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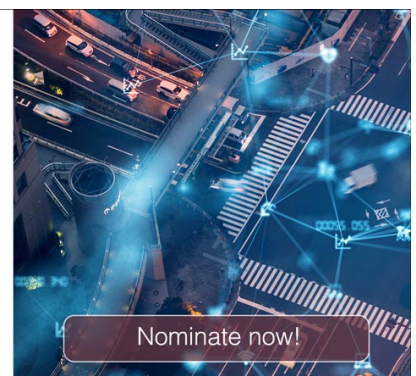


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Problems and Issues of High Rise Low Cost Housing in Malaysia

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Abstract. Major cities in developing countries are undergoing an enormous migration of peoples from countryside regions. This migration from the countryside regions were mostly to develop carrier and expecting for higher salary for their living survival. Consequently, the large amount of immigrants from countryside to the cities each year had created a great demand for urban housing. The impact from that, Kuala Lumpur, Selangor and its surrounding area now is crowded by the low-income group who cannot afford to own an affordable house. The government of Malaysia had aware of this situation and therefore had created the low cost housing especially for urban poor. However, there are many issues and problems arise regarding the low cost housing in Malaysia especially in urban area. The research is regarding a study on problems and issues of high rise low-cost housing in Malaysia. The need to examine the problems associated with the high rise low cost housing is to ensure the success of future low cost housing development in Malaysia.

1. Introduction

Housing becomes an important part of daily life, not only because of its cost, but also because of the access that housing can afford to other attributes of a viable urban life. Specifically, housing can help residents address the struggle to maintain economic livelihood, the threats of a changing climate, the challenges of urban violence, and the inequities of governance [1].

In Malaysia, housing requirement between the years of 2006 to 2010 is 709,400 houses. From that solid figure, twenty thousand units are allocated for hardcore poor, people living under poverty line, their need for housing, too urgent. 165,400 units belong to low-income earner as low-cost housing and 85,505 units are for low-medium-cost housing [2].

The total number of housing units in Malaysia targeted was 800,000 units under Seventh Malaysia Plan and 782,300 units of housing were targeted to be constructed under Eighth Malaysia Plan. During the Ninth Malaysia Plan, requirement for new houses is expected to be about 709,400 units of which



19.2% will be in Selangor followed by Johor at 12.9%, Sarawak 9.4% and Perak 8.2% [3]. Therefore, the Ninth Malaysia Plan (9MP) itself gave special attention to low-cost housing. The overall performance of houses built under the low-cost housing category is encouraging with 200,513 units completed or 86.4% of the set target. Out of this number, 103,219 units or 51.5% were constructed by the public sector including state economic development corporations. To ensure an adequate supply of low-cost houses, any mixed-development projects undertaken by private developers are required to allocate a minimum of 30% to low-cost housing [2].

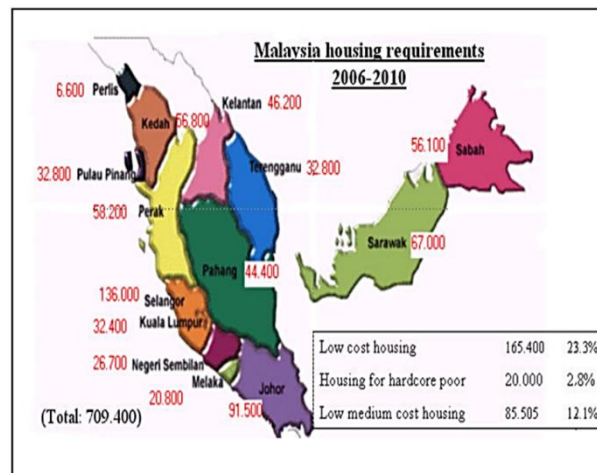


Figure 1.0: Malaysian Housing Requirements 2006-2010 [2]

2. Overview of low cost housing policy in Malaysia

Public house schemes are perceived by the government as the way for low income groups to own their houses and to live under better housing conditions by ensuring the provisions of minimum acceptable standards, amenities, and facilities within and outside the dwelling units. This will contribute to an improvement in the quality of life for residents [4].

