

**AN ASSESMEN OF DISABLED COMMUNITY ABILITY TO  
OWN RESIDENTIAL PROPERTY IN URBAN AREAS OF  
KUALA LUMPUR AND SELANGOR**

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## **ABSTRACT**

Owning a residential property provides the sense of security which leads to happiness, productive and fulfilling of one live. Moreover, home ownership able to create stability and improve the quality of life of the disabled communities. As Malaysia approaches developed status and becomes a high-income economy by 2020, the housing industry needs to be adaptive to demand for special groups. Everyone has the same right to own a good living standard and as to achieve this standard, all people regardless their physical ability should have access to own a house. According to Lusher, 1998, universal houses included the well-planned elements which make the house can be used by all family members and it is also incorporate the principle of universal design as to provide a comfort and safe house. The aim of this research is to study on the ability and preferences in owning residential property among the disabled community in Kuala Lumpur and Selangor. This study looked at the main preferences in term of the housing's location, design and price among the disabled community in owning residential property and the level of satisfaction towards the current location, design and of their residential property. This study was carried out by using the quantitative approach where a questionnaires survey were distributed to 800 of respondents among the disabled community with mainly focused on two categories of disabilities, the physical and visual impairment. The outcome of this study will describe the preferences in owning residential property and level of satisfaction among the disabled community on location, design and price factor. It concludes by providing housing strategy planning in term of location, design and price for the disabled community. This research also will become a reference and a benchmark for providing more informed and leading to better policy formulation and a healthier development of housing industry for the disabled community.

**Keywords:** *Disabled community, residential property, location, design, price, home ownership, preferences*

## INTRODUCTION

According to Yap Kioe Sheng (2016), since the late 1980s, the UN-Habitat has promoted an enabling strategy for its global goal of adequate housing for all. The strategy contends that markets should be the primary housing delivery mechanism and that the public sector's role is to introduce incentives and facilitate housing actions by other factors, through partnerships of local government, the private sector and non-governmental and community-based organizations (NGOs and CBOs). The strategy accepts the limitations of the market for housing the poor and stresses the need for government to recognize and upgrade informal settlements and to develop innovative approaches to low-income housing. Today, most governments in Asia adhere to the enabling strategy, as it has proven to be effective in delivering adequate housing to large sections of the urban population. The strategy was not an isolated initiative, but part of a broader agenda of national and global market liberalization which has brought rapid economic growth in Asia and an expansion of its urban middle class. Without economic growth, the enabling strategy may not have been as effective. Yet, millions of urban poor still remain without adequate housing despite a host of innovations especially disabled groups, because rapidly rising land values and policies to optimize land use blunt any attempt to secure land for housing them. (UNCHS, 1991: 12-62 and UNCHS, 1997:37)

Previously, large institutions had been the number one shape of housing aid with the efforts underpinned by way of notions of pity and charity, and embodying a medicalized nation of disability. However, modern-day tactics to incapacity housing aid reveal the advantageous results for human beings with disabilities of dwelling inside the network rather than in institutional care (e.g. Bostock et al., 2001; Stancliffe & Lakin, 2005; Bleasdale, 2006). Those adjustments represent a paradigm shift from professional, controlled offerings in segregated establishments to services that underpin self-willpower and network participation (Laragy, 2002). Such arrangements can provide higher non-public aid and housing options, in addition to offer an extra opportunity for humans with disabilities to take part in their communities (Epstein-Frisch et al., 2006).

This confined access to housing help creates in addition barriers to equality for people with disabilities. Across the world, people with disabilities, advocacy companies, key non-authorities and government stakeholders are trying to find approaches to enhance housing assist preparations in order that the preparations higher respond to the proper of human beings with disabilities to stay in housing settings of their preference, acquire their preferred assist to stay there and lead full and independent lives.

The country wide public and policy reputation of the need for greater bendy processes to housing aid is likewise meditated internationally beneath Article 19 of the United Nations conference at the Rights of individuals with Disabilities (CRPD), which defines impartial living as the right of all humans with disabilities to live inside the community. The CRPD says that people with disabilities ought to have the opportunity to select their region of residence and in which and with whom they live on an same foundation with others, and not be obliged to live in a selected dwelling association.

## **PROBLEM STATEMENT**

Firstly, many countries used to have public-sector disabled group rental housing programmes that supplied subsidized apartments, but the supply was usually too small to meet the demand, while the type of housing did not match the lifestyle of many of the disabled group. Units were often captured by the middle class whose lifestyle better matched the type. As enabling policies extricated the public sector from direct involvement in housing supply, public rental housing was often sold to the tenants, reducing the formal housing options for the disabled, without offering any alternatives. Moreover, many local governments lack the institutional capacity or political will to be actively involved in housing the disabled group and need support by a national agency to supplement local capacity (Kumar, 2003). Because the disabled cannot meet the loan criteria, they do not have access to formal housing finance, while commercial banks are reluctant to become involved, because of the small size of the loans, their relative cost and the perceived risk of lending to the poor. NGOs promote savings-and-loans schemes, but the disabled's ability to save is limited and there is always a need for additional funds (Jones, 2011).

Secondly, the lack of urban land for informal housing forces some disabled community to shift from informal homeownership to rental housing which is found in the informal sector as well as the semi-commercial sector (Ghertner, 2012). Centrally located buildings destined for demolition may be rented to the disabled group as a temporary arrangement; other buildings have been recently constructed. Both offer very small units and minimal services. In addition to their locational advantages, their variety in type, size, contractual arrangement, quality and rent make rental housing attractive for the disabled group. Units are often occupied by several relatives and friends who share the costs. Despite its importance in many cities, rental housing is often neglected in studies, surveys and policies.

Thirdly, according to Sengupta (2010), persons with disabilities are usually the nation's largest minority and they tend to be marginalized in all aspects of life. They usually experience substantially poorer quality of life and are more likely to be unemployed due to institutional discrimination. He added that a number of challenges of the disabled people, which include continued charity model with lack of respect, lack of uniform professional and quality services by the Health, Welfare and Education Departments, growth of poorly trained professional manpower, lack of integration between various sectors, unhealthy rise in financially motivated services, and vulnerable segments of the population.

