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ADDRESSING ISSUES ON QUALITY IN LOW COST HOUSE CONSTRUCTION IN SELANGOR

Muhammad Firdaus Bin Abd Razak¹ and Mohd Fadzil Mat Yasin²

^{1,2}Department of Building Surveying, Faculty of Architecture, Planning And Surveying,
Universiti Teknologi MARA, Perak Branch, Seri Iskandar Campus, 32610 Seri Iskandar, Perak
Email: firdausrazak95@gmail.com¹ mohdf750@perak.uitm.edu.my²

Abstract:

A growing population in Malaysia demand for housing has also increased and the government has provided low cost housing to those with low household income. This is to give them the opportunity to have their own homes. For that reason many issues raised about low-cost houses. This paper discussed the quality issue of low cost house construction. Therefore the aim of this study is to study the quality issue of low cost housing in Malaysia. The objectives of this research are to explore the current quality issues for the development of low-cost housing and to identify the factors that influence the quality of low-cost houses in Malaysia. A literature review has been carried out and research was conducted among contractor G7 in Selangor State. The data collection of this research is by questionnaire and was analyzed by using SPSS with Version 24 which the latest one and Average Index Method. From the data collected and analyzed, the finding indicated that there are six factors that affect the quality of low cost housing construction and should be noted in order to get good quality of the house.

Keywords: Construction; housing; low cost house; quality;

1.0 INTRODUCTION

In the era of increased urbanization that can be seen in most countries today is widespread and has become a symbol of the economic prosperity that the country is seeking. However, due to this increase, there is also an overwhelming concern in this relatively large housing section of the population. This is because of the rapid growth of the country, increasing the number of people who will settle for a living. As the result of the population grows, demand for housing will also be increasing. According to Adebayo, (2013), as a result of the rapid growth experienced in most countries and due to the importance the quality and availability, housing plays in the lives of its inhabitants, various governments have searched for ways of providing shelter especially for lower income earners of their country. Sale, (2013) stated that the provision of housing has been a major concern and the inability to provide adequate, qualitative house and enhance the existing housing environment as to meet the rapidly increasing population in most towns and urban cities lead to nonconformity to residential building construction standards.

The construction industry of low cost housing can be considered as a major contributor to the economy, which also can create career opportunities as well as prosperity. However, due to time and budget constraint, many projects have faced the defect problems (Yong, 2016). Hashim, et al., (2012) stated that several issues were also recognized related to low cost housing quality based on Kuala Lumpur Structure Plan 2020 which includes low space standards, under the provision of community facilities, shortage of car parking spaces, high maintenance costs and poor quality of construction and materials in low cost housing projects.

2.0 LITERATURE REVIEW

In many developing countries, the governments are committed to provide low cost houses that are adequate, affordable and of accepted quality to the low income group as a basic social need. In the last few decades, many parts of the world were dominated by the construction of new stocks of houses (Isnin, et al., 2012). According to Salleh & Lee, (1997), low cost housing development in Malaysia is undertaken

by both the public and private sectors. The Malaysian government has committed billions of Ringgit Malaysia for providing its citizen with adequate, affordable and quality housing. In 1996, the “Zero Squatter by 2005” policy was implemented in the whole Malaysia. Further to the economic recession in the late 1997, a four-tier pricing system on PPR schemes in cities and major town for the resettlement of squatters has been implemented in order to ensure its citizen, particularly lower income groups, to continue enjoying the benefits of adequate, affordable and quality housing. However, it is important to ensure that the provisions of the housing are able to create a harmonious society and promoting sustainable living environment (Goh, et al., 2010).

2.1 Issues and problems for low cost housing development in Malaysia

The Malaysian Government provides for the lower income group with low cost housing that includes adequate playground area, community hall, landscaping and car parking; with accessible public schools, shops, public transport, medical centers and other commercial outlets. According to Karim, (2012), with these provisions, there are also frequent complaints from residents regarding the quality of these flats in terms of the building materials used during construction, the sanitary system, the facilities provided, the location, the maintenance along with many social problems. In addition, according to (Isnin et al., 2012) further investigation was carried out at low cost housing in Shah Alam, Selangor and it was found that many defects such as crack, dampness, damaged landscape area, sagging of the roof and etc. The crack was found on the floor, ceiling, external and internal walls, staircase and partial wall at car porch and backyard of terrace houses. For the dampness, it was found due to the roof leaks. These problems could be the result of poor workmanship, defects in the materials and lack of protection during construction work.

