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# THE BASIC CRITERIA FOR THE PROVISION OF AFFORDABLE HOUSING IN MELAKA

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## **Abstract**

The aim of this paper is to examine the criteria in the selection of the houses by the homebuyers in Melaka. The case study area was selected from Melaka in response to the report produced by Khazanah Research Institutes (KRI) in 2015 that claims Melaka is the most affordable state in Malaysia. This study applies the quantitative approach. The Yamane Taro 1976 sampling formula was used and 400 samples were selected. Three types of analysis techniques was utilized namely descriptive analysis, Pearson correlation and Relative Importance Index (RII). The study found that the three districts in Melaka were at affordable range for 2012 and 2014 and the income level of the household in Melaka was within the average income of Malaysia. Finally, it is anticipated that the study would give a clear picture on what are main criteria of better housing provision in Malaysia.

**Keywords:** housing price, affordable house, Melaka.

#### INTRODUCTION

Owning a home for shelter and comfort is considered by many as a life goal and a measure of personal success (Hashim, 2010). However, the price of houses is increasing and houses become unaffordable to own. In Malaysia, the same situation occurs where house price is surging upwards, proportionately to income. Land scarcity and economic growth have often been cited as the factors that drive house price up to the point that it becomes unaffordable to the majority of Malaysian public (Hashim, 2010). As Malaysia aspires to be a developed nation with high-income economy by 2020, the housing industry needs to be adaptive and responsive to demand for special groups, especially the medium and low income earners. Cagamas (2013) proposes that the Government must take appropriate measures to ensure access to quality and affordable housing is for all. Cagamas (2013) also notes that as public purchasing power reduces, housing affordability gap has widened even further. However, Ong and Chang (2013) argues that the determining factors on the ability to purchase a property are not dependable solely on income but also by the high house price and the mortgage interest rate. Making houses affordable, especially to the lower income group is critical for poverty reduction, institution building, good governance at the local and national levels, and conflict prevention (Sohaimi, Abdullah, & Shuid, 2017). The objective of this paper is to provide an overview of the affordable housing scenario in Melaka and to determine the housing affordability index for each district in Melaka. It is hoped that the findings from this paper would contribute in making housing more affordable to the Malaysian public.

# LITERATURE REVIEW

Housing is one of the most vital investments that is made by individuals, as housing influence the social interactions and represent socioeconomic status. Tan (2013), and Glaeser and Sacerdote (2000) assert that high housing ownership creates a better motivation for homeowners to enhance the quality of the community and develop homeowners' connection with the neighbourhood. Hence, proper housing unit is one of the prominent requirements to ensure the needs of house as shelters and preferences in selecting home are being fulfilled. Besides that, the housing prices are influenced by demographic factors such as level of income of the individuals, the stock price, cost of capital and population expansion (Osman, Ramlee et al., 2017). The higher the demand it incurred the more houses need to be developed with the limitation resources such as land, increase of construction materials and many others. In addition, the housing location especially in the urban and attraction areas contribute to ridiculously increasing house prices. Eventually, houses were unaffordable for public to own. The increase of property value in most developed and developing countries have been alarming issues that need to be addressed and revised. Especially in Malaysia, the increase of property value specifically in the urban centers lead inability of housing ownership.

There are several other criteria considered by home buyers in selecting their dream houses. The criteria for the provision of the affordable housing are not solely specific on housing designation but it goes beyond the physical design of the house. Such as the provision of better infrastructures and facilities that contribute to mobility of the residents. Therefore, the main idea of this paper is to provide overview by examining and identifying the basic criteria in the provision of affordable housing in Melaka. The state of Melaka is considered as the most affordable state in Malaysia with median multiple index of 3.0 (KRI, 2015; Osman, Rabe, Abdullah, Rosli, & Zainudin, 2017). This study identifies the criteria to attract people to buy properties. The criteria of housing selection relate to house prices, housing location and surrounding facilities provided.

#### **OBJECTIVE OF THE STUDY**

- a) To determine the basic elements criteria in providing good affordable housing
- b) To study the factors that contribute to housing preferences
- c) To provide recommendations and solutions

## **METHODOLOGY**

The method used in the study was quantitative approach, which the primary source of data was from the questionnaire surveys. The criteria of samples selection include Malaysian, having a stable income and a tenant. The method of sampling was random sampling methods. The calculation of 400 samples was calculated based on Yamane Taro's (1967), and the formula is as shown below:

$$*n = \frac{N}{1 + N(e)^2}$$

where:

n = Sample Size

N = Population Size

e = Level of precision or sampling of error, which is  $\pm$  5 %

In addition, the random sampling methods was used and the type of analysis used such as descriptive analysis, Pearson Correlation analysis and Relative Importance Index (RII).