The statement of problem above has presented comprehensive issues related to the disabled community ability in purchasing and owning the residential units. Despite the high achievement of the construction industry in the world including Malaysia, there has been lack of study on the consideration of disabled community opportunity with regards to the residential property. Therefore, this study deals with the urban areas in Selangor and Kuala Lumpur where disabled group is often overlooked.

## **RESEARCH OBJECTIVE**

The research aim is *to identify the housing affordability level of disabled community in urban areas of Kuala Lumpur and Selangor and the preferences in buying a house.*

Four objectives are designed to achieve the research aim as listed below:

**i. Objective 1**

To identify the current housing policies and strategies in Kuala Lumpur and Selangor for disabled (community housing and financial accessibility).

**ii. Objective 2**

To identify the ability and preferences of disabled community in owning the residential property in term of price, design and location.

**iii. Objective 3**

To identify the issues and problem faced by the disabled community to own house/ residential property in urban areas of Kuala Lumpur and Selangor.

**iv. Objective 4**

To propose new strategy and action plan on housing scheme for disabled community in urban areas of Kuala Lumpur and Selangor.

## **LITERATURE REVIEW**

People with disabilities (PWDs) in Malaysia can be considered as one of the most vulnerable of the minority group in the Malaysian population. World Health Organization (WHO) and World Bank (2011) estimated that there are 15% of the world population has some form of disabilities. According to the Department of Social Welfare Malaysia, this percentage does not refer to the whole disabled people in Malaysia because these data are incomplete. It happens as registration of persons with disabilities in Malaysia is not compulsory, and is done only on a voluntary basis. In addition, the data are not up to date, as the names of those who have died are not deleted from the main record.

World Health Organization (WHO) (2011) defines disability as any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being as a result of impairment. According to the Ireland Disability Act 2005, the definition of disability was when it comes to a person, approach a limit within the capacity of the person to hold on a career, enterprise or occupation in the country or to take part in social or cultural lifestyles within the state via reason of a long lasting physical, sensory, intellectual health or highbrow impairment.

Persons with Disabilities Act, (Act 687), (2008) defines person with disabilities (PWDs) as those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society.

*Equality Act 2010 of Parliament of the United Kingdom stated that the human beings is disabled in the event that they have a bodily or intellectual impairment that has a 'huge' and 'lengthy-time period' terrible impact on their capacity to do regular each day activities.*

The Australia Disability Discrimination Act 1992 defined disability as:

- i. General or partial lack of the person's physical or mental functions
- ii. General or partial loss of a part of the frame
- iii. The presence inside the frame of organisms inflicting disease or contamination
- iv. The malfunction, malformation or disfigurement of part of the individual's frame
- v. An ailment or malfunction that results inside the character gaining knowledge of differently from someone without the sickness or malfunction
- vi. An ailment, infection or sickness that influences someone's concept strategies, perception of truth, feelings or judgment, or that effect in disturbed behavior.

*Source: Disability Employment Australia (2012)*

From all these definition, it can be summarized that the definitions of disability as according to all author and act was a person or community that having physical or mental impairment and have difficulties in movement to perform any activities that they want.

Referring to the Person with Disabilities Act (Act 685), (2008) there are seven categories of disabled people which are:

- i. Visually impaired  
4 levels of visual function were normal vision, moderate visual impairment, severe visual impairment and blindness. (International Classification of Diseases),(2006)
- ii. Hearing impaired  
The impairment in hearing whether permanent or fluctuating, but not necessary a deafness. (Disabilities Education Act (IDEA), (2003).
- iii. Lack of physical effort  
Being sedentary or physically inactive is expending less than 1.5 kcal/kg/day in leisure physical activities. (National Population Health Surveys of Canada), (2016)
- iv. Learning issue  
Problems in learning and writing, also person that has problem in understanding language and understanding on what they learned.
- v. Speech disabilities  
Difficulties pronouncing sounds, or articulation disorders, and stuttering. (American Speech-Language-Hearing Association (ASHA), (2016)).
- vi. Mental disabilities  
Ranging from the depression-related illness, anxiety-related disorders, psychotic disorders to autism, learning disabilities, and mental retardation (intellectual developmental disorder) and low IQ. (Disability Secret (2016))
- vii. Less effort wide  
Person that have more than one type of disability. (Universal Design Guidelines), (2011).

According to Social Welfare Department Malaysia or known as JKM (2016) there are 356,677 peoples with disabilities were registered in Malaysia as of 2015. However, as the registration is voluntary, it isn't always reflective of the actual numbers in the country. Malaysia's has taken a vital step to protect the rights of people with disabilities via ratifying the convention at the Rights of people with Disabilities (CRPD) in 2010. The Government has also adopted the Persons with Disabilities Act 2008 and provides social protection services in areas such as health, rehabilitation and education for children with disabilities guided by the National Policy for Persons with Disabilities and the National Plan of Action for Persons with Disabilities. Based on this Act, it can be summarized that the government are taking the matters of disabled community as serious issues that need to be handled in term of their financial, health, social and others.

