

PROBLEM FACING BY PRIVATE  
DEVELOPER INVOLVING ABANDONED  
PROJECTS IN MALAYSIA

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PROBLEM FACING BY PRIVATE  
DEVELOPER INVOLVING ABANDONED  
PROJECTS IN MALAYSIA

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Thesis submitted in fulfillment of the requirements  
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## ABSTRAK

Projek terbengkalai telah menjadi salah satu masalah terbesar di negara ini yang telah merencatkan pembangunan di Malaysia sejak 1980-an. Walaupun era pertumbuhan yang semakin berkembang di Malaysia, hal ini tetap menjadi isu yang sering dibahaskan di Parlimen dan media sosial. Mengikut laman rasmi Jabatan Perumahan Negara, projek-projek terbengkalai ditakrifkan sebagai projek-projek yang memenuhi kriteria berikut, yang mana projek-projek tidak disiapkan di dalam atau di luar Perjanjian Jual Beli dan tidak ada aktiviti penting di tapak pembinaan dalam tempoh enam (6) bulan perkhidmatan berterusan; atau petisyen penggulungan telah difailkan di Mahkamah Tinggi di bawah Seksyen 218 Akta Syarikat 1966; atau diletakkan di bawah Penerima Rasmi dan Pengurus (Penerima & Pengurus); atau pemaju tidak dapat mengakui secara bertulis kepada Pengawal Perumahan; Projek-projek yang dibenarkan dan terbengkalai oleh Kementerian Perumahan dan Kerajaan Tempatan di bawah seksyen 11 (1) (c) Akta 118. Laporan Pemulihan Projek Terbengkalai 2017 telah menyatakan bahawa terdapat 254 projek perumahan terbengkalai yang telah disenaraikan di Malaysia. Antara isu yang telah diketengahkan mengenai masalah ini ialah sumbangan setiap pihak yang terlibat dalam pembinaan projek-projek yang mengakibatkan meninggalkan projek tersebut. Penyelidikan sebelum ini telah mengenal pasti pemaju swasta sebagai punca sebab pengabaian. Dengan kajian yang agak terhad mengenai isu ini, kajian telah dijalankan untuk mengkaji masalah yang dihadapi oleh pemaju swasta Antara kajian yang dijalankan adalah untuk menyiasat masalah utama yang dihadapi oleh pemaju swasta, dengan itu menyediakan soal selidik kepada pemaju, jurutera, perunding, pihak berkuasa tempatan dan lain-lain untuk mencari pandangan dan maklumat terperinci dari pihak ketiga yang mempunyai kepakaran dalam industri mengenai masalah dan cara untuk menyelesaikannya Perspektif responden telah dianalisis pada Indeks Kepentingan Relatif (RII). Responden menyatakan bahawa 'pemaju swasta meninggalkan projek mereka kerana sikap tidak beretika pemaju swasta yang menyebabkan penyalahgunaan modal projek dan penipuan' adalah masalah utama yang menyumbang dalam masalah perumahan terbengkalai dalam projek pembinaan. Akhirnya, mereka bersetuju bahawa 'meminda Akta Pembangunan Perumahan 1966 yang memperuntukkan kawalan dan pelesenan perniagaan pembangunan perumahan di Semenanjung Malaysia dan perlindungan kepentingan pembeli' dapat membantu meminimumkan masalah pengabaian ini.



## **ABSTRACT**

The abandoned project has been one of the biggest problems in the country which has deprived the development in Malaysia since 1980s. Despite the ever-expanding era of growth in Malaysia, this remains an often issues in Parliament and social media. According to the official site of the National Housing Department, abandoned projects are defined as projects which meet the following criteria, which projects are not completed within or outside of the Sale and Purchase Agreement and no significant activity on the construction site during the six (6) months of continuous service; or winding-up petition has been filed in the High Court under Section 218 of the Companies Act 1966; or is placed under the Official Receiver and Manager (Receiver & Manager); or the developer is unable to acknowledge in writing to the Controller of Housing; Authorized and abandoned projects by the Ministry of Housing and Local Government under section 11 (1) (c) of Act 118. Abandoned Project Recovery Division 2017 report stated that there were 254 abandoned housing projects have been listed in Malaysia. Among of the issue that has been highlighted regarding this problem is the contribution of each stakeholder that involved within the construction of the projects which resulting in abandoned the project. Previous researches has identified private developer as root of causes of abandonment. By its relatively limited research on this issue, a study was conducted to investigate the problem facing by the private developer regarding this problem. Among the studies undertaken is to investigate the main problem facing by private developer, thus providing questionnaires to developer, engineer, consultant, local authorities and others to seek the views and detailed information from third parties that expertise in the industry on problems and ways to solve these problems. The perspective of the respondents has been analyzed and ranked based on Relative Importance Index (RII). Respondents stated that ‘private developer abandoned their projects due to unethical attitude of private developer resulting in misuse of project capital and fraudulence’ are the major problem that contributes in abandonment problems of abandoned housing in construction project. Finally, they are agreed that ‘amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular Malaysia and the protection of the interest of the purchasers’ can help to minimize this abandonment problem.

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## LIST OF SYMBOLS



## **LIST OF ABBREVIATIONS**

|         |                                            |
|---------|--------------------------------------------|
| SPA     | Sale and Purchase Agreement                |
| RII     | Relative Importance Index                  |
| MHLG    | Ministry of Housing and Local Government   |
| C&S     | Civil and Structural                       |
| M&E     | Mechanical and Electrical                  |
| UBBL    | Uniform Building by Laws                   |
| ERP     | Efficient Reviving Process                 |
| JPN     | Jabatan Perumahan Negara                   |
| DHLG    | Department of Housing and Local Government |
| SPV     | Special Purpose Vehicle                    |
| MOF     | Ministry of Finance                        |
| SPNB    | Syarikat Perumahan Negara                  |
| HDA     | Housing Development Account                |
| TTPR    | House Buyers' Claims Tribunal              |
| CONQUAS | Construction Quality Assessment System     |

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Malaysia is actively working to achieve Vision 2020 that has been introduced by former Malaysia Prime Minister, YAB Tun Dr. Mahathir bin Mohamad which involves transformation on the economic structure. One of the important agenda that been highlighted to make sure Malaysia is on the right track toward achieving economic prosperity were construction industry. Construction sector has been recognized as an effective and significant role that can assists in growth of other sector of economy. This sector will provide much more inspiring infrastructure showing the development and the living standards of the country. To realize that vision, Malaysia's government has placed construction as top priorities in development's plans (Raza, 2014). Among of the approaches that has been introduced is; to provide sufficient and suitable housing, building and accommodation to its citizens (Noorafiq, 2010).

However, the construction will considered succeed if the projects can be completed and delivered in time to the clients. In construction, it is possible delay will occur in the work progress due to various reasons which will affects many parties involved such as client and contractor, but it is unacceptable if the projects been abandoned by some irresponsible parties that will ruin the reputation of the construction industry. A housing project is generally defined as abandoned when the construction project is not completed and ready for occupation on schedule.

An abandoned project is defined by the Ministry of Housing as projects that meets the following criteria:

- The project is not completed within or later than the delivery date stated in the Sale and Purchase Agreement (SPA) and no significant activity is noticed at the construction site for six (6) continuous months, or
- Notice of winding up or 'Petisyen Penggulangan' has been registered in the High Court under Section 218 of the Companies Act 1966, or
- Company is under the Receiver and Manager, or
- Developers are not able to acknowledge in writing to the 'Housing Controller', and
- Confirmed as abandoned projects by the Ministry of Housing and Local Government under Section 11(1) of Act 118.

Even the construction industry has been developed throughout the Independence Day, the negative phenomenon keeps recurring which is abandoned house projects. Although housing, planning and construction laws and regulations have been passed by Parliament with the purpose of controlling and regulating the housing development industry in Peninsular Malaysia, it is regretted that, this catastrophe are still occur and persisting until today (Nuarrual, 2008). In result, the projects will require additional costs to recover and re-run the projects construction until it finished. Since 2009, the government has registered 254 abandoned private housing projects in Peninsular Malaysia, involving 64,290 residential units. The Minister of Urban Wellbeing, Housing and Local Government, Tan Sri Noh Omar said that the ministry had used RM 219.79 million from the government's fund to restore 32 projects out of the 190 projects (The Malaysian Reserve, 8<sup>th</sup> November 2017).

Table 1.1 Abandoned housing projects by state until December 2017

| STATE                  | No of Projects | No of House Units | No of Buyers |
|------------------------|----------------|-------------------|--------------|
| <b>Johor</b>           | 44             | 8,839             | 5,807        |
| <b>Kedah</b>           | 14             | 2,097             | 1,228        |
| <b>Kelantan</b>        | 19             | 1,961             | 1,662        |
| <b>Melaka</b>          | 8              | 1,503             | 1,072        |
| <b>Negeri Sembilan</b> | 25             | 4,340             | 03,110       |
| <b>Pahang</b>          | 17             | 3,458             | 2,594        |
| <b>Perak</b>           | 18             | 2,327             | 1,407        |
| <b>Perlis</b>          | 0              | 0                 | 0            |
| <b>Pulau Pinang</b>    | 14             | 6,660             | 3,715        |
| <b>Selangor</b>        | 82             | 29,483            | 20,788       |
| <b>Terengganu</b>      | 4              | 340               | 293          |
| <b>WP Kuala Lumpur</b> | 9              | 3,632             | 2,010        |
| <b>Total</b>           | 254            | 64,640            | 43,686       |

Source: Abandoned Project Recovery Division (2017)

There are two type of sector that involved in Malaysia construction institution which is public sector and private sector. The public sector is usually composed of organizations that are owned and operated by the government and exist to provide services for its citizens. Public sector for construction in Malaysia consists of Ministry of Urban Wellbeing, Housing and Local Government. While, the private sector is the part of a country's economic system that is run by individuals and companies, rather than the government. Most private sector organizations are run with the intention of making profit. Among of well-known private developer company in Malaysia is Sime Darby Property, Gamuda Land, Sunway Property and IJM Land Berhad.

## **1.2 Problem Statement**

The seriousness of the problem of abandoned projects has forced the government to step in and splash huge sums of money to rehabilitation these projects, more so in the interests of the house buyers. The Housing Developers (Control and Licensing) Act of 1996 too has been amended in the hope of resolving this problem. Unfortunately, abandoned residential projects still exist and the problem has not been solved. (Dharmasegaran, 2016). Thus, there is a need to study the factors that continue to contribute towards residential projects being abandoned and avoiding this problem from recurring continuously.

There are plenty of common reasons that assist in abandoned house projects such as lack of experience from management, mislead in cashflow, non-systematic financial institutional, lack of implementation in laws and regulations and non-eligible developer. Among of the reasons stated, the developer has been identified as the major source contributor to the abandoned housing projects (Mohamad, 2005).

It also discovered that private developers are the roots to these existing problems. Even though economics crisis was selected by entire respondents it does not considered as the main contributor because it is sessional and it is not an all year occurrence (Ibrahim, 2006). Therefore, private developers remain the prime contributors to the problems. Then, politics, housing contractors, financial institutions, and the government, and economic crisis follow it. (Mohd, 2016)

As the conclusion, this research will find out the main problems and situation facing by private developers that will contribute the indefinitely delayed construction project or abandoned construction buildings in Malaysia thus provide the best solutions toward the problems. Therefore, questionnaire survey will be used to assess several of the opinion about the abandoned housing.

### **1.3 Objectives of the Study**

The objectives of this study is to find out the main problem facing by private developers that will contribute the indefinitely delayed construction project or abandoned construction projects in Malaysia. This can be achieved through the following objectives:

- 1) To study the statistics of abandoned project by private developers.
- 2) To investigate the problems facing by private developers that contribute to the abandoned projects.
- 3) To propose the potential solutions to the problems.

### **1.4 Scope of the Study**

The scope of this study will be focusing on the problems facing by private developers that contribute indefinitely delayed construction project or abandoned construction buildings in Malaysia. The questionnaire is used to identify the problem facing by private developers and the solution that contribute abandoned construction buildings in Malaysia. From the studies of problems facing by private developers in Malaysia, solution will be suggested to improve the quality of the construction institution in Malaysia. The scope of the study is restricted to only private developers. All the elements including the review of abandoned projects, top developers, common problems, impact of abandoned projects, solution toward the problem facing by private developers and person in charge could be performed in this study.

### **1.5 Significance of Study**

The main reason of this study is to find out the problems facing by private developers that will contribute the indefinitely delayed construction project or abandoned construction buildings in Malaysia thus provide the solution toward the problem. Problems facing by private developers and the solution can be determined as the study is focusing on the private developers in Malaysia. This study can be a guideline to review all the problems and the solutions facing by private developers as it taking the highest problematic state in Malaysia in last 3 years which also can include most of the problem facing by the other state in Malaysia.

## **1.6 Thesis Layout**

Thesis layout will summarize the details of the thesis. This thesis is organized into five chapters as detailed below:

Chapter 1 - Introduction: This chapter discusses the background of the problems of abandoned construction projects in Malaysia, the rationale behind this research, the aim and objectives of this research, the scope and significance of study, and the organization of chapters.

