

Rethinking Affordable Housing Delivery: An Analytical Insight

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Abstract. Malaysia currently has a housing shortage of 12 million units. Towards the year 2020, this would require an annual supply of a minimum of 2 million homes. With the current production rate, the deficits will remain over the next 100 years. The crisis will lead to poor standards of living, un-affordable rental price, high mortgage payment, abandonment, and dilapidation of the existing housing stock. Lack of affordable housing is already a source of concern among many Malaysians. The middle and lower income earners spend more than 30% of their income on rent or for mortgage payment. Housing rent or mortgage is a basic need like foods, education, clothing and health. The government has introduced various measures to address the housing deficit. Despite these measures, the housing supply and distribution gaps continue to grow. To better understand the issues, there is a need to examine how the procurement planning in the affordable housing delivery supply chain and market is formulated, explore how cost of affordable housing would be reduced, identify the user value systems in affordable housing, and identify the criteria in the current regulatory framework? For these purposes, this paper reviews the relevant literature to reach preliminary findings on the stated issues. Among the factors found accounting for housing shortages, the overwhelming factors were that of poor policies, strategies, practice, management, and finance. The findings are meaningful in framing an affordable housing delivery model. It could also be useful to stakeholders involved in affordable housing delivery in Malaysia and elsewhere.

1 Introduction

This paper reports initial findings of an ongoing large research project aimed at developing an affordable housing model for an emerging economy. This study addresses the issues obstructing the supply of affordable housing based on a review of existing literature. To clarify, 'affordability' is an elastic word. At one end, a product is very affordable yet at the other end, it is completely unaffordable to the same group of buyers. This makes the issue of affordable housing somewhat complex to understand and explain. Most authors and governments used the terms incorrectly [1] resulting in different definitions of 'affordable housing'. Often, the term is used quite loosely to represent all types of housing developed by governments, its agencies, or in partnership with the developers or social landlords. It would seem that the meaning of affordable housing is more easily defined than understood. The question then arises; at what point does a house that was once

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unaffordable become affordable? This underscores the importance of household income. The demand for houses is income elastic, because its elasticity is greater than 1. In other words, the percentage change in the quantity of homes demanded is more than the corresponding changes in price. Housing is affordable if a rental cost or mortgage repayment does not exceed 30% of household income for households in the lowest 40% of the income distribution range [2]. For rental purposes, the 30% would include utilities bills, including for electricity, water, gas, sewage and garbage collection. In cases of a mortgage, the amount includes the actual consideration, tax, insurance, utilities, and maintenance. This definition is referred to as the 30/40 rule. Affordable housing is also defined in terms of ‘median multiplier’ [3]. The Demographia compares the median house prices to the median household income to measure affordable housing based on annual international Housing Affordability Survey. Based on either of these definitions, the cost of housing in all major cities in Malaysia is ‘severely unaffordable’ to both the middle-income and low-income earners. For instance, monthly expenditure for the rental is 26.7% of the household income [4] however, for the low and middle-income earners is 35% [5]. 2014 inflation in the housing, water, electricity, gas and other fuels category increased to 3.4% (2013: 1.7%), reflecting the upward adjustment in electricity tariffs and a broad-based increase in rentals across different types of residential property [6]. In terms of the income groups, the mean income is RM 6,141. However, the median income which is the acceptable criteria is RM4, 585.

“One of Malaysia’s longstanding development objectives is the provision of affordable housing for Malaysians in both rural and urban areas, with a focus on lower-income groups” [7]. Many schemes were put in place both at the state and federal levels toward meeting the housing requirements in Malaysia. At the federal level, some of the schemes include the Housing Loan Scheme, Housing Maintenance Program, People’s Housing Program, MyHome Scheme, Transit House Program 1Malaysia Civil Servants Housing Program (PPA1M) PR1MA, Government Housing Loan, and the Affordable Housing Policy Wilayah Persekutuan (RUMAWIP). While most of the schemes are under the Ministry of Urban Wellbeing, Housing and Local Government, the others are either under the Prime Minister’s Department, Ministry of Federal Territories, or Ministry of Finance. 80% of the households belong to the low and median income groups [8]. If the housing needs of these groups are not met; it will imply low quality of life and consequently lead to low national productivity. Lack of affordable housing would lead to other social problems including traffic congestions, air pollution, crime and urban sprawl. Unaffordable housing could be the result of many factors, notably increases in house prices or decreases in household income or a combination of both. Methods to increase household income fall outside the scope of this research.