There are many defects and complaints from low cost housing residents in Malaysia on dissatisfaction with the quality of low cost housing construction. Most of the low quality housing in Malaysia is poor because it is equivalent to the price being sold to the buyer. Hence, the condition of the house in the future will be worsening and there will be many defects that give consumers a sense of security.

2.2 Factor that affect low cost housing construction quality

There are five (5) factors that affecting the quality of low cost house in Malaysia which are poor management and supervision on site, poor workmanship, material used, design layout and safety at the houses. According to Isnin et al., (2012), lack of practices of proper construction process and procedures in low cost housing projects may often bring problems to the house and surrounding area thus affecting the natural environment, health and quality of life. The management needs to take serious action or pay more attention on the construction process and procedure. This because it can affect the quality of the project in the future.

Kadir, et al., (2005) stated that construction labour productivity is of great interest to practitioners and researchers because it affects the quality of low cost housing construction project. To analyze the quality of workmanship and labour in low cost project, Quality Assessment System in Construction (QLASSIC) can be used. QLASSIC is an independent method to measure and evaluate the quality of workmanship and finishes of construction works based on approved standards.

Besides that, the material used on the site is one of the major concerns that can affect the quality of the house. The lower quality of material can affect the building in the future. Lee & Danesh, (2016) stated that the most commonly used the type of building frame is concrete, as it is considered much more economical than steel or timber. Other than that, the precast concrete which is concrete blocks is the most suitable material for low cost housing wall.

Design layout of low cost housing also the factor that influences the quality of low cost housing. Goh et al., (2010) stated that, the factor in determining a quality low cost housing are sanitary fitting, unit interval, unit size and unit internal layout. Layout plan of low cost housing should be suitable for

households. A typical family will have 5 people. Therefore the size of the house should be appropriate and the position of the bedroom, kitchen and toilet should be orderly.

Lastly is the house safety. Generally, occupants of low cost housing were concerned for their safety due to increasing crime cases within the low cost housing scheme compound. From the research that had been done by Goh et al., (2010), they highlight that on public housing program (PPR) the safety are low due to not enough lamp posts at car parking and garden area, no proper motorbike parking zone that equipped with metal bars for locking the motorbikes, no humps on driveways causing vehicle to race at driveway, no proper pathway from flats to garden or playground causing danger to kids who cross the driveway to the playground and 1200mm enclosed yard space enable thieves to climb into the unit from the yard.

3.0 METHODOLOGY

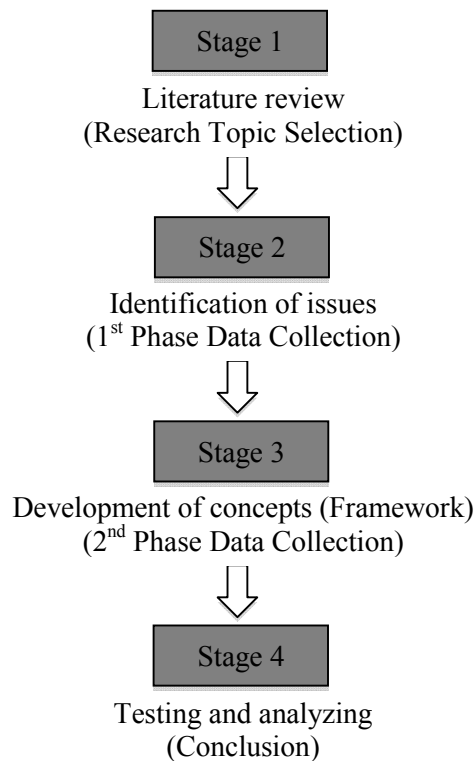


Figure 1: Research Methodology Framework.