## FINDINGS AND ANALYSIS

## Socio Demography Profile

Table 1.0 illustrates the socio demography of the respondents in Melaka. There were a few basic of socio demography components that were asked and the components could also be the contributing factors for the house buyers. Most of the respondents were between 21 and 40 years old. More than 80% of the respondents were renting, did not own a property and wanted to purchase house. 50% of the respondents were between 21 and 30 years old. The age factors may contribute to the ability of the respondents to buy a property.

Table 1: The socio demography of the respondents in Melaka

Age Range         Respondents         Percentage           20 and Below         14         3.5           21-30         200         50.0           31-40         130         32.5           41-50         41         10.25           51-60         15         3.75           Total         400         100.0           Level of education         2         0.5           Secondary School         107         26.75           STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28	Profile	Number of	Dt	
20 and Below       14       3.5         21-30       200       50.0         31-40       130       32.5         41-50       41       10.25         51-60       15       3.75         Total       400       100.0         Level of education       0.5       0.5         Primary School       2       0.5         Secondary School       107       26.75         STPM/Certs/Diploma       145       36.25         Degree       119       29.75         Master       23       5.75         PhD       4       1.0         Total       400       100.0         Household Number       1-2       51       12.75         3-4       189       42.75         5-6       126       31.5       7.75         9-10       3       0.75         Total       400       100.0         Type of Profession       Executive/ Professional       120       30.0         Executive/ Professional       120       30.0         Administration/Management       112       28         Technical Assistant       32       8         Retails<	Prome	Respondents	Percentage	
21-30         200         50.0           31-40         130         32.5           41-50         41         10.25           51-60         15         3.75           Total         400         100.0           Level of education         Primary School         2         0.5           Secondary School         107         26.75           STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Retails         51         12.7	Age Range			
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41-50       41       10.25         51-60       15       3.75         Total       400       100.0         Level of education       Primary School       2       0.5         Secondary School       107       26.75         STPM/Certs/Diploma       145       36.25         Degree       119       29.75         Master       23       5.75         PhD       4       1.0         Total       400       100.0         Household Number       1-2       51       12.75         3-4       189       42.75         5-6       126       31.5         7-8       31       7.75         9-10       3       0.75         Total       400       100.0         Type of Profession       Executive/ Professional       120       30.0         Administration/Management       112       28         Technical Assistant       32       8         Retails       51       12.7	21-30	200	50.0	
51-60         15         3.75           Total         400         100.0           Level of education         2         0.5           Primary School         2         0.5           Secondary School         107         26.75           STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	31-40	130	32.5	
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Primary School         2         0.5           Secondary School         107         26.75           STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Total	400	100.0	
Secondary School         107         26.75           STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Level of education			
STPM/Certs/Diploma         145         36.25           Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Primary School	2	0.5	
Degree         119         29.75           Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Secondary School	107	26.75	
Master         23         5.75           PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	STPM/Certs/Diploma	145	36.25	
PhD         4         1.0           Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Degree	119	29.75	
Total         400         100.0           Household Number         1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Master	23	5.75	
Household Number   1-2   51   12.75     3-4   189   42.75     5-6   126   31.5     7-8   31   7.75     9-10   3   0.75     Total   400   100.0     Type of Profession   Executive/ Professional   120   30.0     Administration/Management   112   28     Technical Assistant   32   8     Retails   51   12.7	PhD	4	1.0	
1-2         51         12.75           3-4         189         42.75           5-6         126         31.5           7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	Total	400	100.0	
3-4     189     42.75       5-6     126     31.5       7-8     31     7.75       9-10     3     0.75       Total     400     100.0       Type of Profession       Executive/ Professional     120     30.0       Administration/Management     112     28       Technical Assistant     32     8       Retails     51     12.7	Household Number			
5-6     126     31.5       7-8     31     7.75       9-10     3     0.75       Total     400     100.0       Type of Profession       Executive/ Professional     120     30.0       Administration/Management     112     28       Technical Assistant     32     8       Retails     51     12.7	1-2			
7-8         31         7.75           9-10         3         0.75           Total         400         100.0           Type of Profession         Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7	3-4	189	42.75	
9-10     3     0.75       Total     400     100.0       Type of Profession     120     30.0       Executive/ Professional     120     30.0       Administration/Management     112     28       Technical Assistant     32     8       Retails     51     12.7				
Total         400         100.0           Type of Profession         120         30.0           Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7				
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Executive/ Professional         120         30.0           Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7		400	100.0	
Administration/Management         112         28           Technical Assistant         32         8           Retails         51         12.7		120	20.0	
Technical Assistant         32         8           Retails         51         12.7				
Retails 51 12.7				
			_	
Non-Technical 40 10.0		51	12.7	
	Non-Technical	40	10.0	