One of the programme under Social Welfare Department Malaysia is 'Rehabilitation of Human Beings with Disabilities'. The objectives of the rehabilitation services for People with Disabilities (PWDs) are to assist PWDs to be self-reliant and to achieve their full potential. Services provided include:

i. Registration

The registration of Person with Disabilities (PWDs) was made voluntarily in nationwide. The agencies that involved with this registration were Social Welfare Department Malaysia (JKM) and Health Ministry of Malaysia. The registration must be made at the Welfare Office. The aim of this registration is to know the number, distribution and categories of disabled people in Malaysia for the purposes of designing programs and appropriate facilities related for them.

ii. Launching Grants

To provide financial assistance to the target groups who have interest and potential to starts their small companies or business in order to improve their lives. The maximum limits of this grants is RM2, 700.00 with once supervision in three months.

iii. Disabled Workers Allowance

A total of RM350.00 per month of allowance is to meet the basic needs of life for disable people. It is also as incentive to encourage the disabled to work and live independently and become productive members of society. To allow they get this allowance, the disable person must register with Social Welfare Department Malaysia (JKM).

iv. Artificial Aid and Assistive Devices

Helping the disable person to purchase equipment and support tools with recommendation by the medical officer.

v. Educational Facilities

To encourage People with Disabilities (PWDs) to further their study to a higher level. The government has provided financial assistance to students with disabilities studying in institution.

vi. Medical Rehabilitation

The government has agreed that all registered PWDs to be exempted from any payment of medical treatment in government hospital.

vii. Housing Schemes

a. Kuala Lumpur City Hall (DBKL)

Provides facilities person with disabilities to rent the houses low-cost or flats DBKL to give reduction in rental rates to people with disabilities.

b. Syarikat Perumahan Nasional Berhad (SPNB) give priority to Low-income disabled persons in obtaining housing low costs and medium low of 20 percent (%) price discounts offered.

*Source: Department of Person with Disabilities (JPOKU), (2016)*

The numbers of registered PWDs in Malaysia were changing by years as it has been reviewed by the Social Welfare Department Malaysia after data cleansing for died cases and others.

Registration of Person with Disabilities (PWDs), 2013 -2015

| Year | Number of Cases |
|------|-----------------|
| 2013 | 264,448         |
| 2014 | 318,132         |
| 2015 | 365,677         |

*Source: Social Welfare Department Malaysia, 2016*

Registration of Person with Disabilities (PWDs) by Categories of Disabilities 2015

| Categories of Disabilities     | Number of Cases |
|--------------------------------|-----------------|
| Visual Impair                  | 32,807          |
| Hearing                        | 29,636          |
| Physical                       | 125,491         |
| Learning Disabilities          | 129,550         |
| Speech                         | 1,827           |
| Mental                         | 29,403          |
| Others (Multiple Disabilities) | 16,963          |
| <b>Total</b>                   | <b>365,677</b>  |

*Source: Social Welfare Department Malaysia, 2016*

## Registration of Person with Disabilities (PWDs) by State, 2015

| <b>States</b>    | <b>Number of Cases</b> |
|------------------|------------------------|
| Johor            | 45,953                 |
| Kedah            | 32,983                 |
| Kelantan         | 25,947                 |
| Melaka           | 18,391                 |
| Negeri Sembilan  | 17,273                 |
| Pahang           | 21,946                 |
| Perak            | 33,020                 |
| Perlis           | 4,404                  |
| Pulau Pinang     | 22,094                 |
| Sabah            | 22,806                 |
| Sarawak          | 25,037                 |
| Selangor         | 55,594                 |
| Terengganu       | 18,281                 |
| W.P Kuala Lumpur | 20,911                 |
| W.P. Labuan      | 1,037                  |
| <b>Total</b>     | <b>365,677</b>         |

*Source: Social Welfare Department Malaysia, 2016*

## **PREFERENCES IN OWNING A HOUSE FOR DISABLED COMMUNITY**

In this research, there are three preferences that would be discussed for the issues of owning a house for disabled community. The three preferences were housing price, location and the universal design of the house.

### **i. Housing Price**

The price of purchasing a house is really a matter for everyone regardless their abilities. In Malaysia, there are few affordable housing scheme provided such as PR1MA, Rumah SelangorKu, RUMAWIP, My First Housing Scheme, MyHome, PPR and others. From all these housing scheme, according to the list of program for disabled community, government is giving a priority to low-income disabled persons in obtaining housing low costs and medium low of 20 percent (%) price discounts offered.

Price of house also related with the access to loan. Credit facilities or finance can be a factor in encourage and discourage in addition to offering a property land (Wurtzebach and Miles, 1994). Credit facilities refer to the amount of loan allowed.

### **ii. Location of house**

The location of the residential property or house is said to be the most important factor in selection of property purchase. Buyers typically give primary consideration to the accessibility, convenience and proximity to the property (Hamid, 2006). According to Bernard Kane (1982), good locations of house often have a high demand from the buyers.

As for the disabled community, the location is really important because it must be near to the all facilities and easily access for them which would help them to move around with minimum supervision.

According to Brendon DeSimone, 2013, there are three factors that determine good location for a house which are:

- a. A safe neighborhood
- b. Convenient access to popular places, shops and restaurants
- c. Access to public transit and or freeways

While Elizabeth Weintraub has mentioned that the location of the house should be:

- a. It's Close to Work/School
- b. Location of Local Amenities

### **iii. Design of house**

Everyone shares the right to a decent standard of living. Essential to the achievement of this standard and therefore to the fulfillment of human life beyond simple survival is access to adequate housing.

According to Lusher, 1998, the universal home includes thoughtful and well-planned features that make the residence more usable by all family members. Universal homes incorporate universal design principles, resulting in a living environment that can, with little difficulty and expense, be adapted to virtually any user's long term comfort, safety and ease.

The important factors of considerations on the requirements of universal design house are:

- a. Efficient design
- b. Minimal effort
- c. Adaptability
- d. Ease of cleaning
- e. Maneuvering space
- f. Safety

Among the characteristic of barrier free adaptable housing to make it become more preferable for disabled people are:

- a. It allows free access to buildings, housing units and services for people with mobility, hearing or vision limitations.
- b. It provides adequate turning and working space for wheelchairs in housing units and public spaces.
- c. It improves the safety of people engaged in normal daily activities.
- d. It provides features that increase safety in emergencies.