2 Background and Theoretical Framework

The provision of affordable and liveable social housing is critical particularly as the government is committed to encourage greater home ownership among the bottom 40% households. The intense pressure on the provision and maintenance of affordable housing are extreme. By 2020, over 70% of Malaysians are expected to reside in urban areas. The greater Kuala Lumpur alone is expected to accommodate an additional one million residents by 2020 [9]. Housing requirements are expected to increase remarkably due to the rapidly growth in population, increase in foreigners (expatriate, students and tourists), migration, changing economic status of the citizens, change in tastes, and dilapidation of the existing stock. In 2020, the population is estimated to reach 32.4 million. While the requirements for housing for the poor and low cost will remain, emphasis will be shifted to delivering vibrant housing that is commensurate with the country’s status. Table 1 presents allocations to the housing sectors for twenty years.

Table 1. Federal government allocation to the housing sector [7, 10-12].

Malaysian Plan	6MP	7MP	8MP	9MP
Amount (RM Million)	3,850	6,125	6,972	9,647

The total allocation for the housing sector under the 9MP was RM11,512 million. Approximately 111,000 units of public affordable housing were built during the Ninth Plan period [7]. There is more than 150% increase in the allocations to the housing sector over the period. Under the Tenth Malaysia Plan (10MP) it was stipulated that housing development will focus on the provision of adequate housing, as well as ensuring a safe, healthy, harmonious and secure living environment equipped with complete necessary public amenities and quality recreational facilities require in the improvement of standard of living. During the 10MP, a total of 78,000 units of new affordable public housing were slated for construction and to reduce the burden on the bottom 40%, low-cost public housing units are provided to household income with less than RM2,500 per month [7]. Subsidises of between 30% and 75% of total construction costs for public housing units is provided. Added to these is the establishment of Housing Maintenance Fund with an initial funding of RM500 million to assist the residents of both public and private low-cost housing units. In continuation of government initiatives towards housing supply, under the 11MP a total of 606,000 houses will be built for those in low and middle-income groups this is in addition to 47,0000 to be built or repaired specifically for the poor. To interpret, during the Plan, approximately 130,600 public homes will be built annually.

However, there is high level of insufficiency in homes supply. Lack of affordable house is now a source of concern among Malaysians. To illustrate, available statistics show that Malaysia currently has 4,831,791 representing an increase of 2.2% compare to 2013 (i.e. 4,725,109 actually) residences and of the total properties transacted 65% is residential and represents 50.4% in terms of value [13]. That is, home production is approximately 107,000 per annum. The plausible implication of this statistics is that there are approximately six persons per home. However, this is inadequate to achieve the above set objectives, countries like Australia and UK have on average 2.5 persons per home. Malaysia’s growing population is increasing at a rate of about 1.7% a year. This means that in a year, approximately 500,000 persons are added. To interpret, in one year, about 400,000 persons will not have homes to live in. This will lead to increase in prices of homes, or many will have to pay unaffordable prices to own or rent a home. Secondly, there will be an increase in maintenance demand. A major factor that determines maintenance demand is the size of the households [14]. Hence, the existing housing stock would not be part of national gross fixed capital formation that is required in a country to stimulate and support national development. Policy makers need to take the supply-side imbalance into consideration to provide accommodation that is affordable in all respects. With increased median incomes from RM2, 841 in 2009, RM3, 626 in 2012, to RM4, 585 in 2014 [15], and with the Gini coefficient sliding down from 0.431 in 2012 to 0.401 in 2014 [15], household income is improving. The mean monthly house income of the top 20%, middle, 40% and bottom 40% of households are RM9, 796; 4,372, and RM1, 852 [15]. Table 2 contains the incomes distribution by household in 2012.

