been carried out carried in Malaysia, In fact, worldwide, housing PPP have been very much under-studied (Ong and Lenard, 2002; Sengupta, 2005). Hence, this study tried to cross the gap by providing some knowledge regarding housing PPP in Malaysia With aim of promotion of innovative partnerships between the Government and Private Developers for provision of affordable housing and to identify the weakness, issues and problems that exist in carrying out the process.
1.6 Brief Research Methodology

The research was conducted by following some major processes such as shown in Figure 1.1. The major processes include:

a) Stage 1: Preliminary Study
b) Stage 2: Literature review
c) Stage 3: Data collection process
d) Stage 4: Data analysis
e) Stage 5: Conclusion

1.6.1 Preliminary study

This stage involves a basic understanding of the research field and issues related to housing supply, identifying the background of problems, designing questions. This was done by referring articles and journals. The main problem, aims and objectives were identified before literature review was carried out.

1.6.2 Literature Review

The literature review for this research is divided into 2 steps:

(a) Define affordable housing and provide a general understanding of the concept and importance of public private partnership for infrastructure projects, followed by reviewing the development of projects and case studies around the world.
(b) Examine the low cost housing programmes implemented by the Government and how have they performed throughout the various five-year Malaysia Plans and Investigate the current state of the low-cost housing sector in order to identify the major issues and problems associated with the low-cost housing development in Malaysia.

1.6.3 Data collection

The data collection process involved two types of data; primary and secondary data. The primary data was collected by structured interview and the secondary data was gathered from reports, articles, journals conference papers and books.

1.6.4 Data Analysis

Microsoft excel 2007 was used to analyze the data. The output was presented in the form of pie charts and tables.
1.6.5 Conclusion and Recommendation

This stage includes conclusion for all the data analyzed. The final stage involved assimilation of the findings.

1.7 Chapters organization

The followings are the summary for each chapter on this research project:

- **Chapter 1: Introduction**

  This chapter presents the background and general information which comprises of introduction, issues and problem statement, research objectives, research scopes, research significance, research methodology and chapters organization.

- **Chapter 2: literature review**

  The literature review for this research is divided into 2 steps:
  
  First part of this chapter elaborates the definition of “affordable housing and tries to provide a general understanding of concept and importance of public private partnership in funding infrastructure projects, followed by reviewing the development of projects and case studies around the world. The second part of this chapter includes overview of low cost housing markets and polices in Malaysia. It provides a general view of the history of low cost housing development and the concept of national housing policies in Malaysia. This is followed by identification of the current issues and problems faced by the housing industry in the development of low-cost housing.
• **Chapter 3: Research Methodology**

This chapter gives an overall view of research methodology for the research and includes the method of data collection and structured interview.

• **Chapter 4: Data analysis**

This chapter focuses on analyzing collected data and discussing the findings. It contains the analysis of the information gathered through the structured interview. It covers a comprehensive discussion that attempts to develop the public private partnership for affordable housing in Malaysia and discusses and presents the improvement public private partnership for implementation in affordable housing schemes in Malaysia.

• **Chapter 5: Conclusion and recommendation**

This chapter will summarize the findings of this research and presents the conclusions to the study and recommendations for further research also will be presented.
Figure 1.1: The flow chart of Research Methodology Sequence
References


Arku, G. (2006). The housing and economic development debate revisited: economic significance of housing in developing countries. *Journal of Housing Built Environment*


Disney J, (2007) *Affordable housing in Australia, Some Key Problems and Priorities for Action, National Forum on Affordable Housing, Australian Housing and Urban Research Institute*,Melbourne,

Dullah Mulok.(2008) *Low-Cost Housing in Sabah, Malaysia: A Regression Analysis School of Business and Economics Universiti Malaysia Sabah*


Ministry of Housing and Local Government Malaysia (2004)

Ministry of Housing and Local Government Malaysia (2006)


Syafiee Shuid (2004), ―Low Medium Cost Housing In Malaysia: Issues And Challenges, Department of Urban and Regional Planning, International Islamic University Malaysia


Wan Nor Azriyati Wan ABD AZIZ, Noor Rosly HANI, Zairul Nisham MUSA (2007). Public-private partnerships approach: A success story in achieving democracy in the home ownership for urban inhabitants in Kuala Lumpur Malaysia, *The Centre of Excellence Study of Urban and Regional Real Estate, Faculty of the Built Environment*


Selangor Mented Besar's Statement on Bandar Utama and Low-Cost Housing. Statement by DAP National Publicity Secretary. Malaysia.