The Malaysia government always tries to identify clearly the target groups entitled to low-income housing. The target group has continued to expand in accordance with the higher aspirations of the people, often matched by a corresponding increase in the capacity for delivery. The low-cost housing has relatively low selling prices or rentals so as to maintain high levels of affordability by the low income group [5]. The government is actively promoting policies to ensure quality and affordability of houses to all nations. Thus, this scenario shows that sustainability is becoming prominent in Malaysian housing industry [6].

Federal government in Malaysia involved directly in housing production and allocation system with the cooperation of the State governments for low cost housing. Funding for public low cost housing programmes usually comes from Federal Government, the State Governments are only responsible to identify the available state's land for housing construction and selection of eligible low cost house buyers. The local government generally did not involve directly in housing production, except approving the planning permission and building plans for housing construction by both public and private developers. However in major cities such as Kuala Lumpur and Petaling Jaya, local governments are also involved in administration and maintenance of public low cost housing with the Federal and State funding [7].

Table 1.0: Total strata public and private low cost housing according to state, 2013

State	Stratified/High Rise Low Cost Housing				
	Public Scheme	Private Scheme	Total	Total Unit	Estimated No. of Occupants
Federal Territory KL	59	2317	2376	130,566	652,830
Penang	29	340	369	73,541	367,705
Sabah	24	-	24	16,167	80,835
Melaka	23	80	103	14,218	71,090
Pahang	18	64	82	7326	36,180
Johor	18	205	223	57,234	286,180
Sarawak	18	-	18	12,832	64,160
Perak	15	74	89	11,430	57,150
Kedah	13	76	89	7754	38,770
Terengganu	12	14	26	3706	1853
Selangor	11	1063	1074	221,703	1,108,515
Negeri Sembilan	8	76	84	13,586	6793
Kelantan	3	6	9	1353	6765
Perlis	3	0	3	1378	6890
Total	254	4315	4569	572,704	2,785,706

Source:[7]

3. Problems and issues of low cost housing in Malaysia

The success of housing programmes does not only depend on merely provision of housing units, but also on other factors that affect the needs of residents. The failure of many housing projects may be attributed to the lack of knowledge on the determinants of residential satisfaction. Residential satisfaction reflects the degree to which individuals' housing needs are fulfilled. Therefore, it acts as a guide to policy makers to monitor the implementation of housing policies [8]. Several issues were also recognized related to low cost housing based on Kuala Lumpur Structure Plan 2020 which includes low space standards, under the provision of community facilities, high maintenance costs and poor quality of construction and materials in low cost housing projects [9].

The provision of strata low cost housing units in Malaysia contribute significantly in ensuring more houses were built to relocate the slums, provide decent and adequate home for the low income people since 1990s. However development of high rise housing in urban area for the low income people are not without any problems especially in public housing. Housing maintenance, management and anti-social behaviours problems are still the major issues that need to be addressed by the government [7].

Nowadays, there is a crisis in affordable housing where prices have risen steadily and construction does not meet standards that guarantee good quality over the life of a project [10]. Qualitatively the type of low cost housing in Malaysia has not been satisfactory to the family housing needs, comfort, social, cultural and religious needs [11]. Zainal et al. [12] stated that most of low cost houses in Malaysia have limited space and recreation areas such as multipurpose hall, and playground to be used for community and recreation activities. Therefore, local participation between policymakers and residents is increasingly necessary to make environmental elements and services available, make those neighborhoods liveable and improve the quality of urban life [13].

Urban housing problems normally arise when the developer in urban areas have less interested to build medium and low cost housing due to small profit gained from the development which consequently

affected in terms of affordability. In addition, with shortage of land supply and increased value of land in urban areas may also affect in the provision of open space. This is much concerned with the compliance of development plan and standard guidelines provided for planning approval where at some point, developers refuse to comply with the provision as there is lack of enforcement carried out by the authority [14]. Providing good quality housing units should promote more equal social, educational, and economic opportunities and help create more equitable environment for all [10].

