Housing in Malaysia

Housing is one of the basic needs for human beings. In Malaysia, there are three low and medium cost houses being constructed due to high demand which in line with the fourth strategic objective outlined in the 10th Malaysia plan. The total number of population in Malaysia has increased by 0.17% from 17,563,420 in year 1991 to 27,565,821 in year 2010. Owing to this substantial increase, most of the low-income group cannot afford to own a house. The purpose of this paper is to identify key parameters of low medium cost housing demand in Malaysia through questionnaire survey with local experts within the construction industry. Data acquired from the questionnaire survey is analysed using Mean Rank adopted from the Statically Package for Social Science (SPSS). Also the parameters identified are analysed using frequency analysis to determine the frequency and ranking. As a result, eight parameters for medium cost housing demand have been identified from this study, namely population, economy, household income, ability of buyers, housing prices, politics, land price, and experts from industries. Ranking from experts has indicated that household income as the most prioritised parameter for low medium cost housing, which are then subsequently followed by population, economy, house price, land price, ability of buyers, experts from industries and politics respectively.

Table 1: Housing price structure

| Categories       | House Price per unit | Target Groups/ Income per month |
|------------------|----------------------|---------------------------------|
| Low Cost         | Below RM42,000 (depend on location) | Below RM1,500                  |
| Low Medium Cost  | RM42,001 – RM60,000  | RM1,501 – RM2,500               |
| Medium Cost      | RM60,001 – RM100,000 | Not stated                      |
| High Cost        | More than RM100,001  | Not stated                      |

Source: (Ministry of Housing and Local Government, 1998).

Malaysia government has introduced low, medium and high cost housing categories and under the Seventh Malaysia Plan (1996-2000) in which the low medium cost housing category has also been introduced due to an increased demand for this income group category [6]. The total number of housing units targeted under Seventh Malaysia Plan was 800,000 units and 782,300 units for Eighth Malaysia Plan [7]. Meanwhile, during the Ninth Malaysia Plan, the demand for new houses was estimated to be approximately 709,400 units where 19.2% had been allocated to Selangor and then followed by 12.9% in Johor, 9.4% in Sarawak and 8.2% in Perak [8]. In the Tenth Malaysia Plan, various of affordable housing plans were provided such as Program Bantuan Rumah (PBR), Program Perumahan Rakyat (PPR), Skim Perumahan Mampu Milik Swasta (MyHome) as well as Perumahan Rakyat 1Malaysia (PRIMA) [9].

Recently, the major demand related-issue is not on the availability but the affordability of the Malaysian public to own a house. Based on to the Seventh Malaysian Plan, low medium-cost houses are meant for the low-medium income group. The government had allocated a specific amount of budget to construct houses for this group through a programme called MyHome [10].

Housing industry in Malaysia has been critical with the substantial increase rate of demand over the years, which can be justified through the fact that construction sector remains strong at 9.6% in third quarter 2014 compared to last ten years in the sector [11]. This statement can be strongly supported through the commitment shown by the Malaysian government to provide adequate, affordable and quality of housing for the public from all levels of society especially the low-income earners [12]. However in 2014, from a total of 101,189 units that being launched in first half at that year, only 49% were taken up by this group. Similar situation happened during to the second half of the 2013 period [13] and the worst scenario was recorded in 2004 when there were no takers for 100,000 available housing units in Selangor whereas places like Kuala Lumpur were still lacked of houses [14].
According to [15], housing problems become more critical especially in major cities like Kuala Lumpur, Johor Bahru and Ipoh due to a rapid growth of the population from natural increase (births minus deaths) and migration from outside the city, which have contributed to the serious problem in terms of supply and demand. Therefore, the issue of unsold properties has become a major issue addressed in the 9th Malaysia Plan especially when it happened in developed states such as Johor, Selangor and Penang [16].

_Persatuan Arkitek Malaysia_ has identified the fact that Malaysia people cannot afford to own a house due to uncontrolled land and house prices [10]. The land value has increased tremendously in parallel to the housing demand [17]. In addition, according to [18], urbanization is another factor that increases the demand of housing in urban.

According to [19], the lack of housing to meet demand may come about in two main ways. The first cause is either decay or depreciation of housing stock over time, or through natural disaster. The second cause is that a lack of dwellings within any particular region is from an increase in housing demand, generated through a population increase and combined with other social and economic factors. These showed that before specific planning and development of housing, key parameters of housing demand is crucial. Therefore, this paper aimed to establish key parameters of low medium cost housing demand in Malaysia.

2.0 Methodology

The initial parameters related to the low medium cost housing demand in Malaysia have been identified through an extensive literature review, which then being transformed into a likert-scale questionnaire to be distributed among 18 local practitioners involved in the construction industry in Malaysia for justification purposes via interviews. The critical criterion for respondent selection include a minimum of 10 years' experience working in housing development projects either in private or public sector. The data generated from questionnaire interview are analyzed through a reliability test prior to conducting a frequency analysis. The mean rank method has been used to determine ranking of each parameter involved where the most effective parameter will be determined based on mean score with value more than 4.00 [20]

3.0 Results and Discussions

There are 8 parameters of low medium cost housing demand in Malaysia that have been identified from the literature review, namely (1) household income, (2) ability of buyers, (3) economy, (4) house price, (5) population, (6) politics, (7) land price, and (8) experts from industries [21-25]. Table 2 shows the results of frequency analysis for each of the identified parameters. It indicates that population as the commonly used parameter for the low medium cost housing demand in Malaysia, which then followed subsequently by economy. Others parameters have only being cited once.