Chapter 2 - Problem Facing by The Private Developer – A Review of the Literature: This chapter covers the review of existing literature on the problem facing by the private developer in Malaysia, including definition and criteria of abandoned projects, project participants related factors and problem facing by private developer. It also reviews existing literature on potential solution to overcome the problem and various impacts regarding abandoned projects that could negatively affect the success of construction factor in Malaysia. This literature covers only in Malaysia situations.

Chapter 3 - Research Methodology: This chapter describes the methods used in this research to accomplish the aim and objectives. It reviews existing literature on the meaning and background philosophy of research and research methodology. It also reviews the quantitative methods used in this research. This is followed by discussions on the methods used in this research, i.e. literature review, data observation, questionnaire survey, and data analysis using Relative Importance Index (RII) method.

Chapter 4 - The analysis data will be discussing in Chapter 4. The data will be obtaining from observation and data analysis in order to achieve all objectives. Technique and method that will be used to analyze the data will be discussed in this chapter.

Chapter 5 - Summarized and discuss all the results from Chapter 4 and give recommendation for further research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

There are numerous problems faced by developers, contractors and buyers in the property industry resulting in an alarming surge in the number of abandoned projects in the country (Zairul and Rahinah, 2008). This research is vital, as the property industry is one of the main priorities of the government in Malaysia and plays a major role in the development of the country and its economy. This research has attempted to identify the problems facing by private developers in contribution to abandoned house projects.

#### **2.2 Top Biggest Private Developers in Malaysia**

Property developers are a dime a dozen in Malaysia. These real estate firms have changed the way of living for many people in the country, contributing to better infrastructure and living standards. However, it's quite difficult to pick the best from the lot. From constructions stopping mid-way to hidden clauses that may cause trouble, it's a tough property world out there with plenty of horror stories. In most cases, these property developers have made a name for themselves by delivering the promises they make.

##### **2.2.1 Sime Darby Property**

Sime Darby is a Malaysian-based conglomerate that has its presence all over the country across many sectors. In 2007, Sime Darby Property was launched to cater to the growing demand for property investment in Malaysia. Although currently a private limited company, there have been talks of the company floating on the stock market in the near future. Sime Darby has developed one of the biggest townships in Klang Valley called Subang Jaya, followed by the developments of USJ and Putra Heights. Most of



their property developments have been a hit with the audience, and their future projects are always long awaited. Some of their most popular projects till date include the development of Ara Damansara, The Avani in Bandar Bukit Raja and Planter's Haven in Nilai to name a few.



Figure 2.1 Ara Hill Damansara

In fact, with a launch price of RM 438,000 (for the most basic unit), The Avani is currently valued at over RM 700,000, making it a hot investment deal for many. From developing the City of Elmina and Elmina Valley 4 to residential and commercial property in Subang Jaya, there a lot of Sime Darby property in the coming years. With a powerful parent company backing Sime Darby properties and the years of history it has in the market, Sime Darby Property has set up a good reputation for itself. Malaysians and foreigners alike find the company to be reliable and respected.

### **2.2.2 SP Setia Berhad Group**

Founded in 1974, not only has SP Setia made Malaysia its home base, but it has expanded into other countries as well such as Vietnam, China, Australia, Singapore and the United Kingdom. SP Setia has a strong presence, building developments that highlight quality and design. One of its most ambitious projects include a joint venture between Sime Darby and SP Setia to redevelop the Battersea Power Station in London.

Coming back to more local ground, KL Eco City developed by SP Setia is an urban retreat right in the centre of Kuala Lumpur, and is one of their premier properties.



Figure 2.2 KL Eco City Aerial View

Its rates have gone up by almost 60% (compared with the initial launch price of RM 1000 per square foot in middle 2013 for a condo). Other developments equally as popular include Duta Nusantara in Kuala Lumpur and Setia Walk, SP Setia's venture into commercial real estate.

### 2.2.3 IOI Properties Group

This property group, first formed in 1984, has visions of residential developments that perfectly combine functionality with tasteful style and design. The company was listed on the Malaysian stock exchange board back in 2014, adding to its popularity with the public. IOI Properties are known in the market for building both residential and commercial property. Some of their major endeavors include 16 Sierra in Puchong and the prestigious IOI Resort City in Putrajaya. In fact, Clio Residences in IOI Resort City is known to be a good investment with a current price of RM 779 per square foot (launch price of RM 600 per square foot).





Figure 2.3 Clio Residences

IOI Properties does have a good standing in the market, yet there are some complaints of them pricing their properties a little higher than expected. Future launches include Conezion (a residential and commercial high-rise) in IOI Resort City, and condo The Palmyra Residence in Bandar Puteri Bangi.

#### 2.2.4 Sunway Property

The Sunway Group is a prominent company in Malaysia, and its property division was floated on Bursa Malaysia back in 1982. This company is steeped with tradition, yet it aims to develop properties that mix modernity and technology with the comfort of home. The Sunway Group has its feet in various industries here in Malaysia, but they do believe that the property and construction section of the firm has attributed to the highest profit margins. From resorts, hotels and spas to residential lots, a Sunway development can easily be found in KL and beyond. It's most sought-after development is Sunway Berhad in Petaling Jaya that is home to bungalows, town houses, high-rise condos, a mall, multiple universities and a private hospital.



Figure 2.4 Sunway Resort City

Having won numerous awards from Best Property Company of the Year 2015 to being named one of the top property developers in Malaysia, Sunway Properties are always on investors' radars. The acclaimed Sunway Eastwood Semi-D homes have seen almost an RM 300k increase in prices since its launch date. Future launches include the Lost World Suites in Ipoh, that's taken inspiration from the success of the Sunway Township in PJ.

#### **2.2.5 Gamuda Land**

With two decades of property development to its name, Gamuda Land is certainly one of the big-shots in the industry. With a strong emphasis on safety, versatility and added value, it's no wonder that the company has a great reputation in the market. Take a drive around KL, and you'll come across the SMART tunnel and the SPRINT expressway built by this developer.



Figure 2.5 SMART tunnel

With six townships within the country and one being developed in Vietnam, Gamuda Land is famous for its first township called Kota Kemuning, among a few others. Kota Kemuning in Shah Alam has performed really well in the property market, making future developments such as Valencia and Bandar Botanic a top choice for investors. One of Gamuda Land's USP is the fact that they put a strong emphasis on safety and productivity, following the principle of CONQUAS (Construction Quality Assessment System).

### 2.3 Background of Abandoned Projects

Generally, the housing programs which have been stated in five-year plans require government and private sector effort for fulfilling the social needs, and they also contribute towards growth in the national economy. Mohd Zain (1989) argues that the housing industry has a multiplier effect that influences the growth of the economy. For instance, this industry provides new occupation, increases the gross development product, the existence of new housing areas and the existence of supporting industries that are indirectly related to the construction industry. Nevertheless, the existence of abandoned housing developments is another phenomenon in the Malaysian housing industry.

Longman Dictionary (2005) defines abandon as “to stop doing something because there are too many problems and it is impossible to continue”. Planning is the foremost thing to be done if projects are to be completely executed (Akindoyeni, 1989). The abandoned projects increasing in Malaysia, which shows the seriousness of this problem. Lack of awareness of this distressing problem of abandoned unleash our government to enlighten the public either involved in the project was abandoned or not. Indeed, development housing abandonment has caused a waste of money for reviving processes and the waste of resources: land and human resources. It may be that until now the lack of research in this field is still not enough to tell the cause of the abandoned project. It was found that the existing literature on the subject is limited to the types of sources such as unpublished theses, conferences papers and especially the news article (Hoe E.T, 2014).

### **2.3.1 The Definition of Abandoned Projects**

It is useful to offer a precise definition of the concept of housing abandonment for this study. This is because the definition and the concept of housing abandonment in Malaysia might be different from those of other countries. For example, in the United Kingdom, housing abandonment refers to the existence of housing projects which have been completed and is related to low demand for housing that is usually more to do with second-hand stock (Lowe et al., 1998). In this case, the developers faced a problem: whether to sell the units or to rent out the completed units. In other words, the term ‘housing abandonment’ in the UK refers to empty property. In the case of Malaysia, the term ‘abandoned housing projects’ refers to “incomplete or unbuilt housing projects approved by the Housing Authority and abandoned by the housing developers” (Siong, 1994, pg.121). Sallehudin (1991 in Md.Dahlan 2001) states that the abandoned housing project in the court case of Syarikat Faber Merlin Sdn. Bhd. referred to a project in which some money had been spent and the physical work had been stopped. However, if the amount of money which has been spent on that project is small, i.e. less than 10 per cent of the total project cost, and the construction work has stopped, it is not considered as an abandoned project. He further contends that the definition of abandoned housing projects was derived from the project management perspective. This definition contradicts that of the Ministry of Housing and Local Government, as described in the forthcoming section.

Md. Dahlan (2001) argues that different parties in housing development can define abandoned projects differently: for instance, either the receiver in the case where the developer company has been winding up defined the abandoned project as the project which had to be stopped owing to financial problems, or the developer of that project has disappeared. He further contends that, from the planning point of view, the term 'abandoned project' refers to a project in which the construction work has been postponed, even though planning permission has been granted to the developer.

The definition of abandoned projects by the Ministry of Housing and Local Government (MHLG) was more detailed and comprehensive. The MHLG has two definitions: one for 1990 and one for the year after 1990 (Rahmat, 1994). The definition of housing abandonment in 1991 was as follows:

- i. Any housing scheme where activities at the construction site have been stopped for more than 1 year after the expiration of the scheduled completion period (24 months – according to the Sales and Purchase Agreement signed by the developer and buyer).
- ii. If the developer has collected 10 percent payment from the buyer, and the Sales and Purchase Agreement has been signed, but the developer has not carried out any activity at the construction site after a lapse of one year from the date of signing of Sales and Purchase Agreement (SPA)

However, the Ministry of Housing and Local Government defined the term 'abandoned housing project' differently as follows, before the year 1990

- i. Any housing scheme where activities at the construction site have been stopped for 6 months or more and it is continuously within or after the expiration of the scheduled completion period (24 months – according to the Sales and Purchase Agreement signed by the developer and buyer), or
- ii. The developers are not capable of continuing the projects; or
- iii. The Controller considers that the developers are not keen to carry out their responsibility to complete the projects.

The controller means the Controller of Housing appointed under section 4 (1) of the Housing Development (Control and Licensing) Act 1966 that stated: "For the purpose of this Act, the Minister may appoint a Controller of Housing and such number of Deputy

Controllers of Housing, Inspectors of Housing and other officers and servants as the Minister may deem fit from amongst members of the public service”. The Controller of Housing will responsible to the MHLG in terms of managing and monitoring the approved housing development. From the above definitions of abandoned projects in Malaysia, it can be concluded that the term ‘abandoned housing project’ refers to a housing project which is incomplete and the construction work has stopped. For the purpose of this study, the definition by the Ministry of Housing, which was established in 1991, has more relevance and significance. Therefore, it is very important to stress here that the term ‘abandoned housing’ used in this research refers to housing projects which have not been completed by the private developers, and the house buyers have lodged a report with the Ministry of Housing and Local Government. On the other hand, the government has to intervene and revive the projects which have been abandoned by the private developers. The following section will discuss the criteria related to abandoned housing projects.

### **2.3.2 The Criteria of Abandoned Projects**

The Ministry of Housing has established a list of criteria for the housing projects which have been abandoned by the developers. The criteria of abandoned housing projects are as follows:

- i. Completion stage of progress work is between 10% and 95%.
- ii. Expiration of the Sale and Purchase Agreement if the project has been abandoned for 6 months or more.
- iii. The developer has been penalized as a result of the delay in handing over the projects and the amount of the penalty is too huge.
- iv. The developer’s licenses have expired and no renewal action has been taken by the developer.
- v. The financier for the project has registered a personal caveat to protect his interest whenever the developers are not capable of settling the instalments as agreed between the developers and financiers.



### **2.3.3 Project Participants Related Factors**

Project participants related factors are mainly concerning clients/owners, consultants, contractors, subcontractors, site workers, and suppliers.

#### **2.3.3.1 Clients/Owner**

Private or public entity that decides to implement a project on his own cost. Client defines program, budget and construction planning of the project. Client plays a main role in the design and the construction performance. Therefore, he monitors and validates each design phase and production process. The Client has to set not only the operation's objectives and the needs, but also he must meet constraints and requirements of social quality, town planning, architectural, functional, technical and economical insertions into the landscape and environmental protection. Besides, due to the competitiveness of subcontracting, clients' emphasis on low construction cost (Chan et al., 2004) could drive contractors and subcontractors into offering unrealistically low price, then cutting corners and offering bribes to recover their losses (Chiang, 2008). Therefore, clients may influence the success of projects, and may lead to the abandonment of projects.