Table 2. Percentage distribution of households and income share by monthly household income class [15].

Income class (RM)	Household	Income
999 and below	5.0	0.8
1,000 – 1,999	17.6	5.4
2,000 – 2,999	15.9	7.8
3,000 – 3,999	16.7	11.5
4,000 – 4,999	11.1	9.9
5,000 – 5,999	7.8	8.6
6,000 – 6,999	6.0	7.7
7,000 – 7,999	4.5	6.7
8,000 – 9,999	5.7	10.1
10,000 and above	9.7	31.5

From Table 2, more than 60% of Malaysians are either lower income earners or middle income earners, and as such their housing needs are not being met, leading to a housing crisis. Household expenditure for housing, water, electricity, furnishing, household equipment and building maintenance is the highest among the various house classes [5]. Furthermore, in 2012, 23% of households earned less than RM2,000 monthly, 55% earned less than RM4,000 monthly and 74% less than RM6,000 per month [16]. Out of the 6,659,036 active EPF members, 8% earned between RM4,001 and RM6,000, 24% earned between RM2001 and RM4000, while 60% earned less than RM2000 monthly [17]. For 2013 and 2014, while the total percentage change in the consumer price index was 2.7% for housing, water, electricity, gas and house maintenance collectively was 4% [18]. Based on the recent information on the consumer price, the low and middle-income earners spend about 35% of their monthly incomes on housing, utilities bills, and house routine maintenance [19]. From 2000 to 2014, there is more than 100% increase in the price of houses from the period quoted (Table 3), and this will be the case in the years to come particularly with the increase in the cost of living and the uncertainties that surround the implementation of the Goods and Services Tax. While it is probably a touch early to speculate on the extent of increase in cost caused by the GST, observers in the industry hypothesised that the likely increase would be around 4%.

Table 3. Annual House Price Index and house price 1999-2013 [13].

Year	Index 2000=100	1-Yr % Change	House price (RM)
2000	100	-	138,712
2001	101.1	6	140,507
2002	103.6	1.1	144,830
2003	107.7	2.5	150,705
2004	112.9	4	156,549
2005	115.6	4.8	160,654
2006	117.8	2.4	165,111
2007	124	1.9	172,464
2008	129.8	5.3	179,359
2009	131.8	4.7	184,002
2010	140.7	1.5	196,720
2011	154.6	6.7	216,720
2012	172.8	9.9	241,591
2013	192.9	11.8	266,304
2014	213.6	11.6	295,345

While the growth rate for the Housing Price Index was 11.6 in 2014, the corresponding growth rate for the Consumer Price Index was 3.4. In addition, the total approved loan to the housing sector increased to RM129,051 million in 2014 as compared to RM124,230 million in 2013 but RM426,800 million housing loan is still outstanding[6].

3 Summary and Further Research

While there are commitments to provide more affordable housing, the housing shortage is on the increase. Hence there is a need to rethink the affordable home delivery. Firstly, incentives to prospective homebuyers provide opportunities to have access to buy a house, but do not translate to lowering the cost of houses. This could be explained by the inadequacies in the formulation of the initiatives. For illustration, while the government allow applicants to withdraw from the EPF to finance the 10% down payment for the PR1MA scheme, a major problem with this initiative is that