Based on Figure 1, there are four (4) stages and two (2) phase of data collection in order to complete this research. In first phase data collection, the journal, articles and dissertation of other authors are being analyzed in order to achieve the objectives of this research. For second phase data collection, it was obtained from respondents and analyzed to get the actual data. The distribution of questionnaire survey is about 150 samples are distributed to contractor G7 in Selangor state and only 100 respondents give a feedback and answered the questionnaire. The percentages are 66.67% and it valid because more than half respondents. The questionnaires were distributed to the targeted respondent using the analytical technique based on the Likert scale divided by five categories of the rating scale. In addition, the data obtained is being analyzed by using Statistical Package for the Social Science (SPSS) with Version 24 which the latest one and means. The analysis indicates that demographic information is vital because it is to get the validity and clarify of study. This consists of year of the company establishment, year of the company

experience in low cost housing construction, respondent's academic qualification, and respondent experience in low cost housing construction. From the data obtain, the higher company and respondent experience in low cost construction are around 6 to 10 years and below than five years respectively. It can be said that the respondents have experience in low cost construction and know the issues on quality of low cost housing in Malaysia. Furthermore, the highest percentage of respondents' qualification academic is degree by 52.4%. Other than that, from the analysis of data collection of respondent, it indicated that the low quality selection of material used was the most quality issues for low cost housing development in Malaysia. In addition, skill and knowledge of labour workers is the main factor that affecting the quality of low cost house construction.

4.0 ANALYSIS AND FINDINGS

4.1 *Quality issues for low cost housing development*

This section is to explore the current quality issues for low cost housing development in Malaysia. Table 1 below shows the factor that affects current quality issues for low cost housing.

Table 1: Descriptive statistics of factor that affect current quality issues for low cost housing development.

No	Question	Scale					Average Mean Index	Rank
		1	2	3	4	5		
1	Low quality selection of material used	0	0	10	40	50	4.40	1
2	Poor workmanship	0	0	15	30	45	3.90	4
3	Poor management of maintenance work	5	10	10	35	40	3.95	3
4	Position of interior design layout	5	15	25	20	35	3.70	6
5	Safety of low cost houses area.	0	15	20	30	35	3.85	5
6	Lack of facilities provided	0	10	10	40	40	4.10	2
7	Selection of low cost housing location	5	20	10	30	35	3.70	7

Based on Table 1, the result that answered by respondents of the current quality issues for low cost housing development, it indicates that the critical factor is the low quality selection of material used. The average mean index of this factor is 4.40 with half of the respondents strongly agree that the factor affects the quality of low housing. The selection of low quality material used because in order to match with the selling price of the house. From that, it will affect the quality of the house in the future. Besides that, poor workmanship, poor management of maintenance work and lack of facilities provide also can be classified as the factor that affect because most of the respondents are agreed. From the rank 2 to 4, it can be concluded that the management needs to supervise the labour workers so they are doing their job seriously. The lowest average index is the position of interior design layout with 3.70. It can be said that the factor is not actually affecting the quality of low cost housing.

4.2 *Factors that affect the quality of low cost house construction*

This section is to identify the factor that affecting low cost house construction quality in Malaysia. Table below shows that the factor that affect the quality of low cost house construction.

Table 2: Descriptive statistics of factor that affect the quality of low cost house construction

No	Question	Scale					Average Mean Index	Rank
		1	2	3	4	5		
1	Poor management and supervision on site	0	0	20	45	35	4.15	4

2	Selection of material used	0	0	20	40	40	4.20	3
3	The quality of labour workers in terms of local and foreign workers.	0	0	20	55	35	4.35	2
4	Skill and knowledge of labour workers.	0	0	10	40	50	4.40	1
5	The size and position of interior design layout	10	10	25	30	25	3.50	6
6	Safety and facilities that provide at the houses area.	10	0	10	40	40	4.00	5

Based on Table 2, it indicates that the highest factor is the skill and knowledge of labor workers. The average mean index of this factor is 4.40 with half or respondents are strongly agreed. The second rank also about the quality of labour workers in term of local and foreign workers with 4.35 average mean indices. It can be said that skill workers play an important role in construction work in order to get a good quality of the house. Other than that, the selection of material is the third rating and also should be emphasized because the lower quality of material can affect the quality of housing in the future. The lowest rank is the size and position of interior design layout with 3.50. It can be said that the factor is not actually affecting the quality of low cost housing and it just makes the residents feel uncomfortable because of its size too small and un-strategic layout.

5.0 CONCLUSION

As a conclusion, this study found that there many issues on quality of low cost housing in Malaysia which are poor management of maintenance work, poor workmanship and low quality of the material used which causes many defects occur such as crack and dampness. From the data collection, the respondent agreed that the factors that affecting the quality of low cost house in Malaysia are poor management and supervision on site, low quality selection of material used, poor workmanship, the size and position of interior design layout and poor safety and facilities that provide at the house area. Government and contractors need to pay attention to the factors in order to get good quality of the house.

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