#### **2.3.3.2 Consultants**

Consultants in a construction project typically consist of architects, civil and structural (C&S) engineers, and mechanical and electrical (M&E) engineers. Incomplete or poor detail design on the part of consultants can cause delay (Zhi, 1995). Designers should also avoid out of sequence design process (due to design changes and incomplete or delayed information by the customer) which could lead to schedule delay, but this must be well-balanced with the trade-off of meeting customer requirements in the best possible manner (Koskela et al., 1997). In order to minimize design-related risks, consultants may follow the risks identification and assessment system outlined by Chapman (2001) which is 'knowledge acquisition', 'selection of the core design team', 'presentation of the process', 'identification', 'encoding' and 'verification'.

#### **2.3.3.3 Contractors, subcontractors, and site workers**

Contractors can significantly improve the chances of overall project success by reducing team turnover, implementing constructability programs, and increasing the number of construction control meetings (Jaselskis & Ashley, 1991). Constructability

programs can also enhance schedule performance (Jaselskis & Ashley, 1991). Contractors can also achieve better budget performance by reducing team turnover, increasing the number of budget updates and having four to six control meetings per month (Jaselskis & Ashley, 1991). Shortage of site workers (Elinwa & Joshua, 2001; Frimpong et al., 2003; Sweis et al. 2008; Toor & Ogunlana, 2008) might result in severe overtime and shifts (Toor & Ogunlana 2008). Site workers include technical personnel and hard labour. Lack of motivation of site workers might be due to the lack of proper incentives to the site workers (Elinwa & Joshua, 2001), and this might result in poor productivity and absenteeism problems (Toor & Ogunlana, 2008).

According to Lai (as cited in Chiang 2008), contractors divide the works into small packages because small contractors would 1) have their heads being the gangers actually working on site, 2) be obedient and cooperative, 3) offer lower prices and 4) be less claim conscious. The main contractor would then spend much of their time managing and coordinating their large pool of small contractors instead of doing the works themselves.

Arditi and Chotibhongs (2005) suggest that clients' project managers can mitigate the problems of non-payment to workers by asking contractors to list their subcontractors in their own tender documents. Once their tender is accepted, the contractor cannot change their subcontractors without clients' approval, thus helping prevent the exploitation of subcontractors' weak bargaining position in a post award bid shopping. Project managers, from both the clients' and contractors' sides, can also ensure that payments are paid when they become due to the subcontractors. Although site managers do not have direct authority over sub-contract operatives and do not dictate the rewards to sub-contractors, the attention they give to target setting, planning and co-ordination can create better prospects for sub-contract staff to achieve their goals (Fryer, 2004).

## **2.4 Problems Facing by Private Developer**

According to Loi (2001), Malaysian Housing Industry is governed by more than 50-60 piece of legislation ranging from development license issuance to private developers, law of building and land to the environment and worker safety. Moreover, Loi (2001) stated that it is compounded by the fact that separate laws, policies, and controlled by federal, state and local government separately. In addition to that, Ismail

(2002) and Othman (1993) emphasized that the private developer must comply with Building Standard (UBBL) 1984 due to the building standard and safety. Moreover, the private developers must comply with Planning Acts, 1976 (Act 172) section 24(1). Under the this Acts the private developers should offer and provide social facilities such as school, recreation area, mosque, temple, church, or any religious concern, shop lot and public market.

According to Tan (2011), the private developers must confront with more complex situation on the development approval from the authorities. Tan (2011) highlighted the complexity and hurdles of the development approval by stating that all the relevant arrangements in housing developments such as land conversion for housing, drawing of layout plans, building and structure plans, planning of infrastructure and assessment of environment impact must be approved by federal and state authorities. These approval processes for development involves federal and state agencies which consist of Land and Mine Department, Land office, Local Authorities, survey Department, Telekom Malaysia, Tenaga Nasional, Water Work Department, Town and Country Planning Department, Fire Department, Health department, and National Landscape Department. Due to this, the decision for development approval takes longer time period which takes two (2) years it cause the private developers to cancel the application or postpone the housing development proposal (Loi, 2001).

Additionally, Khalid (2010) and Hussin and Omran (2011) discovered that the reason the private developer abandoned their projects due to the lack of sufficient fund, therefore, they unable to run construction activities, to buy construction materials, to pay wages, to hired qualified project managers or to complete the housing projects. Even though the private developers use other people money (20% deposit from purchasers) to take off the construction works the private developers still need fund from bridging loan from the banks. If the private developers unable to obtain the bridging loan, as a result, they have to stop the housing projects and abandoned it. Other cause sparks private developers to abandon their housing projects is poor management, which come from lack of management knowledge among managers (Khalid, 2010).

The study conducted by Mumin (2010) found out that one of the factors the private developers or housing contractors is that lack of knowledge in project

management; therefore, they are unable to plan, organize, and coordinate the work activities on construction site, material needed, time and money required. The author also insisted that the projects managers incapable to apply and implement modern construction methods and technique to achieve project goal and meet project deadline. Not knowing the projects management, the project manager or the contractor definitely cause a delay in project completion time. Sambasivan and Soon (2007) also highlighted the worse of lack knowledge in housing construction is contractor's improper planning, poor site management, faulty in communication and mistake during construction stage. As a result of the delay, the housing projects finally abandoned (Sambasivan & Soon, 2007).

In addition to that, other scholars who had done the study on the causes of residential housing abandonment were Hussin and Omran (2011). They had discovered other three causes: Poor marketing and sale strategy, technical problems faced during construction, and compensation requested by squatters for resettlement. The authors recited what Ministry of Housing and Local Government had found. For example, 118 or 70% of the housing projects abandoned came from within the organization, which are the developers themselves. Both author agreed that the problem exist within the developers, 14% from wrong marketing and sale strategies while 16% come from poor company management and disputes between developers and the land owners. Furthermore, Hussin and Omran, (2011) discovered that Asian Financial Crisis such as in 1997 affected the developer whereby the cost of building material increased drastically and it had caused them to abandon the projects.

In contrast, Zairul and Ibrahim (2010) concluded what are the reasons of the housing projects abandonment: delay approval by the concerned authority on building plans and land status has cause the cost increase, financial problems from the developer to finance the projects, poor management by developers, lack of coordination between contractors and developers, dispute and disagreement between project consultants and the developers, increase in price of the construction materials, construction does not follow specification stipulated hence create the long delay in construction activities. Developers unethical attitude by delaying the payment to both contractors and the consultant, and lack of risk management skill among developers to predict future price,

change in construction materials and to set good marketing and sale strategy also resulting losses to the developers therefore they choose to abandon their residential housing projects.

## **2.5 Solution to Overcome the Problem**

Several solutions are provided to mitigate and overcome the problem of abandoned housing projects. One solution is to adopt another housing selling system instead of the CSS. If this system remains, then some of the conditions shall be enforced to balance the interests of creditors and purchasers or borrowers, and prevent exorbitant cruelty transactions (Dahlan & Aljunid, 2011). Promoting public-private partnership (PPP) might useful to mitigate delay and project abandonment (Abdul-Aziz & Kassim, 2011). Another preventive strategy could be the resolutions of developers, the government, financial institutions, and contractors to reduce project failure in the CSS. For projects that are already abandoned, Tan (2010) recommended an effective and efficient selling system while reviving the projects. Efficient Reviving Process (ERP) implies establishing an agent for the MHLG, and maintaining that the account of abandoned projects to be left untouched.

The government plays an important role in rehabilitating abandoned housing projects and addressing the different consequences of such projects. The MHLG has monitored the existence of housing projects abandonment in Malaysia since 1986, and reported that the cumulative figure of the total projects involved (until 31 December 2017) was 254. At the time, 64,640 housing units, involving 43,686 house buyers, exist in Malaysia. In 2017, a new division was established under the MHLG called the Division of Rehabilitation of Abandoned Projects. Handling this particular division is the Jabatan Perumahan Negara (JPN), a division of the Department of Housing and Local Government (DHLG) under the MHLG. From January 2009 to December 2017, the Division of Rehabilitation of Abandoned Projects has been responsible for and has completed the revival of 192 out of 254 abandoned housing projects in Malaysia (MHLG, 2017).

Other initiatives of the Malaysian government to resolve the issue of abandoned housing projects are focused on reducing the negative impacts of the latter. In general, the government's role can be categorized into the following: (1) facilitating and

monitoring the rehabilitation process; (2) funding some special abandoned project to facilitate the rehabilitation; (3) actions taken to reserve the right of purchasers and other legal resolutions; and (4) proposing an alternative housing selling system. The government launched the Special Task Force or a Special Purpose Vehicle (SPV) under the Ministry of Finance (MOF) to address the issue. In addition, Syarikat Perumahan Negara (SPNB), which is the MOF incorporated and funded in 2001, assigned with the major role of rehabilitating abandoned projects. Until 2017, the SPNB has successfully completed 192 projects involving 52,745 housing units, with 15 other projects under construction (SPNB, 2017).

The recent amendments made to the Housing Development (Control and Licensing) Act 1966 (Act 118), effected through the recent Housing Development (Control and Licensing) (Amendment) Act A1415, are believed to help mitigate the abandonment of housing projects and successfully complete the revival process. The amendments apply to all developers that refuse to continue the project or have postponed, suspended, or stopped the project for a period of six months or more, or past the original scheduled completion date as stated in the SPA (Dahlan, 2011b). Upon conviction, such developer is liable to pay a fine of not less than RM 250,000 but not more than RM 500,000, or be imprisoned up to three years, or both. Other amendments in the Act to reserve the right of purchasers include the following: (1) deposit increase from RM 200,000 to 3% of the total estimated physical development cost, which also includes professional fees for the Housing Development Account (HDA); (2) house buyers having the option to cancel the SPA in the event that the project does not take place within six months of the agreement being signed; (3) extending the House Buyers' Claims Tribunal (TTPR) scope to enable house buyers to claim damages from unlicensed housing projects; (4) imposing a maximum penalty of RM 50,000, from RM 20,000, for any offense of developers on any provisions under Act 118; (5) prosecuting developers responsible for abandoned housing projects; and (6) expanding the definition of "housing developer" to include liquidators, in which their role is to revive abandoned housing projects should the developer companies go for liquidation. (Act 118 Housing Development (Control and Licensing) Act 1966, 2016)

The initiatives and proposed solutions to address the problem of abandoned housing projects can be categorized into strategies to prevent the occurrence of the problem and remedies to address the problem after it has occurred.

## **2.6 Impact of Abandoned Projects**

Any of problems that occur certainly leave an impression either positive or negative. But in this case, the abandoned buildings would always give a bad impression either of the parties involved or not involved. The impacts of the abandoned construction projects are referring to the side effects or problems bring while a development project is said to be abandoned. Those impacts are negative because it will be caused of loss for the entire impacts. The impacts could be in varies aspects where it could be in terms personal impact, company impacts, social-economic impacts, environment impacts and country impacts.

### **2.6.1 Personal and Company Impact**

The first impression, personal and company here refers to the individual that involves in this construction project which is buyers and developer. This is because when the project is abandoned, buyers as victim is traumatized because they have a financial loss where they are still required to pay back the loan plus interest to financiers although there is no guarantee the house will be completed and handed over. Followed by for those houses buyers who are not capable for repayment loan they will have big problems toward the personal financial which might lead to the bankruptcy. (Abdul Hadi et al.)

For company's effect, appointed developer would have difficulty getting an injection of funds either through bank loans or investor capital company or sell the remaining unsold units for the purpose of recovering cash flows. In addition, the project was abandoned lead to significant financial losses to the company might be bankrupt because they could not repay damages to the buyer. In addition, companies will be blacklisted by the government in using any other development and cooperation and blacklisted from financial institutions in funding the recruitment of any new development. Image of their company affected because people who want to buy a house that will not buy from them because of the disappointing to the company.

### **2.6.2 Social and Economic Impact**

The increasing number of abandoned buildings, it's become a breeding place gangster, drug activity, illegal sexual activity and others to undergo undesirable activities. With the existence of such a situation, the safety of the neighborhood is disrupted, either because of family or personal security will provide an opportunity for theft by addicts or gangsters. In addition, if the abandoned projects increased, it will affect the country economy because it will decrease the chance of employment to the workers. Abdul Hadi et al stated that, the unemployment rate is increasing and causes the economy quality of life decrease upon people loss their job. At the end, social-economic issue gives impact by the abandoned project has the decreases the value of the property related to the surrounding market value.

### **2.6.3 Environment Impact**

Abandoned building will create a variety of pollution to the environment because it shows a dilapidated building in an area. This condition also can produce water retention, mosquito larvae like to be at water retention area. Besides, the reproduction of the existence of diseases such as dengue fever, which can be fatal will be increase. Abdul Hadi et al also stated that, dangerous animals are threatening to the public will appear where poisonous snake lead to people dead, the rat, flies and mosquito may create new diseases which lead the public healthy in a poor situation.

### **2.6.4 Country Impact**

By gather all the impacts that mentioned of above, it may affect the image of our country toward tourist that came to travel. It's also show the poor management skill of our country lead to a lot of abandoned project occurs and follow by those social-economic impacts and the environment impact then may cause loss in the tourism sector in Malaysia. In addition, due to the abandoned project that cause the overall market value collapse will lead to the country economic collapse as well because too much of unemployment cases in our country.