## **HOUSING ISSUES FOR PEOPLE WITH DISABILITIES**

In order to achieve the target to ensure disabled community will be able to own the residential property with affordable house price, there are few issues on the housing for disabled need to be highlighted. Among of the issues are:

Housing issue for disabled community in Malaysia and United States

| <b>Source / Country</b>        | <b>Year</b> | <b>Issues</b>  |
|--------------------------------|-------------|--|
| 11 <sup>th</sup> Malaysia Plan | 2015        | i. Mismatch of demand and supply for affordable houses. With the increasing number of disable person in Malaysia, the units of house for disabled supposedly need to be increased too. |
|                                |             | ii. The increase in house prices in town center. This condition has reduces the supply of affordable houses especially for disabled community.   |
|                                |             | iii. Maintenance of public housing is weak. This happen when the housing provided for the disabled community is under low cost public housing.   |
|                                |             | iv. Government has insufficient money to achieve the need of facilities in disabled housing area.  |
|                                |             | v. Most of the public housing especially for disabled community was not equipped with basic facilities such as school, clinic and public transport.                                    |
| The Arc of the United States   | 2016        | i. Affordability gap between income and affordable house price for people with disabilities to own house.  |
|                                |             | ii. Accessibility of disabled community houses are not in good design especially for the wheelchair user   |
|                                |             | iii. Housing discrimination for people with disabilities when they would like to buy a house.  |

Source: 11<sup>th</sup> Malaysia Plan (2015) and the Arc of the United States, 2016

## **AFFORDABLE HOUSING PROGRAM FOR DISABLED COMMUNITY IN MALAYSIA**

People with disabilities (PWD) or disability people are part of the community that need to be fairly concerned and should not being abandoned in the normal societies. Therefore, they will have equalized rights and opportunities to live a life like any other member in society. The rights-based approach should be used to ensure the protection of the interests as well as welfare of the disabled are well protected (Department of Social Welfare Malaysia, 2015). According to (New Straits Times, March 2015) has mentioned in 2007, Malaysia has established the National Policy for Persons with Disabilities aimed at increasing their involvement and contribution in the nation's growth. This also signifies that, government needs to pay attention to the issue of PWDs especially housing possession to ensure they are given equal treatment and have the same opportunities as the others.

People with disability have negative aspects of interaction in terms of body impairment, limitation activity and contextual factors. Therefore, people with disabilities need proper housing and dwelling (Azlinor Suffian, 2007) in order to ease their normal routine like other's human being without too much depending on surrounding people.

### Summary of affordable housing programme for the disabled in Kuala Lumpur and Selangor

| Housing programme   | Location                                | Units provided   | Price   | Design for the disabled |  |
|---------------------|---|------------------|---|-------------------------|--|
| PR1MA               | Cyberjaya 2, Selangor (Sepang)          | To be determined | RM274, 000  | ✓                       |  |
| PPA/PA              | Kuala Lumpur                            | 123              | Sale: RM 35, 000<br>Rent: 50 % from RM 94, RM124 and RM 218 | ✓                       |  |
| Rumah Selangor      | Bandar Baru Bangi                       | 4                | RM60,000,<br>RM99,00 &<br><RM150,000                        | ✓                       |  |
|                     | Klang                                   | 4 (Jenis A)      | RM40,000  |                         |  |
|                     | Batu Caves                              | 10               | RM65,000  |                         |  |
|                     | Kota Puteri,<br>Sungai Buloh            | 2                | RM180,000 –<br>RM220,000                                    |                         |  |
| PPA1M               | No project in Kuala Lumpur and Selangor |                  |   |                         |  |
| Rumah Idaman Rakyat | No project in Kuala Lumpur and Selangor |                  |   |                         |  |

### GOALS OF DISABILITY HOUSING SUPPORT POLICY

The intention of disability housing assist coverage is to achieve 4 coverage dreams.

i. Human rights

Fulfilling the proper to housing assist allows participation in wider political, social, financial and cultural spheres of society (Parker, 2007). A cause of housing guide regulations is to assist humans with disabilities to lead full and impartial lives (Bigby, 2004). Human rights shape the conceptual framework for the opposite three desires of incapacity housing assist, which aren't unbiased of this first purpose.

ii. Great of life

Enhancing great of existence is a goal of all disability coverage as is identified under the Australian Commonwealth incapacity offerings Act 1986 (Felce 2000). When compared to institutions, network-based housing can provide

more possibilities for precise first-rate of lifestyles, such as network get right of entry to, self-willpower, well-being, social networks and self-care (Emerson et al, 2001; Howe et al, 1998; Kim et al, 2001; Stancliffe & Keane 2000; younger, 2006).

iii. Unbiased living

Facilitating unbiased living selections promotes the proper of humans with disabilities to stay in the community, to pick their region of residence, in which and with whom they live and without obligation to live in a specific housing arrangement. to satisfy their man or woman desires and possibilities they must have get right of entry to quite a number in-home, residential and other community assist offerings, consisting of non-public assistance vital to support dwelling and inclusion within the community, and to save you isolation or segregation (Bigby, 2004; Burchard 1991; United countries, 2008;).

iv. Price effectiveness

Deciding on cost powerful policies from the perspective of the man or woman using the housing guide and the corporations organizing them ambitions to maximize affordability and effects.

## **DATA COLLECTION METHOD**

### **Primary Data Collection Method**

All the data that are collected at first time are included under the primary data collection method. Three approaches or methods are comprised under the primary data collection method such as observation method, in-depth interview and survey through questionnaire (Scruggs and Mastropieri, 2006). Under the primary data collection method, most of the researchers prefer to use direct communication with the respondents to reach at the result of the research. In observation method, data are collected by the researcher through observing response or activities of the targets and personally going in the field (Church, 2002).

Along with this, through conducting in-depth interview and gaining oral-verbal response of the respondents, data are collected by the researcher. Under the interview, telephonic and personal both types of interview can be conducted by the researcher to gather the data. Along with this, survey through questionnaire is also available to collect the data. In this, through forming questions, responses of respondents are gained by the researcher (Jonker and Pennink, 2010).

In short, for this study, the primary data is collected through the questionnaire survey among the disabled community in Selangor and Kuala Lumpur.

### **Secondary Data Collection Method**

Data that are collected on the basis of previous data or research is included under the secondary data collection method. In this way, several types of approaches can be used such as case study, documentation review, articles, projects, and etcetera.