about 68% of EPF contributors aged 54 have less than RM50, 000 in their accounts [17] and more than 60% of the contributors actually earned less than RM2,000 monthly. For applicants to withdraw RM30, 000 for a property that costs RM300, 000 will be very unlikely. Having only about RM20, 000 left in their account at the age of 55 would lead to members retiring into poverty. Out of EPF's 14,192,832 members, only 6,659,036 are active or those who have contributed at least once within 12-month [17]. Based on the My First Home / Skim Rumah Pertamaku (SRP), affordable housing is those that cost between RM90,000 and RM170,000, while this is affordable, to be eligible for this scheme now, homeowners are required to purchase a property that cost RM400,000. Providing subsidy of up to RM30, 000 per unit to developers would lead to ineffective over production apart from the fact that it is limited to 10,000 units. Essentially, the subsidy could only reduce costs paid by homeowners but will not necessarily increase home production. While there are some schemes, e.g. Skim Rumah Pertamaku, (SRP) Perumahan Rakyat 1Malaysia (PR1MA), Rumah Mesra Rakyat (RMR1M), Program Rumah Mampu Milik (RMM), that help to reduce the burden on the entry costs, the house price itself is unaffordable. To date, only 560 units of 158,807 of the PR1MA housing have been completed, though 41,187 are under construction [20, 21], yet a total of 1.02 million have registered for the scheme [20].

Secondly, homes in Malaysia are 'severely unaffordable' or very expensive to own or rent [2]. Therefore, the question to ask is why the houses are so expensive and how can costs be reduced? Both in absolute and relative terms, subsidises such allowing prospective homebuyers to utilise part of the EPF to finance the down payment do not have significant impact to prompt the homebuyers to own a home because these do not contribute to housing economics. However, in real time, what is required is to explore how the cost of construction could be reduced. This is critical to any strategies that will be beneficial to prospective homebuyers and the governments. Hence, issues of procurement planning, regulatory and policies framework, method of financing and availability of basic materials and products are elementary problems that will result in affordable housing delivery. Other fundamental aspects that are often over looked by either the government or developers are the size, locations, functionality, employment, transport, access to services. In other words, the homes must be adequate all in respects. Most of the MyHome housing is not located in the cities or close to other infrastructures. But residing in affordable housing in the suburb is no longer cost-saving. Increases in transportation costs, access to children school among other is wiping saving accrued from paying reduced rent or mortgage on affordable housing due to location factor. Specifically, the current initiatives are inadequate to offer solutions to the housing requirements because the fundamental aspects that would lead to price reduction have not been evaluated and disregarded for homeowners or home users' value systems.

Thirdly, the existing measures on affordable housing do not connect affordable housing to sustainability. However, as government aims to provides housing that will contribute to sustainability requirements, it becomes imperative to integrate the supply of affordable housing with sustainable development. Evidently, the affordable housing delivery needs to be integrated with sustainability. The requirements of sustainability on the housing delivery will lead to significant energy optimisation, enhancement of durability of housing, waste minimisation, improvements on social impacts, good indoor environment, reduces pollution, consideration of project life cycle-cost, and active user-friendliness, and user comfort and total satisfaction. Therefore, the possibilities of matching sustainability requirements with affordable housing require exploration. Since research on this aspect is grossly inadequate, it could not be established if the two are compatible and to what extent. This study shows that the 11MP is ambitious in increasing the access to affordable housing. However, what is still not clear is if there are definitive interpretations and understandings of the concept of affordable housing. Some unanswered questions have also been exposed, for instance, as the 11MP also hinges considering sustainable issue on affordable housing, on what basis is this initiative based?

To conclude, this study begins to reveal the benefits and shortcomings of the existing housing programmes and financing methods in the affordable housing procurement processes. The housing deficits, which are expected to rise, are a clear indication that the existing housing policy is not formulated and implemented as expected and hence not operational as planned. In order to develop a

systemic framework for the supply of affordable housing, fundamental concepts, strategies and methods need to be evaluated. These include the procurement planning in affordable housing delivery, behaviours credentials of home owners and users, and users' value systems and sustainability criteria in affordable housing delivery. All these ought to precede any decisions on the development of affordable housing. This research is concerned with investigating and evaluating these aspects through exploratory methods. The supply of affordable housing requires different funding sources and systemic delivery models that involve the various stakeholders in the supply chain and marketplace.

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