## **2.7 Summary**

The problems facing by private developers identified from existing literature mainly focus on issues concerning too many regulatory and act, complex development approval from the authorities, lack of sufficient fund and credit, lack of management knowledge, incapable to apply and implement modern construction methods and technique, lack of coordination between contractors and developers, dispute and disagreement between project consultants and the developers, poor marketing and sale strategy and unethical attitude by private developers. It is found that the relevant literature available is mainly news articles which lacks credibility and focuses mainly on abandoned housing projects. A more detailed research into abandoned construction projects in Malaysia is therefore required. In addition, the solution for the problems also has been justified in this chapter to be use as a guideline in overcome the problem.

A list of negative impacts has been produced as a result of an extensive literature review on the factors that affecting on construction project which is will be cause by abandoned housing. These impacts of abandoned construction projects will be used as a basis for an industry wide questionnaire survey as well as suggestions on how to solve the problems. In the following chapter, will be explored more about the questionnaire prepare for the study.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

Methodology is a set of procedures or methods used to conduct research. The methodology can be either the analysis of the principle methods, rules and postulates employed by a discipline or the systematic study of methods that are, can be, or have been applied within a discipline. This chapter describes on the methodologies used main intention of doing this study.

This research method has been developing to achieve the three objectives of this study; to study the statistics of abandoned project by private developers, to investigate the causes by private developers that contribute to the abandoned projects and to propose the potential solutions to the problems. In order to gain these objectives, information gathered starting from literature review, distributing questionnaire forms and conducting interview, data collection, data analysis and the discussion of the results, opinions and conclusion. This kind of method procedure is to make sure all the information gained for this study is related for evaluation. The quantitative methods are used in this study.

#### **3.2 Research Methodology**

Research methodology is “a system of methods used in a particular area of study or activity” (Oxford Dictionaries 2010a). Other definition of research is strategy as the way in which the research objectives can be questioned (Naoum, 2007). Also, research methods concern the techniques/approaches on collection and analysis of data (Fellows and Liu, 2008).

### 3.2.1 Quantitative Methods

Quantitative research involves the measurement of variables and their interrelationships. Therefore, the data obtained using the quantitative method is quantified data, measurable using scientific techniques and instruments. Data from the quantitative method are normally analyzed using statistical procedures (Creswell, 2009). Analyses of the data yield quantified results and conclusions derived from evaluation of the results in the light of the theory and literature (Fellows & Liu, 2008).

## 3.3 Literature Review

The literature review is carried out at the early stage of the research but it continues throughout as the research progresses. Existing literature on the issues and causes of abandoned construction projects has been reviewed. These potential causes will be used as a basis for an industry wide questionnaire survey as well as semi structured interviews to gain industrial opinions on the causes of the problems as well as suggestions on how to solve the problems. The sources of information are mainly news articles, and journals.

## 3.4 Primary Data Collection

Data collection techniques would be split into several stages to get information that is orderly. In early stage, a structure work shaped to get picture on study journey. This structure will divide to various parts namely:

### 3.4.1 Data observation

In this study, an observation data of the previous projects also involves to get the information. Data observation is required at the at the early stages of the research to determine the critical factors which tend to contribute to the abandoned projects in Malaysia. The observation was made using all the data collected from Ministry of Urban Wellbeing, Housing and Local Government (MHLG). In order to evaluate the causes of abandoned construction projects, direct observation is done by utilizing a checklist to document it in phase of analysis data.

### 3.4.2 Questionnaires

Questionnaire survey is used as primary data collection for this study. A total of minimum 100 questionnaires are distributed randomly to the private developer company. Questionnaires are distributed to the respondent to obtain feedback and appropriate data for the objectives of this study. The distribution of questionnaires done through social network and e-mail by using questionnaire form.

The questionnaires could be in the form of multiple choice questions. The sample of questionnaires survey used in this study is listed in appendix 1. The questionnaire is divided into four sections as follows:

- i. Section A: The purpose of this section is to establish respondent's background.
- ii. Section B: This section is divided by two which is about the abandoned house and the causes of the abandoned housing.
- iii. Section C: This section is including question about the problem facing by the private developers in contribution to abandoned house projects.
- iv. Section D: This section includes question about the solution of the problem facing by the private developer in contribution to abandoned house projects.

Likert's Scale is used in the multiple choices question which is five ordinal measure of agreement for each statement from 1 to 5.

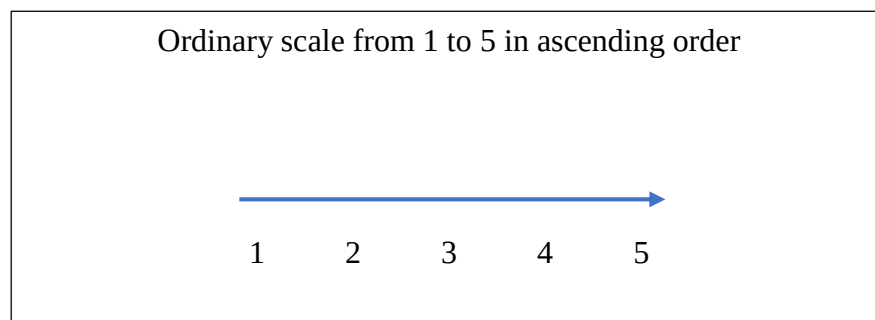


Figure 3.1 Five ordinal measure of agreement of Likert's scale

Each scale represents the following rating:

1 = Totally Agree

2 = Agree

3 = Neither agree or disagree

4 = Disagree

5 = Totally Disagree

The reasons that use this scale as follows:

- i. To make simply for respondents to answer
- ii. The evaluation of the data collection become easier to evaluate
- iii. Numerous information can be generated and obtained

### 3.5 Data Analysis

The data analysis made on the data obtained from questionnaires so that these data can be processed and converted into easily understood form of information. Relative Importance Index (RII) is adopted to evaluate the ranking of different factors by the respondents. The higher index value donates higher unnecessary statement with maximum index value factor. The classification of the rating scale by Mc Caffer and Zaimi Majid (1977) is following below:

Table 3.1 Relative Importance Index

| Rating Scale | Relative Index                           | Category                  |
|--------------|------------------------------------------|---------------------------|
| 1            | $0.00 \leq \text{Relative Index} < 0.20$ | Totally Agree             |
| 2            | $0.20 \leq \text{Relative Index} < 0.40$ | Agree                     |
| 3            | $0.40 \leq \text{Relative Index} < 0.60$ | Neither agree or disagree |
| 4            | $0.60 \leq \text{Relative Index} < 0.80$ | Disagree                  |
| 5            | $0.80 \leq \text{Relative Index} < 1.00$ | Totally Disagree          |

Khairul Hisyam Kamarudin stated that the formula for Relative Importance Index is as follows:

$$\text{Relative Importance Index (RII) Value} = \frac{\sum w}{A \cdot N} \quad (0 \leq \text{RII} \leq 1)$$

RII : relative importance index

W : is the weight given to each factor by the respondents and ranges from 1 to 5, (where '1' is "strongly agree" and "5" is "strongly disagree")

A : is the highest weight (i.e 5 in this case)

N : is the total number of respondents

### **3.6 Summary**

Summary is a review on definition of research and research methodology use in this study. The method used for literature review and questionnaire survey has also been reported. The results gathered from the data analysis are used to establish the final conclusion based on the objectives of the study.

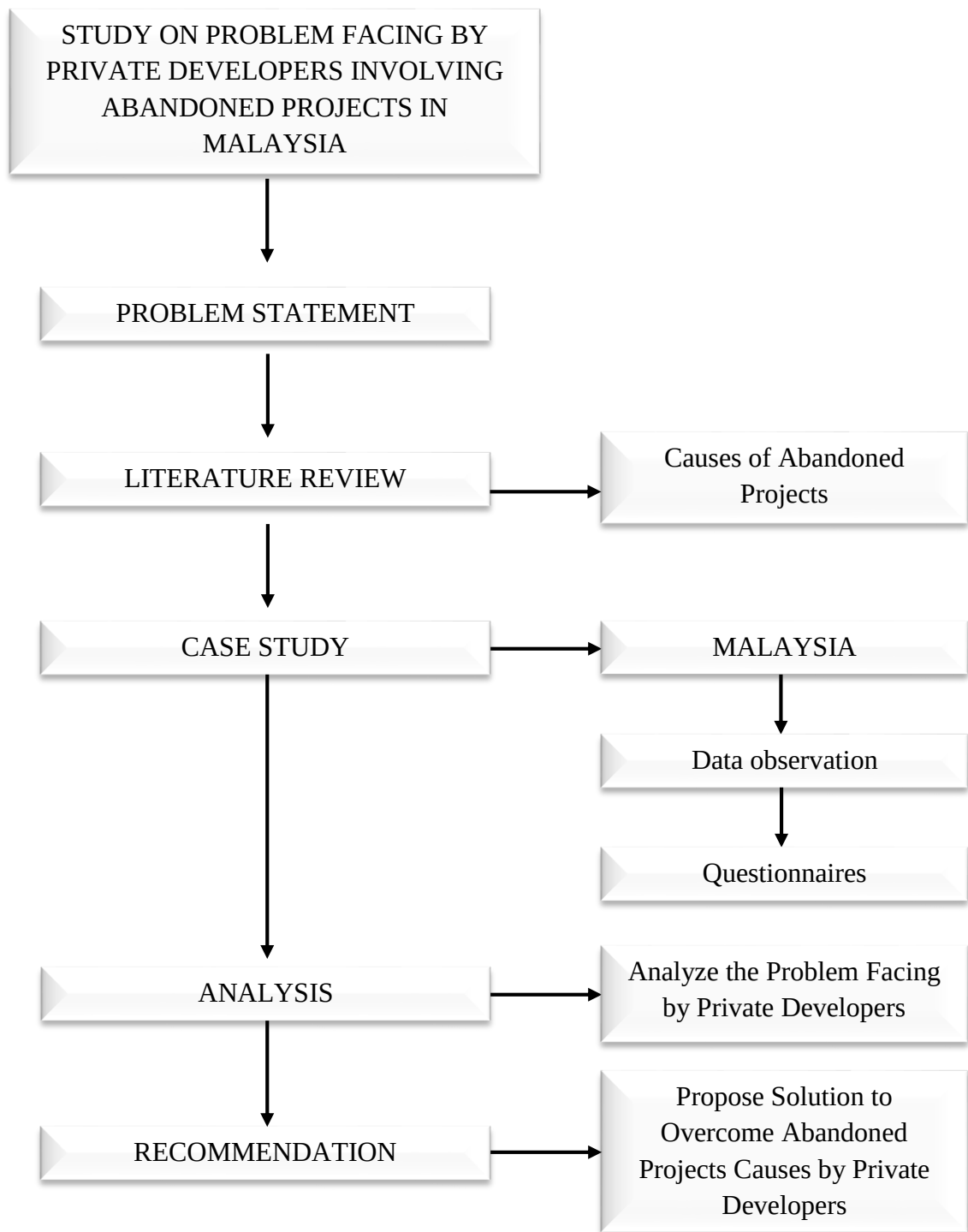


Figure 3.2 Flowchart of research methodology

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter will explain the finding of data collecting and also data analysis in order to achieve all three objectives. It involves treating, managing, and analyzing of all information gathered in previous phases particularly in data collection. The data was collected through the questionnaire that conducted based on the objective of study.

#### **4.2 Study On Statistics of Abandoned Projects**

Statistics of abandoned housing projects have been obtained from the annual report issued by the state housing department. This annual report has been published for public reading on the official portal of the department. In this annual report, the number of housing projects has been grouped by state and summed up according to status of construction that has been updated by the state housing department. Data from 2009 to 2018 have been reviewed at a rate that will further prove that there is a considerable increase in rates on abandoned housing projects. The study was conducted starting from 2009 to avoid the economic crisis aspect that has been identified with the name 'The Great Depression' in 2008, thus the economic crisis will not be a big influence that will contributed to abandoned housing projects. As addition, based on previous studies, the economic crisis is not a major contributor to the abandonment of this abandoned housing project.

Table 4.1 and Table 4.2 shows the statistic of abandoned housing project in Malaysia in 2009 to third quarter of 2018. Next, the Figure 4.1 shows the comparison statistic of abandoned housing project in Malaysia in 2009 to third quarter of 2018.



Table 4.1 Statistic of abandoned housing project in Malaysia (2009)

| Status       | No of Projects   | No of House Unit | No of buyers  |
|--------------|------------------|------------------|---------------|
| Planning     | 21 (27%)         | 4,323            | 2,893         |
| Restoring    | 5 (6%)           | 1,186            | 746           |
| Completed    | 56 (67%)         | 23,974           | 17,149        |
| <b>Total</b> | <b>82 (100%)</b> | <b>29,483</b>    | <b>20,788</b> |

Table 4.1 shows a total of 21 (27%) projects remaining in the government's initial plan to revive, which involved 2,893 total purchasers and 4,323 units of houses. Thereafter, there were 5 (6%) projects being rehabilitated by the government which involved 746 buyers and 1,186 units of houses. Lastly, there are 56 (67%) completed and fully completed projects which involved 17,149 total purchasers and 23,974 units of houses. The total number of abandoned housing projects in 2009 was 82 projects which involved 20,788 total purchasers and 29,483 residential units.