For this research, the secondary data are collected through the Ministry of Urban Wellbeing, Housing and Local Government, Department of Social and Welfare Malaysia, PR1MA Corporation Malaysia, Dewan Bandaraya Kuala Lumpur (DBKL), Syarikat Perumahan Negara Berhad (SPNB), Lembaga Perumahan dan Hartanah Selangor and published documents (books, articles and government related data).

#### Data Collection Method (Quantitative Approach)

| Research Objective   | Operational Objectives (OO)  | Data Collection Method      |
|--|--|-----------------------------|
| <p><i>Research Objective 2:</i><br/>To identify the ability and preferences of disabled community in owning the residential property in term of price, design and location.</p>            | <p>OO-1:<br/>To identify the income of disabled community.</p> <p>OO-2:<br/>To identify facilities assistance received from government or NGOs.</p> <p>OO-3:<br/>To identify the desire to own a house among disabled community.</p> <p>OO-4:<br/>To identify the preferences in owning a house in term on price, design and location.</p> | <p>Questionnaire Survey</p> |
| <p><i>Research Objective 3:</i><br/>To identify the issues and problem faced by the disabled community to own house/ residential property in urban areas of Kuala Lumpur and Selangor.</p> | <p>OO- 5:<br/>To identify the problem among disabled community in owning a house.</p> <p>OO- 6:<br/>To identify the ideas from disabled community perspective to able them to own a house.</p>   |                             |

## **Determination of Sampling Size**

In this study, there were 20, 911 registered disabled person in Kuala Lumpur and 55, 594 registered disabled person in Selangor by year 2015. Thus, by using the total number of registered disabled person in Kuala Lumpur and Selangor as the size of population ( $N = 20, 911$  and  $N= 55, 595$ ) with a 95% confidence level ( $P = 0.05$ ), the estimated sample size was calculated as follows:

i. Kuala Lumpur:

$$n = \frac{N}{1 + Ne^2}$$
$$n = \frac{20,911}{1 + 20,991 (0.05)^2}$$
$$n = 399.9$$

ii. Selangor:

$$n = \frac{N}{1 + Ne^2}$$
$$n = \frac{55, 595}{1 + 55, 595 (0.05)^2}$$
$$n = 399.9$$

Based on the result above, 400 respondents were estimated to be the lowest acceptable number of responses to maintain 95% confidence level. However, as there are argues on the existence of the probability error and bias, the number of respondents targeted in the study was determined as 500 samples for each states. So the total of sample size will be 1000.

## **Sampling Method: Purposive Sampling**

This study use homogeneous sampling category which it focuses on one particular subgroup in which all the sample members are similar, such as a particular occupation or level in an organization's hierarchy (Saunders, M., Lewis, P. & Thornhill, A 2012). In this study the sample are from disabled community in shelter homes, NGOs and from JKM's list. This disabled community was divided into 2 categories which are physical and visual impairment. 500 of questionnaire survey were distributed to shelter homes and NGOs for each state with help of appointed enumerators.

## Analysis method for quantitative method

| Research Objective   | Operational Objectives (OO)  | Analysis Method             |
|--|--|-----------------------------|
| <p><i>Research Objective 2:</i><br/>To identify the ability and preferences of disabled community in owning the residential property in term of price, design and location.</p>            | <p>OO-1:<br/>To identify the income of disabled community.</p> <p>OO-2:<br/>To identify facilities assistance received from government or NGOs.</p> <p>OO-3:<br/>To identify the desire to own a house among disabled community.</p> <p>OO-4:<br/>To identify the preferences in owning a house in term on price, design and location.</p> | <p>Descriptive analysis</p> |
| <p><i>Research Objective 3:</i><br/>To identify the issues and problem faced by the disabled community to own house/ residential property in urban areas of Kuala Lumpur and Selangor.</p> | <p>OO- 5:<br/>To identify the problem among disabled community in owning a house.</p> <p>OO- 6:<br/>To identify the ideas from disabled community perspective to able them to own a house.</p>   |                             |

## ANALYSIS AND FINDING

### Respondent socio – demographic profile

| Variables      | Components | Frequency | Percentage (%) |
|----------------|------------|-----------|----------------|
| Gender         | Male       | 450       | 56.3           |
|                | Female     | 350       | 43.7           |
| Age            | 18-27      | 76        | 9.5            |
|                | 28-37      | 196       | 24.5           |
|                | 38-47      | 200       | 25.0           |
|                | 48-57      | 172       | 21.5           |
|                | 58-67      | 100       | 12.5           |
|                | 68-77      | 56        | 7.0            |
| Race           | Malay      | 595       | 74.4           |
|                | Chinese    | 103       | 12.9           |
|                | Indian     | 102       | 12.8           |
| Marital status | Single     | 276       | 34.5           |
|                | Married    | 438       | 54.7           |
|                | Divorced   | 32        | 4.0            |
|                | Widowed    | 54        | 6.8            |

Source: Primary data: Questionnaire Survey

### Respondent socio – demographic profile (continue)

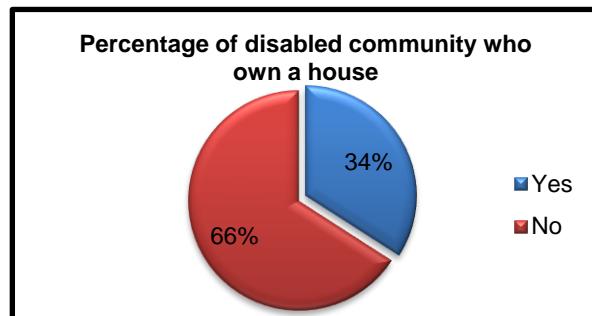
|                          |                          |     |      |
|--------------------------|--------------------------|-----|------|
| Education level          | None                     | 8   | 1.0  |
|                          | Primary school           | 43  | 5.4  |
|                          | Secondary school         | 484 | 60.5 |
|                          | STPM/Certificate/Diploma | 200 | 25.0 |
|                          | Bachelor degree          | 56  | 7.0  |
|                          | Master degree            | 9   | 1.1  |
| Employment sector        | Government               | 99  | 12.4 |
|                          | Private sector           | 342 | 42.7 |
|                          | Self employed            | 152 | 19.0 |
|                          | Unemployed               | 207 | 25.9 |
| Income of disable people | None                     | 35  | 4.4  |
|                          | Below RM500              | 80  | 10   |
|                          | RM501 – RM1000           | 150 | 18.8 |
|                          | RM1001 – RM1500          | 250 | 31.3 |
|                          | RM1501 – RM2000          | 170 | 21.3 |
|                          | RM2001 – RM2500          | 35  | 4.4  |
|                          | RM2501 – RM3000          | 39  | 4.7  |
|                          | RM3001 – RM3500          | 41  | 5.1  |