4. Methodology

A self-administered survey was conducted to collect data regarding issues and problems of the low cost housing residents. The respondents eligible to participate in the survey were those who stay in the high-rise low cost housing. The data were collected by face-to-face interviews and distribution of questionnaires survey.

For the purpose of analysis of quantitative data collection through questionnaires survey, the Statistical Package for Social Science (SPSS) software version 20.0 was adopted. The objectives of using quantitative approach is to summarize statistically large information such as questionnaires responses feedback translated into figures that can be understood and interpreted.

5. Results and Findings

The research study was conducted in the state of Selangor in peninsular Malaysia. Census 2010 revealed that the total population of Malaysia was 28.3 million. Selangor state has a geographical area of 8,104 square kilometers and a population of 5,462,141 as the most populated state in Malaysia, census 2010 [9].

There were 700 sets of questionnaires distributed to all occupants in the high rise low cost housing in Selangor. However, there were only 510 sets of questionnaires had been returned to the researcher. The questionnaires survey contained three section. These were Demographic information; Problems/Issues of Current High Rise Low Cost Housing on Occupied Unit (Internal unit to perimeter drain area).

5.1. Section A of the questionnaires: Demographic Information

Section A of the questionnaire survey provided data on the age, gender, marital status, race, education level, total household income levels and employment status of the respondents, Table 2.0 illustrate the demographic information of the respondents in Selangor.

Table 2.0: Demographic information of the respondents

No	Item	Frequency	Percentage
1.	Age (years):		
	20-30	75	14.7
	31-40	170	33.3
	41-50	170	33.3
	Above 50	95	18.6
2.	Gender:		
	Female	280	54.9
	Male	230	45.1
3.	Marital status:		
	Married	387	75.9
	Single	67	13.1
	Single mother	39	7.6
	Single father	17	3.3

4.	Race:		
	Malay	199	39.0
	Indian	153	30.0
	Chinese	158	31.0
5.	Home ownership:		
	Owner	179	35.1
	Rent from landlord/owner	167	32.7
	Rent from State Government	164	32.2
6.	Length of occupancy:		
	Below 1 year	2	0.4
	2-4 years	72	14.1
	5-7 years	138	27.1
	8-10 years	150	29.4
	More than 10 years	148	29.0
TOTAL		510	100%

Based on the Table 2.0, 14.7% of the respondents were aged 20-30 years old. A further 33.3% of the respondents fell into 31-40 and 41-50 years old bracket respectively. Aged above 50 years old contributes to 18.6% of the total respondents. Majority respondents residing in low cost housing in Selangor are aged range between 31-50 years old. The results turned out to have similarities such as a study conducted by Sulaiman et al., 2016 that stated the highest of respondent age is 31 to 50 years old are commonly living in low-cost housing area in Malaysia

There were slightly more female (54.9%) than male (45.1%) among the 510 respondents involved. This might be because the distribution of questionnaires took place during weekday working hours; many male dwellers would have been at work and unable to respond to the questionnaires. Based on the Table 2.0, it is stated that 75.9% of the respondents are married; 13.1% of the respondents are single; 7.6% of the respondents are single mother; and 3.3% of the respondents are single father. As for ethnicity, there were Malay (39%), Chinese (31%) and Indian (30%). The proportion of race is vital to know to make sure that there is multicultural race exist in the high rise low cost housing area community.

It is also showed that 35.1% of the respondents owned their house during the case study period. Another 64.9% of the respondents rented their house, either rented from landlord or the state government. People usually rented a house as they feel convenient to travel to their working place and can save more time. They also can avoid traffic congestion during the peak hours.