Table 4.2 Statistic of abandoned housing project in Malaysia (June 2018)

| Status       | No of Projects    | No of House Unit | No of buyers  |
|--------------|-------------------|------------------|---------------|
| Planning     | 46 (18%)          | 7,648            | 5,303         |
| Restoring    | 13 (5%)           | 4,029            | 2,873         |
| Completed    | 196 (77%)         | 52,963           | 35,510        |
| <b>Total</b> | <b>254 (100%)</b> | <b>64,640</b>    | <b>43,686</b> |

Table 4.2 shows a total of 46 (18%) projects remaining in the government's initial plan to revive, which involved 5,303 total purchasers and 7,648 units of houses. Thereafter, there were 13 (5%) projects being rehabilitated by the government which involved 2,873 buyers and 4,029 units of houses. Lastly, there are 196 (67%) completed and fully completed projects which involved 35,510 total purchasers and 52,963 units of houses. The total number of abandoned housing projects in June 2018 was 254 projects which involved 43,686 total purchasers and 64,640 residential units.

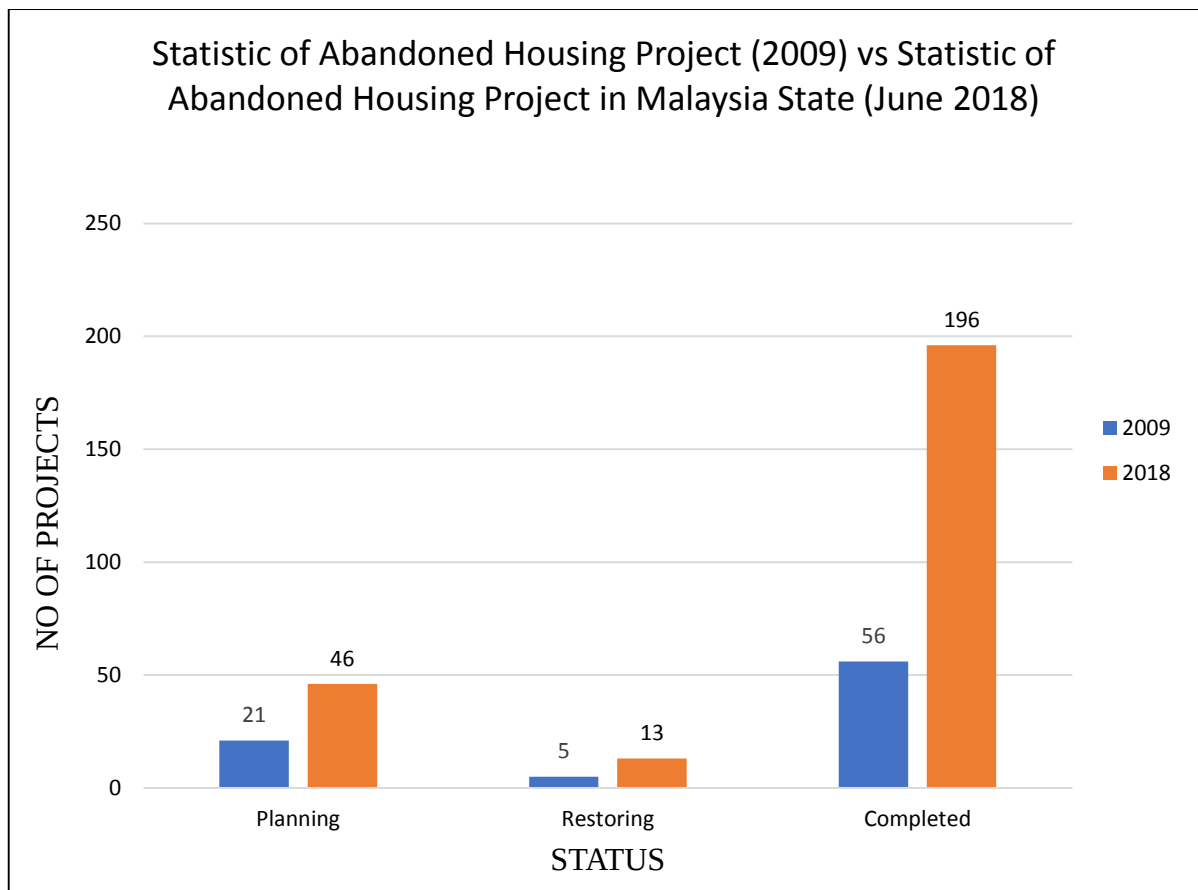


Figure 4.1 Statistic comparison on abandoned housing projects in 2009 to June 2018

Based on figure 4.1, the rise number of projects under initial recovery planning in June 2018 based on 2009 data was 119%, while the number of projects being rehabilitated was 160% increased based on 2009 data. Furthermore, the increasing of completed projects total number is 250%. Lastly, the total number of abandoned housing projects has increased by 210% to June 2018 as compared to 2009. The increase rate has increased by two times which has triggered concerns among buyers.

This may be due to various aspects that are not seriously considered resulting in abandoned the projects. By comparing previous studies, this study compares the increase in project abandonment that has taken place for the last 9 years based on a statement issued by the Minister of Development. As a prevention for this abandonment issues from continuing, this study has been conducted to refine the aspects faced by main contributor which is developer that could contribute to abandoned projects.

### 4.3 Responses to Questionnaires

The structured questionnaire based on the literature review is presented in Appendix. The questionnaire has been distributed to the 10 random construction companies to seek the views from the construction expertise such as engineer, technician, developer, consultant and others. This questionnaire form should be answered by the expertise to ensure the authenticity of the data obtained. Table 4.3 shows the list of the respondent's selected companies. The number of respondents collected from the questionnaire is 86.

Table 4.3 List of companies selected

| No | Company's Name                        | No | Company's Name                |
|----|---------------------------------------|----|-------------------------------|
| 1  | Kedah Holdings Sdn. Bhd.              | 6  | Anas Construction             |
| 2  | Bina Darulaman Bhd.                   | 7  | DKLS Construction Sdn. Bhd.   |
| 3  | EUPE Corp. Bhd.                       | 8  | Belati Wangsa (M) Sdn Bhd     |
| 4  | Builtech Project Management Sdn. Bhd. | 9  | Conlay Construction Sdn. Bhd. |
| 5  | PLB Land Sdn. Bhd.                    | 10 | JKR Kedah                     |

In the selection of a company to ask for a view, some criteria are needed to ensure the effectiveness of the views that will affect the results to be made at the end of this study. All of the above companies are selected based on their credibility and success in project success since the establishment of the company. As an addition, companies that have been listed above are some well-known companies in their respective states.

#### 4.3.1 Background of Respondents

A total of 86 respondents were selected for this research. The background of each respondents taking into consideration are the gender, occupation, occupation sector, ages and the duration of their involvement in construction industry.

##### 4.3.1.1 Occupation of Respondents

The respondents' occupation sector data is described in this section. A detailed overview of the occupation sector of the respondents is presented in Table 4.4 and Figure 4.2.

Table 4.4 The demographic occupation sector of the respondents ( $N = 86$ )

| Sector       | Frequency, $n$ | Percentage, % |
|--------------|----------------|---------------|
| Private      | 49             | 57            |
| Government   | 37             | 43            |
| <b>Total</b> | <b>86</b>      | <b>100</b>    |

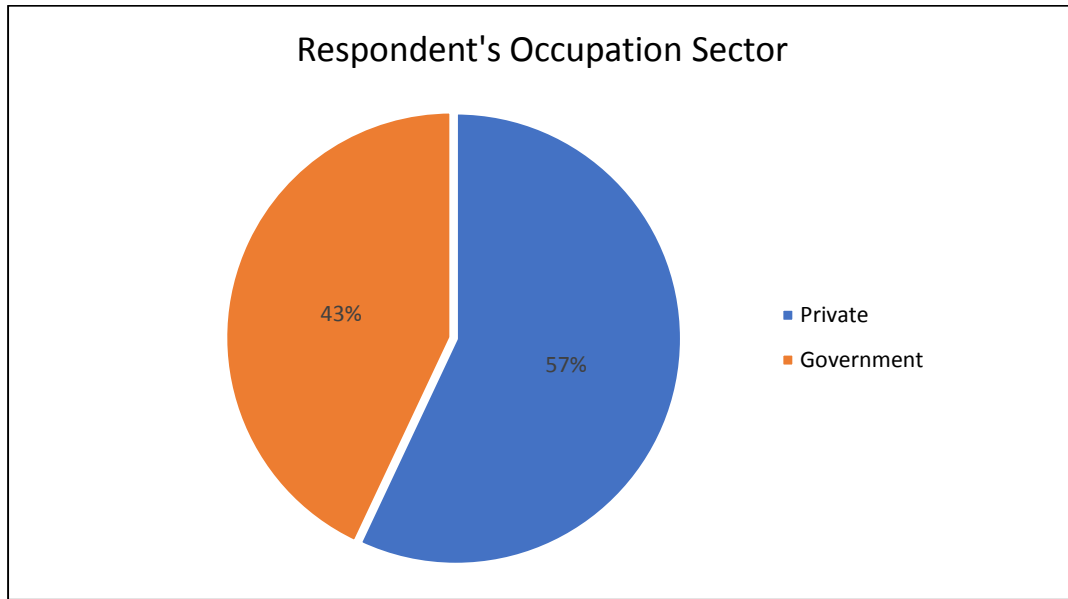


Figure 4.2 Respondent's occupation sector

Figure 4.2 represented the sector of work for respondents that involved in construction industry. The figure shows that 57% of the respondents are in private sector, followed by government sector which is 43% respondents. The percentage shows that the private sector respondents are much higher than government sector respondents.

It happens because the questionnaire is more widely distributed to the private sector than the government sector. The questionnaire was distributed to 9 private companies rather than just a government company, thus the private sector questionnaires would likely be the majority voted. The result also shows that the percentage between government and private sector is almost balanced, and will provide answers that does not favor any parties compared to previous studies which only focused on the private sector alone. Each sector can give their own opinions based on their sector's experience, for example the private sector will be more vulnerable to project risks managed being into

abandoned projects while for the government sector, they are more vulnerable to the process of reviving the abandoned projects.

The respondents' occupation data is described in this section. A detailed overview of the occupation sector of the respondents is presented in Table 4.5 and Figure 4.3.

Table 4.5 The demographic occupation of the respondents ( $N = 86$ )

| <b>Occupation</b> | <b>Frequency, <math>n</math></b> | <b>Percentage, %</b> |
|-------------------|----------------------------------|----------------------|
| Engineer          | 22                               | 26                   |
| Contractor        | 15                               | 17                   |
| Government sector | 12                               | 14                   |
| Technician        | 10                               | 12                   |
| Local authorities | 8                                | 9                    |
| Developer         | 12                               | 14                   |
| Consultant        | 7                                | 8                    |
| <b>Total</b>      | <b>86</b>                        | <b>100</b>           |

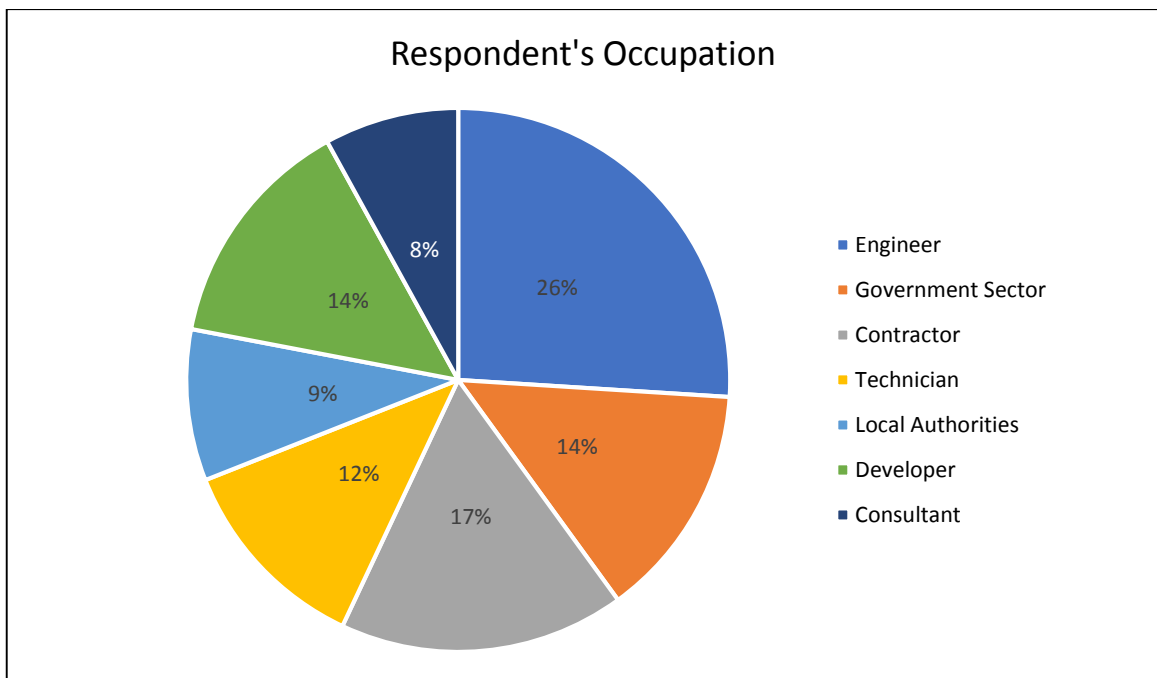


Figure 4.3 Respondent's occupation

Figure 4.3 represented the occupation of respondents that involved in construction industry. The figure shows that 26% of the respondents are engineer, followed by the respondents from contractor which is 17% respondents. Government sector and developer takes third place of the majority respondents with 14%. Next, the percentage followed by the technician and local authorities with the percentage of the respondents is 12% & 9 respectively. For the least percentage of the respondents is consultant which at 8%. Engineers and contractors become the majority because these two parties are available in all types of construction companies compared to other parties such as consultants and authorities.