*Source: Primary data: Questionnaire Survey*

As this study only focused on two types of disability which are visual and physical impairment, so the respondents were only from this two types of disabilities. Most of the respondents were visually impaired with n = 514 respondents. For the physically impaired, there were n = 286 respondents where it was only 35.8% of the total responses.

The numbers of registered disabled people with Department of Social and Welfare Malaysia (JKM) were 92.7% or n = 742. Only 58 respondents or 7.3% of total respondent were not registered with JKM. Based on the survey interview, the reason of these respondents did not register with JKM was due to their stabled financial background and their personal opinion that they were still able to survive on their own.

Percentage of disabled community who own a house



*Source: Primary data: Questionnaire Survey*

From the 66% respondents that do not own a house, 43.5% (n = 348) of them were renting. Next, 16.7% (n = 134) respondents were currently live with their family. Another 5.8% (n = 46) respondents were staying at shelter house for the disabled.

#### Factor influencing respondents for not own a house

| <b>Factor influencing respondents for not own a house</b>        | <b>Frequency</b> |
|--|------------------|
| The house price is too expensive                                 | 237              |
| Need help from others for self-management                        | 55               |
| Difficult to get housing loan                                    | 292              |
| There is no discount for disable people                          | 63               |
| Not qualified to apply for housing loan                          | 126              |
| High responsibilities and monthly expenditure                    | 134              |
| Too comfortable with facilities and services from shelter's home | 46               |

*Source: Primary data: Questionnaire Survey*

As there were n = 528 respondents that do own a house, majority or n= 433 respondents were interested to have their own house. Another n = 95 respondents do not interested to own a house and this happened due to their physical condition, also the financial background which would not allowed them to buy a house.

#### Level of preferences in buying a house

| <b>Factor</b> | <b>Level of preferences</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|---------------|-----------------------------|------------------|-----------------------|
| Price         | 1                           | 152              | 19.0                  |
|               | 2                           | 442              | 55.3                  |
|               | 3                           | 206              | 25.8                  |
| Location      | 1                           | 487              | 60.9                  |
|               | 2                           | 199              | 24.9                  |
|               | 3                           | 114              | 14.3                  |
| Design        | 1                           | 191              | 23.9                  |
|               | 2                           | 129              | 16.1                  |
|               | 3                           | 480              | 60.0                  |

*Source: Primary data: Questionnaire Survey*

### Current and preferred house price

| Price Range           | Current house price | Preferred house price |
|-----------------------|---------------------|-----------------------|
| Below RM50,000        | 80                  | 254                   |
| RM50,000-RM100,000    | 102                 | 291                   |
| RM100,001 - RM150,000 | 58                  | 122                   |
| RM150,001 - RM200,000 | 10                  | 62                    |
| RM200,001 - RM250,000 | 1                   | 8                     |
| RM250,001 - RM300,000 | 5                   | 13                    |
| RM300,001 - RM350,000 | 16                  | 39                    |
| RM350,001 - RM400,000 | 0                   | 1                     |
| RM450,001 - RM500,000 | 0                   | 10                    |
| Total                 | 272                 | 800                   |

*Source: Primary data: Questionnaire Survey*

The purpose of knowing the current price range and preferred price range is to examine what is the current range of housing price that disabled people has purchased and what is the actually range of housing price that they afford or preferred based on their income. From the finding, it shows that, the current price ranges of housing were meeting the demand of the preferred price range of housing among disabled people. Referring to this preferred price range of housing, it can be a proposal that government or private housing company should provide the housing unit for disabled people with this range of price.

### Score of characteristic for preferred location of house

| Statement                           | 1 | 2 | 3  | 4  | 5  | 6  | 7  | 8   | 9   | 10  | Mean |
|-------------------------------------|---|---|----|----|----|----|----|-----|-----|-----|------|
| Easily accessed by public transport | 0 | 0 | 2  | 3  | 1  | 19 | 1  | 117 | 107 | 550 | 9.43 |
| Safe neighbourhoods area            | 5 | 0 | 0  | 0  | 15 | 22 | 0  | 149 | 99  | 510 | 9.24 |
| Close to work place and school      | 0 | 8 | 0  | 13 | 12 | 18 | 18 | 95  | 106 | 530 | 9.22 |
| Equipped with disabled facilities   | 0 | 3 | 0  | 15 | 40 | 30 | 13 | 119 | 68  | 512 | 9.03 |
| Near to public facilities           | 2 | 0 | 14 | 0  | 38 | 21 | 0  | 167 | 68  | 490 | 9.01 |
| Near to attractive places           | 0 | 0 | 5  | 13 | 17 | 42 | 47 | 152 | 77  | 447 | 8.89 |