A five point likert scale score, which ranges from purely insignificant onto purely significant in the questionnaire interview with all 18 respondents in order to determine the degree of significance of each parameter towards the low medium housing cost demand in Malaysia. The result indicates that almost 90% of the respondents agree on the importance of all the eight parameters involved towards the low medium housing cost demand in Malaysia, which is being evaluated based on moderate up to purely significant overall score. Table 4 outlines the reliability test conducted using Cronbach’s Alpha adopted from the SPSS software in order to determine the consistency of the data.

| No . | Parameter    | Authors [21] | Authors [22] | Authors [23] | Authors [24] | Authors [25] |
|------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1    | Income       | /            | /            | /            | /            | /            |
| 2    | Buyers Ability | /           | /            | /            | /            | /            |
| 3    | Economy      | /            | /            | /            | /            | /            |
| 4    | House Price  | /            | /            | /            | /            | /            |
| 5    | Population   | /            | /            | /            | /            | /            |
| 6    | Politics     | /            | /            | /            | /            | /            |
| 7    | Land Price   | /            | /            | /            | /            | /            |
| 8    | Experts from Industries | / | / | / | / | / |

Table 2: Frequency analysis of the parameters

| Cronbach’s Alpha               | Cronbach’s Alpha Based on Standardized Items | N of Items |
|--------------------------------|---------------------------------------------|------------|
| .864                           |                                              | 8          |

Table 3: Data Respondent of Parameter

The cronbach's alpha method is used to calculate the average of all potential reliability coefficients. The indication of results with more than 0.6 are considered good while more than 0.7 are essentially very good [26]. Thus the result of reliability test for this research, as shown in Table 4 falls under “essentially very good” category with the score value of 0.864.
In conclusion, 6 significant parameters for low medium cost housing demand in Malaysia are; (1) household income; (2) population; (3) economy; (4) house price; (5) land price; and (6) ability of buyers. These key parameters can be used for further research on low medium cost housing demand in Malaysia.

Figure 1 identifies the ranking of 6 parameters that have been classified as ‘significant’ for low medium cost housing in Malaysia, which is being classified based on the mean value, which exceeds 4.00 from the standard deviation [27]. However, parameters with the same mean value are selected based on the highest standard deviation.

| Parameter       | Purely Insignificant | Not Significant | Moderate | Significant | Purely Significant |
|-----------------|----------------------|-----------------|----------|-------------|-------------------|
| Income          | 2                    | 0               | 0        | 2           | 11                |
| Buyers Ability  | 2                    | 0               | 1        | 3           | 9                 |
| Economy         | 1                    | 0               | 1        | 5           | 8                 |
| House Price     | 1                    | 1               | 0        | 5           | 8                 |
| Population      | 0                    | 0               | 3        | 4           | 8                 |
| Politics        | 0                    | 1               | 8        | 6           | 0                 |
| Land Price      | 1                    | 0               | 0        | 8           | 6                 |
| Expert from Industrys | 1    | 2               | 1        | 10          | 1                 |
| Total           | 8                    | 4               | 14       | 43          | 51                |
| Percentage      | 6.67%                | 3.33%           | 11.67%   | 35.83%      | 42.5%             |

Table 4: Reliability test

| N  | Parameter      | Purely Insignificant | Not Significant | Moderate | Significant | Purely Significant |
|----|----------------|----------------------|-----------------|----------|-------------|-------------------|
| 1  | Income        | 2                    | 0               | 0        | 2           | 11                |
| 2  | Buyers Ability| 2                    | 0               | 1        | 3           | 9                 |
| 3  | Economy       | 1                    | 0               | 1        | 5           | 8                 |
| 4  | House Price   | 1                    | 1               | 0        | 5           | 8                 |
| 5  | Population    | 0                    | 0               | 3        | 4           | 8                 |
| 6  | Politics      | 0                    | 1               | 8        | 6           | 0                 |
| 7  | Land Price    | 1                    | 0               | 0        | 8           | 6                 |
| 8  | Expert from Industries | 1     | 2               | 1        | 10          | 1                 |
| Total | 8           | 4                    | 14              | 43        | 51          |
| Percentage | 6.67%        | 3.33%                | 11.67%          | 35.83%    | 42.5%        |

Figure 1 meanwhile portrays the results acquired from the mean rank analysis in order to determine the priority importance ranking of each parameter addressed in this research. The mean value 4.00 represents “important” and thus the ranking of “significant” parameters for the low medium cost housing demand in Malaysia is being classified based on the mean value, which exceeds 4.00 from the standard deviation [27]. However, parameters with the same mean value are selected based on the highest standard deviation.

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