Despite that, majority of the respondents are the parties that directly involves on site which will influence the result a lot for this study. The experience possess by the respondents may help in providing a better understanding of this matter and in better position in giving much precise answer required to the questionnaires form. In this study, it clearly demonstrates the feasibility of the respondents' characteristics which provide an opinion and thus provide an effective answer to this abandonment issue.

#### 4.3.1.2 Experience in The Construction Industry

In this part, the experience will play an important factor in gaining experience in the probability encountered with abandoned projects. In addition, the longer the individual is involved with the construction sector, the more the situation will take, which is likely to contribute to the risk of abandonment projects. The respondents' experience in the construction industry data is described in this section. A detailed overview of the experience in the construction industry of the respondents is presented in Table 4.6 and Figure 4.4.

Table 4.6 The demographic experience of the respondents ( $N = 86$ )

| <b>Years of Experience</b> | <b>Frequency, <math>n</math></b> | <b>Percentage, %</b> |
|----------------------------|----------------------------------|----------------------|
| Less than 1 year           | 25                               | 29                   |
| 2-5 years                  | 40                               | 47                   |
| More than 5 years          | 21                               | 24                   |
| <b>Total</b>               | <b>86</b>                        | <b>100</b>           |

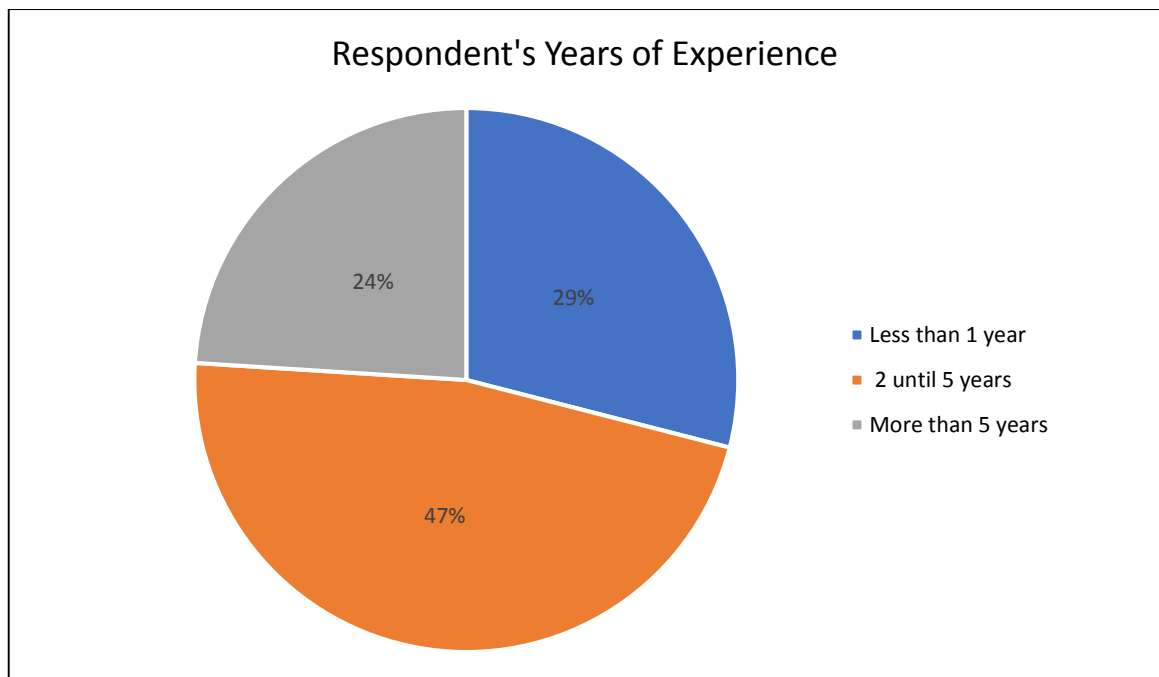


Figure 4.4 Respondent's years of experience

Figure 4.4 show the years of experience of the respondents in construction industry. Most of the respondents experienced 2 to 5 years in construction industry with 47% majority followed by less than 1 year of experience which is 29% of the respondents. Next, more than five years of experience was on the last place which at 24%. The data shows that expertise has influenced the percentage of the respondents thus provided the best answer for this research. The majority comes from respondents experienced 2 to 5 years due to the positions that will require much more experienced to be held.

However, this percentage also reflected the current phenomenon of local industry, which there were large amount of young practitioners have been graduated in current years to meet the vast human demand, and they sat on high positions in the organizations. This research focuses on more experienced people in providing insights and provides the best answer for this research.

#### 4.3.1.3 Location of Respondents

Respondent's location is not a major factor in influencing the validity of the answer but it can play a role in the possibility of involvement of an individual that works in a state with a high number of abandoned housing projects. The views of individuals which directly involved with abandoned projects are meaningful to this research. The

respondents' location data is described in this section. A detailed overview of the location of the respondents is presented in Table 4.7 and Figure 4.5.

Table 4.7 The demographic location of the respondents ( $N = 86$ )

| <b>Location</b> | <b>Frequency, <math>n</math></b> | <b>Percentage, %</b> |
|-----------------|----------------------------------|----------------------|
| Kedah           | 29                               | 33                   |
| Penang          | 16                               | 19                   |
| Selangor        | 15                               | 17                   |
| Perak           | 10                               | 12                   |
| Perlis          | 9                                | 11                   |
| Kuala Lumpur    | 7                                | 8                    |
| <b>Total</b>    | <b>86</b>                        | <b>100</b>           |

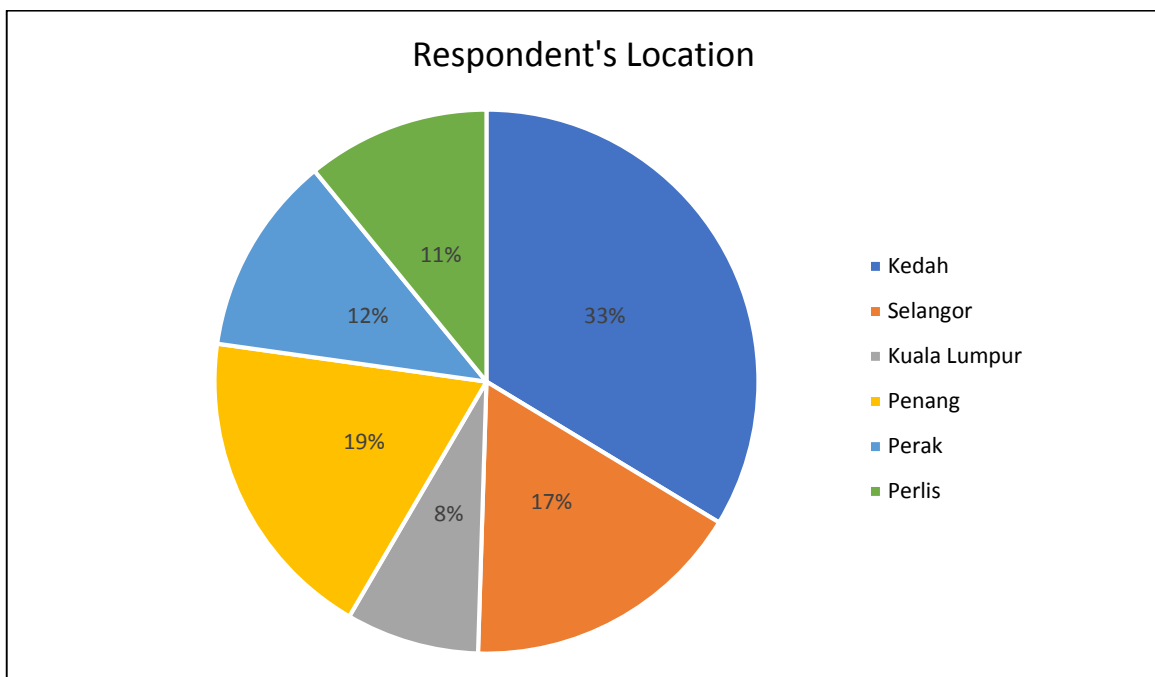


Figure 4.5 Respondent's location

Figure 4.5 show the location of the selective respondents. Questionnaires are distributed to Selangor, Kuala Lumpur and all over state in North Malaysia. The majority of the respondents are from Kedah, Penang and Selangor with 29, 16 and 15 respondents or 33%, 19% and 17% respectively. This is followed by Perak respondents, with 10 respondents representing 12% in this study, followed by Perlis with 9 respondents or



11%. The least percentage of respondents came from Kuala Lumpur with 8% or 7 respondents.

Most of the respondents came from huge company that has involved with varieties of the projects. The majority of respondents are from northern Malaysia as 9 out of 10 companies are from northern Malaysia. As an additional info, Kedah is the second largest state to receive funds from the government in an effort to restoring abandoned projects. Therefore, the views obtained may the views of those who have been involved with the abandoned projects.

#### **4.4 Evaluate The Perspective from Authority Regarding Abandoned Housing Project in Malaysia**

In this section, the perspective of the authorities will be taken into account in assessing the seriousness of this issue. The perspective of the authorities that have been directly involved with the construction sector will help in obtaining the effectiveness of the study. Nowadays, the issue of abandoned projects is no longer foreign in the construction sector in Malaysia, but not all states affected by the problem with the growth of the growing number of abandoned projects. There are likely to be a few who did not aware about the abandoned project issue. The data to be obtained can be used to further elaborate the scope of the study to provide an effective solution for areas involved with severe abandoned project issues. A detailed overview of the authority perspective regarding abandoned housing project in Malaysia is presented in Table 4.8 and Figure 4.6.

Table 4.8 The demographic perspective from authority regarding abandoned housing project in Malaysia ( $N = 86$ )

|              | <b>Frequency, <math>n</math></b> | <b>Percentage, %</b> |
|--------------|----------------------------------|----------------------|
| Yes          | 68                               | 79                   |
| No           | 14                               | 16                   |
| Maybe        | 4                                | 5                    |
| <b>Total</b> | <b>86</b>                        | <b>100</b>           |

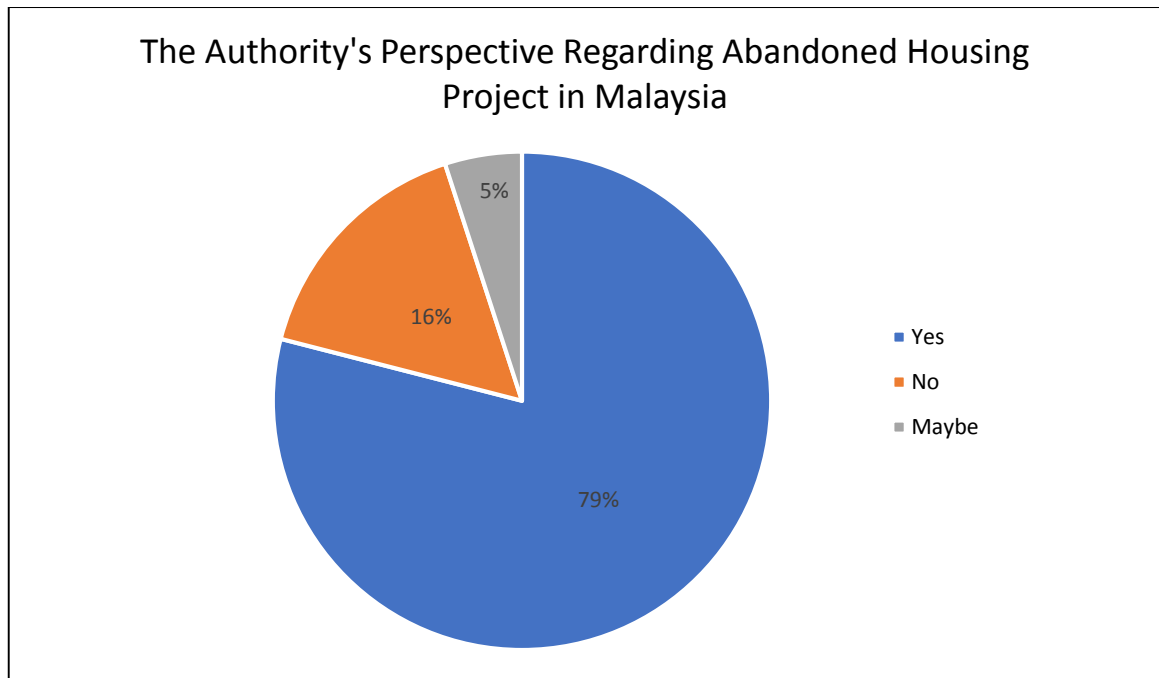


Figure 4.6 The authority's perspective regarding abandoned housing project in Malaysia

Abandoned projects are an issue which is very popular among the authorities. Figure 4.6 shows the responses of the authorities involved in this study whether they know or not on the problem cases in this study. 79% of the respondents chose Yes, while the respondents that chose No is 16% and the rest chose Maybe is 5%. This data shows that the abandoned housing project is possibly known by the most of the respondents and this data clearly proves that the issue and problem is highly ranked in the construction industry. The rest that chose No and Maybe may because of the unclear view of the current issue that haunt the majority of the stakeholder involve in the construction industry.