*Source: Primary data: Questionnaire Survey*

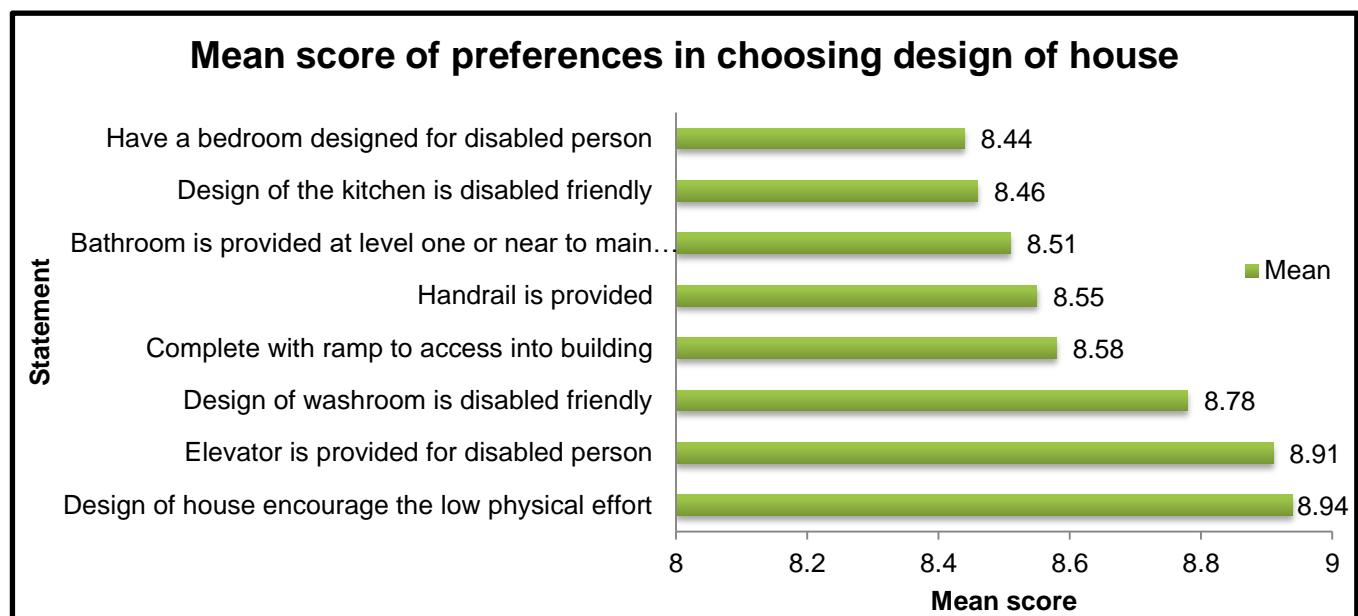
### Score of current satisfaction for location of house

| <b>Statement</b>                          | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> | <b>8</b> | <b>9</b> | <b>10</b> | <b>Mean</b> |
|---|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-------------|
| Near to attractive places                 | 3        | 0        | 3        | 81       | 86       | 152      | 94       | 111      | 117      | 153       | 7.26        |
| Safe neighbourhoods area                  | 7        | 43       | 19       | 49       | 84       | 70       | 157      | 59       | 81       | 231       | 7.25        |
| Overall satisfaction on location of house | 3        | 13       | 4        | 19       | 201      | 102      | 115      | 66       | 102      | 175       | 7.25        |
| Near to public facilities                 | 12       | 3        | 61       | 6        | 144      | 97       | 166      | 94       | 86       | 129       | 7.11        |
| Easily accessed by public transport       | 4        | 15       | 57       | 54       | 144      | 66       | 137      | 70       | 81       | 172       | 6.88        |
| Close to work place and school            | 49       | 24       | 21       | 93       | 61       | 96       | 163      | 78       | 65       | 150       | 6.58        |
| Equipped with disabled facilities         | 6        | 27       | 67       | 70       | 106      | 139      | 181      | 42       | 48       | 114       | 6.35        |

*Source: Primary data: Questionnaire Survey*

Even though the disabled people preferred location of house that can be easily accessed by the public transport, the mean score for this characteristic in their current location of house were only 6.88

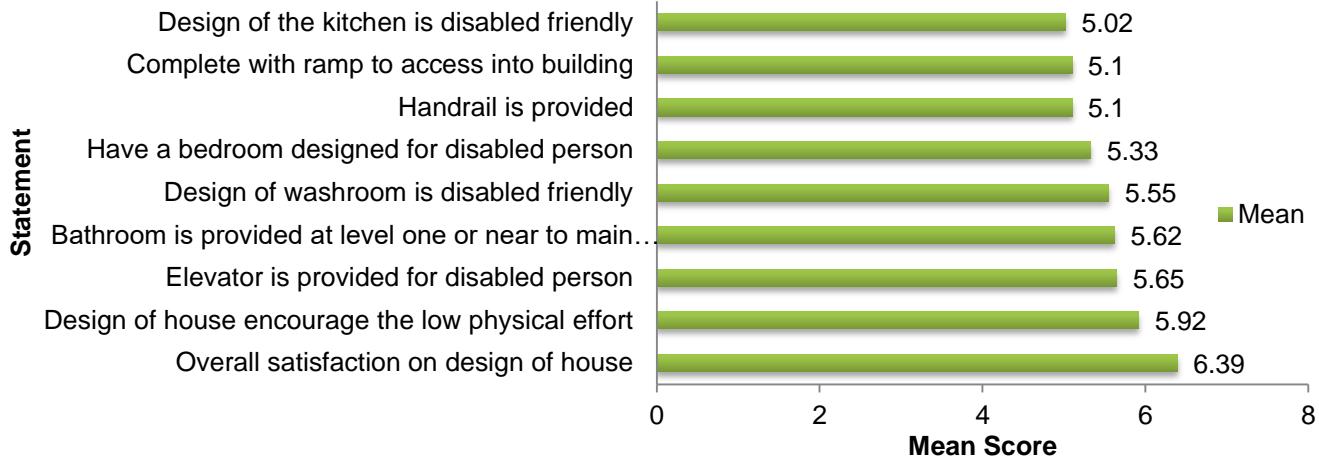
### Mean score of preferred design of house



*Source: Primary data: Questionnaire Survey*

Mean score of current satisfaction for design of house

### Mean score of current satisfaction on design of house



Source: Primary data: Questionnaire Survey

Issue faced by the disabled in owning a house

| Issue  | Frequency |
|--|-----------|
| Difficult to get housing loan (Complicated procedures) | 611       |
| Not qualified to apply for housing loan                | 673       |
| The house price is too expensive                       | 659       |
| Location of the house was not strategic                | 518       |
| Design of the house was not universal design           | 446       |