There were 29.0% of the respondents had residency lengths of more than 10 years, 29.0% had habitation periods of 8–10 years, 27.1% had habitation periods of 5–7 years, 14.1% had a length of residency of 2–4 years and a further of 0.4% had lived in the low cost house below than a year. This high level prevalence of occupancy for periods over four years as described indicates that the respondents were well-placed to convey their experiences of living in the high rise low cost housing neighbourhoods. These demographic results have; thus, confirmed that the respondents in this case study are reasonably representative of a low cost housing in Malaysia. The duration of occupancy equal to five years or more, means that these respondents have, potentially, developed a sense of community and neighbourliness in the high rise low cost housing in Malaysia.

5.2. Problems/Issues of Current High Rise Low Cost Housing on Occupied Unit (Internal unit to perimeter drain area)

Section B of the questionnaire requires the respondents to rate their satisfaction level regarding the issue and problems faced by them during their stay in the high rise low cost housing. The respondents were need to rate their satisfaction level based on five numerical Likert-scale; “1” (Strongly satisfied), “2”

(Satisfied), “3” (Neutral), “4” (Dissatisfied), and “5” (Strongly dissatisfied). Table 3.0 illustrates the occupants’ satisfaction level towards the listed issues.

Table 3.0: Percentage of ‘strongly satisfied and satisfied’ level on high rise low cost housing issues

No	Issue	Strongly Satisfied	Satisfied	Strongly Satisfied & Satisfied	Percentage
1	Roof leakage	6	187	193	37.8%
2	Criminal cases	0	192	192	37.6%
3	Corridor lighting	0	76	76	14.9%
4	Noise	0	70	70	13.7%
5	Drainage system	0	58	58	11.4%
6	Fire door	0	24	24	4.7%
7	Corridor spaces	0	20	20	3.9%
8	Safety walking under uncovered corridor	0	16	16	3.1%
9	Staircase condition	0	15	15	2.9%
10	House design	0	7	7	1.4%
11	Plumbing system	0	5	5	1.0%
12	House workmanship	0	4	4	0.8%
13	Lift numbers	0	3	3	0.6%
14	Lift size	0	3	3	0.6%
15	Handicap facilities	0	3	3	0.6%
16	Material quality	0	2	2	0.4%
17	Lift maintenance	0	1	1	0.2%
18	Internal ventilation	0	0	0	0.0%

Table 3.0 above shows the questionnaires results in relation to occupants’ satisfactory and strongly satisfactory level to the issues and problems in their the low cost housing area. As depicted in the table above, there are 38.7% respondents satisfied with the issue of roof leakage. This is because most of the respondents do not experience such issue as their housing unit is in the mid or low levels. Respondents are quite satisfied with the low criminal cases within their low cost housing vicinity. This is due to the high density populated low cost house living in close community. Thus everyone takes the responsibility and awareness for crime prevention. 14.9% respondents are satisfied with corridor lighting and 13.7% shows satisfaction for noise issue at low cost housing complex. A total of 7 issues and problems having less than 1% respondents for satisfied and strongly satisfied. These are namely house workmanship, numbers of lifts, size of lifts, availability of facilities for handicap, quality of building materials, issues of lift maintenance and internal ventilation.

Table 4.0: Percentage of ‘Strongly dissatisfied and dissatisfied’ level on high rise low cost housing issues

No	Issue	Strongly Dissatisfied	Dissatisfied	Strongly Dissatisfied & Dissatisfied	Percentage
1	Lift maintenance	386	112	498	97.65%
2	Lift size	355	130	485	95.10%
3	Lift numbers	357	125	482	94.51%
4	Handicap facilities	295	170	465	91.18%
5	House workmanship	217	224	441	86.47%
6	Plumbing system	231	207	438	85.88%
7	House design	185	233	418	81.96%
8	Material quality	147	258	405	79.41%
9	Safety walking under uncovered corridor	199	197	396	77.65%
10	Staircase condition	141	214	355	69.61%
11	Corridor spaces	134	214	348	68.24%
12	Fire door	120	221	341	66.86%
13	Internal ventilation	68	219	287	56.27%
14	Drainage system	85	181	266	52.16%
15	Corridor lighting	47	193	240	47.06%
16	Noise	71	122	193	37.84%
17	Criminal cases	89	49	138	27.06%
18	Roof leakage	19	59	78	15.29%