The questionnaire was distributed to companies located in areas with high number of abandoned projects, which in turn gave feedback that the majority of respondents were aware of the current problems in the construction sector of Malaysia. Through this study, it will give a clear view to the authority and be more concerned about the problems of this abandoned house / buildings. The authority experience involving abandoned housing project in Malaysia data is described in this section. A detailed overview of the authority experience of the authority involving abandoned housing project in Malaysia is presented in Table 4.9 and Figure 4.7.

Table 4.9      The demographic authority experience involving abandoned housing project in Malaysia ( $N = 86$ )

|              | Frequency, $n$ | Percentage, % |
|--------------|----------------|---------------|
| Yes          | 66             | 77            |
| No           | 20             | 23            |
| <b>Total</b> | <b>86</b>      | <b>100</b>    |

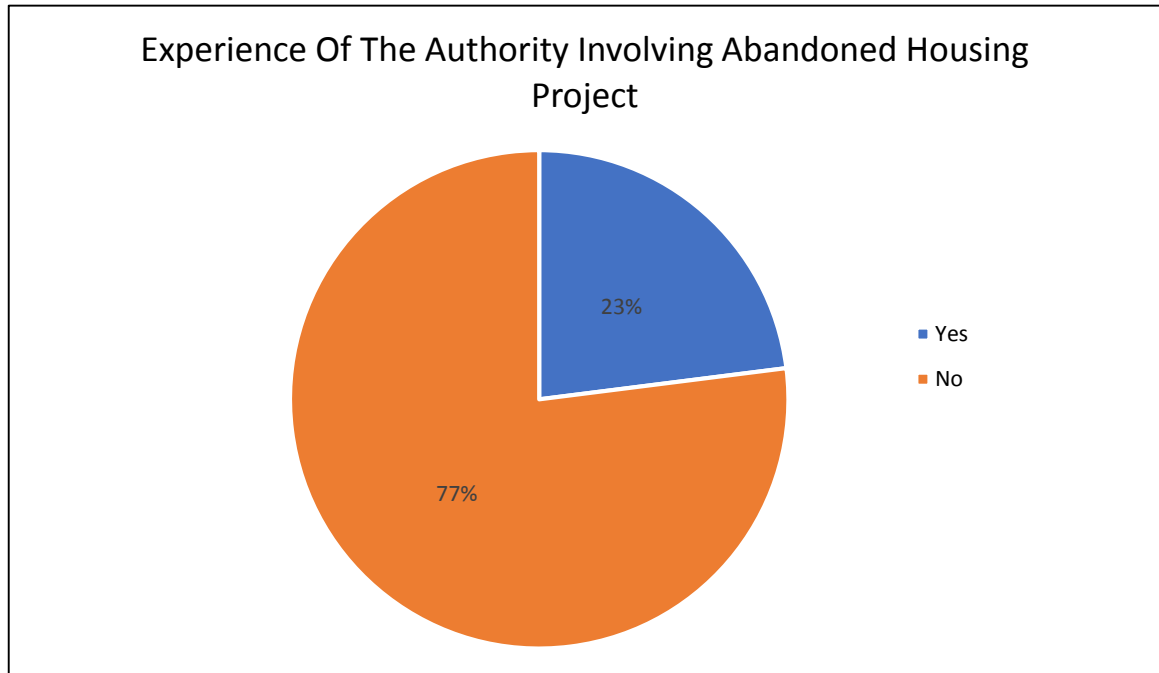


Figure 4.7      Experience of the authority involving abandoned housing project

In Figure 4.7, the responses of the respondents either have experienced in managing abandoned housing projects have been analyzed. However, there were only 23% of the respondents had experienced managing abandoned projects and 77% majority of the respondents never experienced in dealing with this issue. The data outcome bit worrying because it may affect the results as the views from the authority of those have experienced the abandoned projects is less than the inexperienced. The views from the experienced authority are very important to get the best result and best solution to this problem. It may be due to the distribution of questionnaires to a reputable company in delivering a project to the buyer. So, most of them have never been directly involved with the problem of this abandoned project. For earlier planning, this study focused more on

the experience of an individual who has been involved directly in the issue of abandoned projects to provide a very useful point of view, but the findings of this questionnaire form only one third of the parties involved with the problem. But even so, through this study, the inexperienced will be clearer on the issue and the problem of abandoned projects.

This study explains in depth the definition of abandoned projects, statistics, the cause, the major problems towards this issue and solutions that clearly indicate that this issue is not an issue that can be taken lightly as it will hurt more parties especially the buyers.

Based on previous studies, private developers have been selected as stakeholders that have contributed most to the problem of this abandoned project. Therefore, private developers have been chosen as individuals that contribute substantially to the root of this abandoned project problem. In this section, the point of view is needed to reinforce the view of the authorities to prove that the private developer is the most contributing towards this problem. The private developer are the main causes of the construction projects abandonment data is described in this section. A detailed overview of the private developer are the main causes of the construction projects abandonment is presented in Table 4.10 and Figure 4.8.

Table 4.10 The demographic private developer are the main causes of the construction projects abandonment ( $N = 86$ )

|                            | <b>Frequency, <math>n</math></b> | <b>Percentage, %</b> |
|----------------------------|----------------------------------|----------------------|
| Totally disagree           | 1                                | 1                    |
| Disagree                   | 4                                | 5                    |
| Neither agree nor disagree | 2                                | 2                    |
| Agree                      | 59                               | 69                   |
| Totally agree              | 20                               | 23                   |
| <b>Total</b>               | <b>86</b>                        | <b>100</b>           |

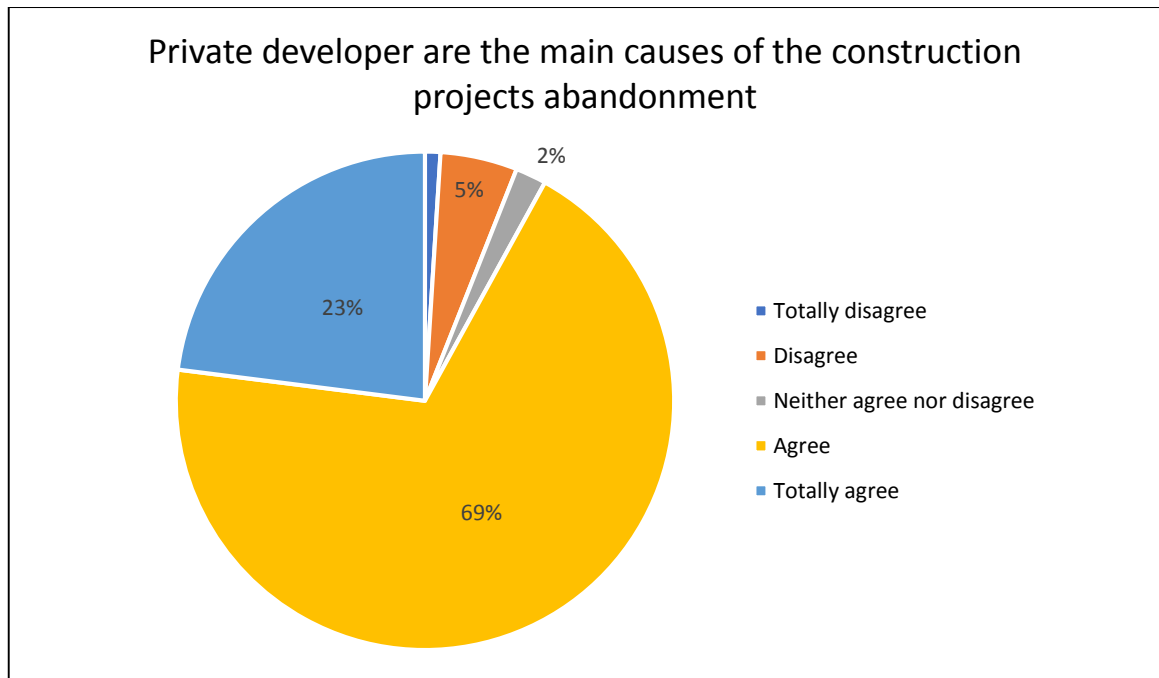


Figure 4.8 Private developer are the main causes of the construction projects abandonment

Private developer are the main causes to the problem of abandoned construction projects. The views of the respondents were surveyed in this study have been analyzed in Figure 4.8. Through a range of one to five, from strongly agree to strongly disagree, 69% of the respondents agreed that the private developer is the main cause of the abandoned construction projects. Followed by 23% respondent strongly agreed, and 2% chose neither agree nor disagree. Even so, there are 5% of the respondents choose not to agree that private developer is the main cause of this problem. However, this study remains agree that private developer is the main cause of this problem as the majority of the respondents respond agree toward this question.

Private developers have been selected as the main party responsible for contributing to the problem of this abandoned project. This may be due to the various problems arising from private developers such as unethical attitude, low cash flow, fraudulence, mismanagement, poor marketing and sale strategy, business termination and incapable to implement modern construction methods. Due to some of the factors attributable to the developers, it is not surprising that the authorities have chosen a private developer as the root of the problem. Various cases have been done regarding this problem, but this study has done more focusing on the problem facing by private

developer which contributed to the abandoned construction projects. The next section will discuss the main problems facing by private developer involving abandoned projects in Malaysia.

The purchaser blame the approving authorities of the said project is right action data is described in this section. A detailed overview of the purchaser blame the approving authorities of the said project is right action is presented in Table 4.11 and Figure 4.9.

Table 4.11 The demographic purchaser blame the approving authorities of the said project is right action ( $N = 86$ )

|              | Frequency, $n$ | Percentage, % |
|--------------|----------------|---------------|
| Yes          | 69             | 80            |
| No           | 17             | 20            |
| <b>Total</b> | <b>86</b>      | <b>100</b>    |

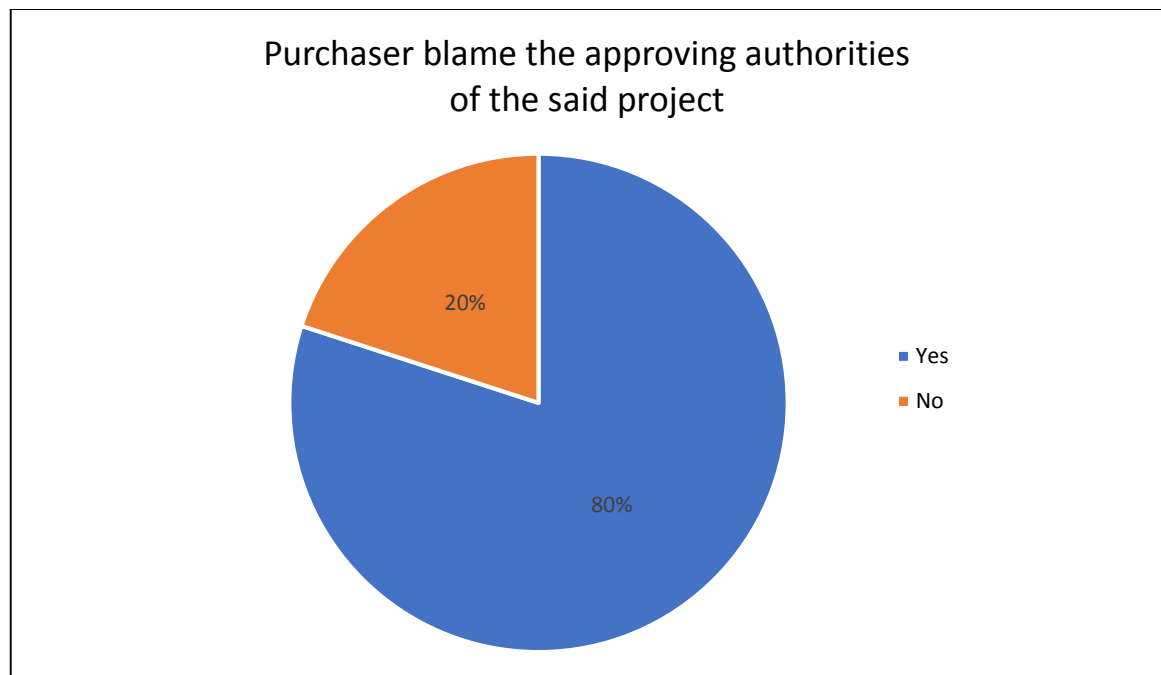


Figure 4.9 Purchaser blame the approving authorities of the said project

In Figure 4.9, the respondents preferred 'Yes' to this question, 'Is it right for purchaser facing the abandonment stress to blame the approving authorities of the said

project?’ in which the question put this matter to the authorities that have approved to the projects. 80% of the respondent answered ‘Yes’, while the rest of 20% of the respondents disagree with the question. Based on the data obtained, it shown that majority of the respondents put the offense and agreed that the party that involved in the project should be responsible and play a major role in abandonment problem occur, is the developer.