Source: Primary data: Questionnaire Survey

## SUMMARY OF RECOMMENDATION

| RECOMMENDATIONS   | LEADING AGENCIES   | SUPPORTING AGENCIES   | TIME FRAME   | ACTIONS/STRATEGIES  |
|---|--|---|--------------|---|
| <b><u>Research Finding 1:</u></b>   |  |   |              |   |
| R1:<br>Provides special housing subsidies for the eligible disable people.  | - Ministry of Urban Wellbeing, Housing and Local Government (KPKT) | - Ministry of Women, Family and Community Development (KPWKM)<br>- State government<br>- Department of Social Welfare Malaysia<br>- Ministry of Finance (MoF) | Short – term | <b>S1:</b> Eligible for the disable people with low income group<br><br><b>S2:</b> Monthly allowance from JKM can be used as the monthly house rental payment or bank loan.   |
| <b><u>Research Finding 2:</u></b>   |  |   |              |   |
| R2:<br>Appointment of a potential financial institution to collaborate with Syarikat Jaminan Kredit Perumahan Berhad to provide special housing loan scheme for the disable people. | - Ministry of Finance (MoF)  | - Financial institution<br>-Syarikat Jaminan Kredit Perumahan Berhad<br>- Department of Social Welfare Malaysia   | Short – term | <b>S1:</b> Disable people need to provide a proof that they have consistent record of monthly income or saving even-though they do not have pay slip<br><br><b>S2:</b> The disabled people need to attend homeownership counseling sessions.<br><br><b>S3:</b> The eligibility only for the first – time homeowners |

| RECOMMENDATIONS   | LEADING AGENCIES   | SUPPORTING AGENCIES  | TIME FRAME   | ACTIONS/STRATEGIES   |
|---|--|--|--------------|--|
| <b>Research Finding 3:</b>  |  |  |              |  |
| <b>Most of the disable people were not afford to own a house because of the price is too expensive compared with their income</b> |  |  |              |  |
| R3:<br>Provides 'Rent to Own House Program' – 'Program Sewa Rumah Sendiri'  | - Ministry of Urban Wellbeing, Housing and Local Government (KPKT) | - State government<br>Financial institutions<br>- Housing developers   | Short – term | <b>S1:</b> The disable people should have good record of monthly rental payment for certain period of time<br><br><b>S2:</b> The house will automatically belong to that disable people after end of the renting period  |
| R4:<br>Provide "Help to Buy: Shared Ownership" scheme   | - Local authority  | <ul style="list-style-type: none"> <li>- Ministry of Urban Wellbeing, Housing and Local Government (KPKT)</li> <li>- Financial institutions</li> <li>- Housing developers</li> </ul> | Long - term  | <b>S1:</b> Home ownership is shared between disable people and local authority (share between 25% and 75% of the house's value)<br><br><b>S2:</b> Agreement up to few years only<br><br><b>S3:</b> The applicant should be the criteria of minimum income<br><br><b>S4:</b> Local authority have right to take the ownership of the house if the applicant does not buy the remaining share after few years. |
| <i>Benchmarking countries:</i><br>Australia ( Ilan Wiesel and Karen R Fisher,2017)  |  |  |              |  |

|  |  |   |               |   |
|--|--|---|---------------|---|
| <b>Research Finding 5:</b>   |  |   |               |   |
| <b>The analysis and finding has highlighted that the highest percentage on preferences of house price among the disable people were between below RM50,000 and RM50,000 to MR100,000</b> |  |   |               |   |
| R7:<br>Standardization on the price of low – cost house.   | - Ministry of Urban Wellbeing, Housing and Local Government (KPKT) | <ul style="list-style-type: none"> <li>- Ministry of Urban Wellbeing, Housing and Local Government</li> <li>- State Government</li> <li>- Ministry of Finance (MoF)</li> <li>- Housing Developer</li> </ul> | Medium - term | <b>S1:</b> Selling price should be not more than RM50, 000.<br><br><b>S2:</b> Minimum width area of 700sq ft. |
| <i>Benchmarking countries:</i><br>Japan (Andrew Oxlade, 2014)  |  |   |               |   |

| RECOMMENDATIONS  | LEADING AGENCIES  | SUPPORTING AGENCIES  | TIME FRAME  | ACTIONS/STRATEGIES   |
|--|---|--|-------------|--|
| <b><u>Research Finding 6:</u></b>  |   |  |             |  |
| <b>Complicated procedures in both applying to purchase a house and applying for housing loan were among the problem faced by the disable people. The disable people have limited physical movement, so the complicated procedure has become one of the reasons that the disable people do not own a house.</b> |   |  |             |  |
| <b>R8:</b><br>Provides 'One Stop Centre' for housing facilities<br><br><i>Benchmarking countries:</i><br>(new recommendation based on the issue)   | - Ministry of Women, Family and Community Development (KPWKM) | - Ministry of Urban Wellbeing, Housing and Local Government (KPKT)<br>- Ministry of Women, Family and Community Development (KPWKM)<br>- Department of Social Welfare Malaysia<br>- State Government<br>- Financial institutions<br>- Housing developers | Long - term | <b>S1:</b> All housing related matter for disable people should be under One Stop Centre |

## CONCLUSION

As conclusion, it is found that this study is significant to be carried out because there are several issues on housing for disabled community that should be highlighted. Looking at the limited abilities, people might thought the disabled people will not have such of desire to own a house, but after the study has been carried out, it is proven that most of them has high interest and demand to have their own house.

This study also has identified the three level of preferences factor that influence the disabled community in owning a house which are price, location and design factor. From this study, it helps to identify what is the most preferred factor in buying a house among the disable people. The location has been identified as the most preferred factor in owning a house. Besides that, this study also has helped to identify the issues that faced by the disabled community in owning a house. The issue that has been highlighted can help the government and related agencies to improve the planning of affordable housing policy for the disabled people.

Significantly, this study contributes to the knowledge and awareness about the importance of planning for housing for the disabled people with more consideration as to ease their ability to live on their own.

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