Table 4.0 above shows the dissatisfaction and strongly dissatisfaction level of the low cost house residents' towards the problems and issues faced. The top three issues faced are related to the lift, namely lift maintenance (97.65%), lift size (95.10%) and numbers of lift (94.51%). The numbers of lift are insufficient and to make it worse most are having malfunctioning lift. This is then followed by the availability of facilities for disabled. The next four problems are related to the quality of the low cost house which are house workmanship, plumbing system, design of the house and construction material quality used. In between 79% to 84% of respondents agreed to these common quality problems. Subsequent group of problems are associated with the common area within the low cost housing complex. The issues of safety while walking under the uncovered corridor, condition of the staircases, corridor spaces, condition of the fire door, internal ventilation and drainage system are recorded as dissatisfaction and strongly dissatisfaction among 52% to 77% of the respondents. Finally four issues recorded below than 50% response are corridor lighting issue, noise problem, numbers of criminal cases and roof leakage. Low criminal cases shows that the level of safety and security at low cost housing area are good as many dwellers are house wives and senior citizens which normally occupy the house during day time. Close community at low cost housing complex also contributes to low crime case. Problem having lowest response is roof leakage as this is only experienced by several homeowners residing at the topmost level in each block.

Table 5.0: Percentage of 'Neutral' level on high rise low cost housing issues

No	Issue	Neutral	Percentage
1	Noise	247	48.4%
2	Roof leakage	239	46.9%
3	Internal ventilation	223	43.7%
4	Corridor lighting	194	38.0%
5	Drainage system	186	36.5%
6	Criminal cases	180	35.3%
7	Fire door	145	28.4%
8	Corridor spaces	142	27.8%
9	Staircase condition	140	27.5%
10	Material quality	103	20.2%
11	Safety walking under uncovered corridor	98	19.2%
12	House design	85	16.7%
13	Plumbing system	67	13.1%
14	House workmanship	65	12.7%
15	Handicap facilities	42	8.2%
16	Lift numbers	25	4.9%
17	Lift size	22	4.3%
18	Lift maintenance	11	2.2%

Out of 510 respondents, it is also important to point out the statistic of those in neutral position, neither satisfied and strongly satisfied nor dissatisfied and strongly dissatisfied. Noise issue is less of a concern among 48.4% of respondents though low cost housing complex is normally densely populated. Secondly followed by the problem of roof leakage which is only experienced by dwellers at the topmost floor. This is followed by three physical properties of the low cost house which is internal ventilation (43.7%), corridor lighting (38.0%) and drainage system (36.5%). 35.3% respondents are neutral on social issue such as criminal cases that happened within their low cost housing area. Issues related to safety during emergency such as fire door condition, space on the corridor and condition of staircase is responded as neutral by 28.4%, 27.8% and 27.5% respectively. The lesser the percentages means respondents regard these issues either as satisfaction or dissatisfaction. This is shown by the bottom three issues that is marked as neutral namely lift numbers, lift size and lift maintenance in which is the top three dissatisfaction issues as depicted in Table 4.0 above.

6. Discussion

Studies suggest that low-income households are somewhat less likely to move than higher income groups. The studies income household have more imply the fact that higher choices in the housing market as they are less deterred by the high transaction cost. Thus, higher income group are more likely to move as compared to low income households [15]. Due to this reason, there is a need to improve on all the problems faced by all residents in the high rise low cost housing in Malaysia. Governments has put up continuous efforts in the provision of low cost housing for the benefits of low income earners to own a house and thus provide better living for their families. However the issues and problems faced by the dwellers need to be emphasized and rectified. The most common problem at high rise low cost house is the availability and sufficiency of lifts which affects all residents. Numbers of lift is insufficient thus increases the frequency of use. Lifts are not being regularly maintained thus resulting in frequent breakdown. The quality of low cost house units in terms of construction material, internal design, layout and plumbing system also need to be taken seriously.

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