Entrepreneur/Work	45	11.3
Independently		
Total	400	100.0
Income Range		
2,000 and Below	45	11.25
2,001-4,000	105	26.25
4,001-6,000	90	22.5
6,001-8,000	69	17.25
8,001-10,000	54	13.5
10,001 and Above	37	9.25
Total	400	100.0

The level of education influence behaviour of homebuyers. 73% of the respondents had underwent tertiary education and 27 % of the respondents had secondary education level. 36.25 % of the respondents had STPM/certificates and diploma qualification and 30% of the respondents held Degrees qualifications. Education levels influence the deliberation and preferences of the individuals' in house selections.

Most respondents (75%) had 3 to 6 household size. Household size determines the criteria or preferences of the homebuyers. Such criteria include housing size, housing type and housing comfort.

58% of the respondents worked as executive or professionals and management. 30% of the respondents were holding position as an executive or professional, while 28 % of them from management professions.

48% of the respondents earned between RM 2,000 and RM 6,000 monthly. Majority of the respondents (26%) earned between RM 2,001 and 4,000 per month. The mean income of the respondents was RM 5,904 and the median was RM 5,500 monthly. The income range influence housing selection criterion. The higher the income, the bigger the chances that respondents had to own houses, hence the more criteria would be considered, such as comfort, better surveillance and privacy.

# Perceptions and Information on the Element Housing Criteria

Table 2 shows the range of affordable housing price based on demographic and socioeconomic background. 90% of the respondents stated that the affordable housing price was RM 300,000 and below. Additionally, the mean affordable housing price was RM 211,070 and the median was RM 165,000. Below is the correlation between household income and housing price.

**Table 2**: Affordable house price

Price Range	Frequency	Percentage
300,000 and below	359	89.75
301,000-600,000	40	10.0

700,000 and above	1	0.25
Total	400	100.0
Mean	Median	Mode
RM 211,070	RM 165.000	RM 200,000

There was a statistically significant and moderate positive correlation between household income and housing price (r = .0428, = < 0.05) (see Table 3). The result indicated that the higher the household income, the higher the housing price affordable to the respondents.

**Table 3**: Pearson correlation between income and price range

		household income	housing price
household income	Pearson Correlation	1	.428**
	Sig. (2-tailed)		.000
	N	400	400
housing price	Pearson Correlation	.428**	1
	Sig. (2-tailed)	.000	
	N	400	400

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## Important Criteria in the Provision of Affordable House in Melaka

Table 4.0 shows the criteria in the provision of affordable housing. There were several housing criteria that were inquired and the data were analysed using relative importance index (RII) in SPSS. The purpose of the analysis was to measure the priority of the housing criteria according to the respondents. The highest RII score was House Price with RII of 0.90. Housing price was the main concern not only in Melaka but in Malaysia. Housing price were increasingly unbearable and unaffordable especially in major city areas.

The second highest RII score was Security Level with RII of 0.89 and the third highest RII score was Access to Public Facilities such school, clinic and many others. These facilities were essential to better facilitate homeowners to access better quality of life. On the other hand, the lowest RII score was Number of Bedrooms and Bathrooms and House Design with RII score of 0.82 and 0.80 respectively. In conclusion, if the houses was affordable and equipped with basic facilities and amenities, the housing designs would not be a major concern.

Table 4: Important criteria in the provision of affordable house

Statement	Total Weightage	RII	Rank
Type of House	3323	0.84	9
House Price	3594	0.90	1

Location of the house	3485	0.87	5
House design	3201	0.80	11
Number of Bedrooms and Bathrooms	3289	0.82	10
The Quality of Construction	3457	0.86	6
Total floor area	3392	0.85	7
Security Level	3571	0.89	2
Access to public Facilities	3518	0.88	3
Distance from working area	3505	0.88	4
Access to public transportation	3371	0.84	8

#### Level of Satisfaction with the Current House

Table 5 shows the level of satisfaction of the current house. Types of House had the highest weightage score of 2993 or 0.74 RII score. Secondly, Access towards Public Facilities had 0.74 RII score. Based on the verbal interviews, most respondents mentioned that the accessibility towards public facilities were short driving distances. The respondents were also satisfied with the distance to work. However, there were several issues to be addressed such as the Housing Price as well as the Accessibility of Public Transportation connecting to the neighbourhood areas. The Accessibility of Public Transportation was least satisfied with the RII score of 0.65. Hence improvement should be made on the accessibility to public transportation.

**Table 5**: Level of satisfaction with current house

Statement	Total	RII	Rank
	Weightage		
Type of house	2993	0.75	1
Access to public transportation	2602	0.65	12
House price	2782	0.70	11
Security Level	2855	0.71	7
Location of the house	2899	0.72	6
Total floor area	2790	0.70	10
House design	2796	0.70	9
Number of bedrooms and bathrooms	2886	0.72	5
Access to public facilities	2968	0.74	2
quality of construction materials	2837	0.71	8
Distance from work	2917	0.73	4
Overall satisfaction of current house	2953	0.74	3

#### Level of Satisfaction with Public Facilities and Infrastructure

Table 6 indicates the level of satisfaction on public facilities and infrastructure of current house. The highest weightage scored is water and electricity with 3053 or RII score of 0.76. The religious facilities and education facilities also shared the same RII scores which was 0.76, but differed by the weightage scores of 3025 and 3021 respectively. In addition, the drainage system and the health facilities also shared the same RII of 0.75 but the drainage total weightage was greater compared to health facilities. The sport and recreational facilities had the least score with RII score of 0.72. In summary, the respondents were satisfied with the overall basic facilities provided in most neighbourhood areas.

**Table 6**: Level of satisfaction of the public facilities and infrastructure

Statement	Total	RII	Rank
	Weightage		
Circulation system	2971	0.74	6
Water and electricity	3053	0.76	1
Drainage system	2984	0.75	4
Sewerage system	2948	0.74	9
Garbage disposal system	2887	0.72	11
Clinic and health facilities	2982	0.75	5
Commercial Facilities	2958	0.74	7
Playground and open spaces	2901	0.73	10
Sports and recreational facilities	2873	0.72	12
Religious facilities	3025	0.76	2
Education facilities	3021	0.76	3
Parking area	2959	0.74	8

## DISCUSSION AND CONCLUSION

The selection of housing criteria play a vital role especially to the first time homebuyers. The buyers were looking into houses that were decent to live, accommodate all the basic facilities, amenities and infrastructures. This study examine the important housing criteria based on respondents' preferences and satisfaction level on the current rental houses.

In order to encourage housing ownership, it is imperative to identify the determinants that attract individuals in buying a property (Tan, 2015). The housing price is closely related to income, education, household size and education level. It is anticipated that the suggestions made would help to minimize the current housing issues. According to the respondents, the main problem was the housing price. Housing prices were too high and were beyond respondents' ability to afford especially for those in the low and middle income groups. The housing schemes that were provided by the government were good enough to increase the number of housing ownership, yet the schemes still need to be regularly supervised.

Additionally, there should be enhancement of housing policies and regulations to be more pro poor. By increasing the construction of affordable housing and improving housing cost-effective design, housing prices would be more reasonable. Housing features could also be improved by upgrading facilities and amenities within the neighbourhood.

Affordable housing financing should be more attractive and reliable for all especially for the low income earners. The low income earners have restriction of income resources. The policy or programs that are going to improvised are anticipated to reduce the cost of homeownership through down payment and mortgage income payment. The government is urged to promote the increase in the availability of home financing by enabling the EPF fund to be more accessible to use for down payment and housing mortgage payment. The EPF process system should be simplified and integrated into all related agencies as it will ease process of application and submission of documents.

The study also shows most respondents were satisfied with the current condition of their houses. Yet, improvisation should be conducted from time to time in order to ensure that the people were happy with their living environment. Apart from that, the provision of parking spaces should also be revised especially in high-rise development. Multiple parking spaces for high rise buildings should be provided not only in high cost housing development but also for middle and low cost housing development. The accessibility towards public transportation should also be a concern by the housing developers and respective authorities. Access to public transport influence the value and the attractiveness of housing development.

In conclusion, more proactive approaches and housing strategies need to be executed to increase housing ownerships and better living environment are achieved.

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