This is because private developers have full control over projects that have been approved. Therefore, any problems arising after the sale process will be held accountable to private developers. According to the Housing Development (Control and Licensing) Act 1966, the purchasers enable to initiate criminal proceedings against any licensed housing developers who abandon or cause to be abandoned any housing project. The licensed developer who abandons or causes a housing development to be abandoned may be fined between RM250,000 and RM500,000 or imprisoned for a term not exceeding 3 years, or both. In this study, the scope of research has been diminished and focused on problem facing by the private developer, thus help the private developer to overcome their main critical factors.

#### **4.5 Ranking of Main Problems Facing by The Private Developer Which Contributes to the Abandonment Housing Projects**

The objective of this section is to determine the problem facing by private developers which contributes to the abandonment housing projects in Malaysia. A total of 10 problems facing by the private developer therefore led to the abandoned building / housing projects have been identified from the literature review. These problems will be ranked based on relative importance index (RII) as mentioned in the methodology in chapter three.

The problem facing by private developer which contributes to the abandonment housing project in Malaysia ranked by 86 of respondents are illustrated in Table 4.12. The problem ranked for number 1 which led to abandonment housing projects is private developer abandoned their projects due to unethical attitude of private developer resulting in misuse of project capital and fraudulence. This is followed by problem ranked for number 2 which private developer facing problems on poor marketing and sale strategy. On the number 3 ranked, private developers facing lack of management knowledge issues among managers. Subsequently, problems ranked on number 4 and 5 focus on private

developer must comply with too many regulatory and act which resulting in delayed the project progress and private developers must confront with more complex situation on the development approval from the authorities such as land conversion for housing, drawing of layout plans, building and structure plans, planning of infrastructure and assessment of environment impact.

The problems that ranked on number 6 is lack of coordination between contractors and developers which led to abandoned projects. This is followed by private developer facing business termination or bankruptcy issue which led to the abandoned project that ranked on number 7. Next, the problem that ranked on number 8 is private developers incapable to apply and implement modern construction methods and technique to achieve project goal and meet project deadline. The second last problem ranked is lack of sufficient fund and credit which resulting in unable to run construction activities, to buy construction materials, to pay wages and etc. Lastly, the last problem ranked is Dispute and disagreement between project consultants and the developers.

Table 4.12 Ranking on problem facing by private developer involving abandoned projects

| Rank | Question                                                                                                                                                                                                                                                                   | RII   | Question |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----------|
| 1    | Private developer abandoned their projects due to unethical attitude of private developer resulting in misuse of project capital and fraudulence.                                                                                                                          | 0.43  | 1        |
| 2    | Private developer facing problems on poor marketing and sale strategy.                                                                                                                                                                                                     | 0.523 | 3        |
| 3    | Private developers facing lack of management knowledge issues among managers.                                                                                                                                                                                              | 0.556 | 4        |
| 4    | Private developer must comply with too many regulatory and act which resulting in delayed the project progress.                                                                                                                                                            | 0.556 | 8        |
| 5    | Private developers must confront with more complex situation on the development approval from the authorities such as land conversion for housing, drawing of layout plans, building and structure plans, planning of infrastructure and assessment of environment impact. | 0.570 | 6        |
| 6    | Lack of coordination between contractors and developers which led to abandoned projects.                                                                                                                                                                                   | 0.574 | 10       |



|    |                                                                                                                                                   |       |   |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|
| 7  | Private developer facing business termination or bankruptcy issue which led to the abandoned project.                                             | 0.574 | 5 |
| 8  | Private developers incapable to apply and implement modern construction methods and technique to achieve project goal and meet project deadline.  | 0.574 | 9 |
| 9  | Lack of sufficient fund and credit which resulting in unable to run construction activities, to buy construction materials, to pay wages and etc. | 0.579 | 2 |
| 10 | Dispute and disagreement between project consultants and the developers.                                                                          | 0.670 | 7 |

Mitigation efforts are necessary to minimize losses due to the abandonment problems. Previous analysis on the problem facing private developer which contribute to the abandonment problems is significant as to recommend the appropriate action or method to mitigate the abandoned housing case in Malaysia and minimize the problems that may be raised.

Abandoned housing had been a topic of concern in the construction industry. This problem can be minimized only when their problems are identified. Knowing the problems facing by private developer involving abandoned housing in a construction projects would help avoiding the effects. Table 4.13 show ranking of the top six effective methods of minimizing this issues from the viewpoint of respondents in Malaysia. These methods were ranked based on relative importance index as mention in chapter three. The respondents agreed that ‘amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular Malaysia and the protection of the interest of the purchasers’ are the best solution to mitigate this problem. The second top solution chose by respondents are ‘encouraging project delivery success through some approaches such as public-private partnerships’.

Table 4.13 Ranking of solution to overcome abandoned projects

| Rank | Question                                                                                                                                       | RII | Question |
|------|------------------------------------------------------------------------------------------------------------------------------------------------|-----|----------|
| 1    | Amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular | 0.5 | 1        |

|   |                                                                                                                   |       |   |
|---|-------------------------------------------------------------------------------------------------------------------|-------|---|
|   | Malaysia and the protection of the interest of the purchasers.                                                    |       |   |
| 2 | Encouraging project delivery success through some approaches such as public-private partnerships.                 | 0.533 | 2 |
| 3 | Rehabilitation (reviving) of current abandoned projects can be a solution to reduce the abandoned housing project | 0.547 | 3 |
| 4 | Changing the current off-the-plan selling system to a new selling system (such as build-then-sell).               | 0.588 | 4 |
| 5 | Takeover by the Government.                                                                                       | 0.721 | 5 |
| 6 | Demolition.                                                                                                       | 0.856 | 6 |

#### 4.6 Summary

By conducting analysis and discussion in this chapter, various discoveries and results are obtained. The pre-defined objectives are accomplished by focusing to answer the research question during the analysis and discussion. The problems facing by private developer that contributes to the abandoned housing and point of view from experts about regarding this matter were distinguished, ranked and analyzed. From a sum of ten problems that contributes to the abandonment of housing projects, five best most critical problems have been distinguished. The methods in minimizing abandonment of housing projects also established. Thus, the following chapter, which is the final chapter, will include end, and recommendation for this study, and recommendation for further research on this topic. Problems that exist amid the study and the limitation will also be described in the following chapter.

## **CHAPTER 5**

### **CONCLUSION**

#### **5.1 Introduction**

This chapter discusses the three objectives that has been achieved through previous analysis and discussion chapter. Therefore, in this final chapter of the research project paper, the overall conclusion and summary of the study will be made. Besides that, any recommendation for this study as well as recommendation for pursuing this study will also be described in this chapter.

#### **5.2 Conclusion of the Findings**

The followings are the conclusions derived from the literature study and questionnaire survey conducted.

##### **5.2.1 To Study the Statistics of Abandoned Project by Private Developers**

As mentioned in Chapter 1, the first objective is to study the statistics of abandoned projects by private developer. This objective has been achieved through the literature review in previous chapter and the comparison data reviewed in the Chapter 4. From the Figure 4.1 in Chapter 4, the data shows the comparison of abandoned housing project by private developer for the entire Malaysia starting from 2009 till June 2018.

##### **5.2.2 To Investigate the Problems Facing by Private Developers That Contribute to the Abandoned Projects**

Second objective has been achieved through literature review and questionnaire data obtained from the survey. From the literature review, about ten problems facing by private developer that contribute to the abandonment housing projects in local construction market have been identified. The problems were ‘Private developer must

comply with Building Standard (UBBL) 1984 due to the building standard and safety (Ismail, 2008)', 'Private developers must confront with more complex situation on the development approval from the authorities (Tan, 2011)', 'Private developer abandoned their projects due to the lack of sufficient fund and poor management (Khalid, 2010)', 'The private developers or housing contractors is that lack of knowledge in project management and incapable to apply and implement modern construction methods and technique to achieve project goal and meet project deadline (Mumin, 2010)', 'The worse of lack knowledge in housing construction is contractor's improper planning, poor site management, faulty in communication and mistake during construction stage (Sambasivan & Soon, 2007)', 'Wrong marketing and sale strategies and disputes between developers and the land owners (Hussin & Omran, 2011)', 'construction does not follow specification stipulated and (Zairul & Ibrahim, 2010)', 'Developers unethical attitude by delaying the payment to both contractors and the consultant (Zairul & Ibrahim, 2011)'. All these factors are shown in chapter 2.

Therefore, the results for the frequency of problems of occurrence based on priority are; 'private developer abandoned their projects due to unethical attitude of private developer resulting in misuse of project capital and fraudulence'. Follow by 'private developer facing problems on poor marketing and sale strategy.' and 'Private developers facing lack of management knowledge issues among managers.'. Subsequently, next problems appear to focus on 'private developer must comply with too many regulatory and act which resulting in delayed the project progress.' and 'private developers must confront with more complex situation on the development approval from the authorities such as land conversion for housing, drawing of layout plans, building and structure plans, planning of infrastructure and assessment of environment impact.'.

### **5.2.3 To Propose the Potential Solutions to the Project Abandonment Problems**

View from the authorities such as developers, engineers, contractors, and those associated in the construction field in both sector, private nor government is needed in highlighting the issue and problem. This objective focused more on the knowledge and experiences of the authorities in dealing with project abandonment issue. Table 4.9, Figure 4.7 and Table 4.13 is the analysis has been made based on this third objective. Despite that, according to the responds acquired from the majority of the respondents, it

shows that this problem is not a major issue highlighted by the authorities as the number of respondents experienced in the abandoned projects is low. It is minimal for the number of authorities in the construction industry to get involve in the abandoned projects, as this study early expectation is most of the respondents have experienced in the housing abandonment projects problem.

Through the literature review in chapter 2, all the solutions to overcome the abandoned projects has been listed. The solutions were justified by Abdul Rahman, H., Alashwal, A.M., Ayub, M., & Abdullah, A. in their research entitled ABANDONED HOUSING PROJECTS IN MALAYSIA: Pressing Issues during the Rehabilitation Process in 2013. The solutions listed were ‘Amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular Malaysia and the protection of the interest of the purchasers’, ‘Encouraging project delivery success through some approaches such as public-private partnerships’, ‘Rehabilitation (reviving) of current abandoned projects’, ‘Changing the current off-the-plan selling system to a new selling system (such as build-then-sell)’, ‘Takeover by the Government’ and ‘Demolition’.

Based on the relative importance index done in previous chapter, the result of frequency occurrence selected by the authorities on the best solutions is ‘Amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular Malaysia and the protection of the interest of the purchasers’.

### **5.3 Recommendations**

In this section, the recommendation will be focusing on the method to minimize abandoned housing problems based on the obtained data and recommendation for further research.

The following is a method that should be used to minimize the problem of abandoned projects based on the analysis conducted on the problems faced by private developers. Unethical attitude of private developer has contributed a large part for problem facing by private developer in this study. The result of the study indicated that bad behavior of private developer by delaying the payment to both contractors and the

consultant is one of the major sources of project abandonment. This factor is concerned with the instability of the financial situation of the developers as a result of their inappropriate management of funds for particular projects, and, as a result, the project cash flow being jeopardized. Therefore, an action can be taken by the government to supervise the financial of the developer by required the developer to open up a Housing Development Account for a particular project in order to control the funding of that project. Its purpose is to prevent the misuse of the funding for other purposes.

Among of the recommendation for further studies is, the qualifications of each respondent should be re-evaluated by selecting only respondents who have been exposed to the problem of this abandoned project. Hence, the views gained will be more valid and contribute to the effectiveness of the study. As an additional, studies can also be improved by adding interviews session to the representative blacklisted companies or representatives of companies who have been involved with projects that have been declared abandoned. This improvement will support the data collection and study. Hopefully, for the next 5 years, the total abandoned projects will be reducing in the construction sector of Malaysia.

Finally, a further study could be carried out focusing on the law and regulatory approval that must be facing by the private developer which in turn will delay the construction phase thus resulting in abandoned the projects. In the future, this study could encourage the authorities to simplifying the verification process in addition, the quality and qualification of developers will still be assessed and maintained. This study could help the current situation of the private developers and ease them in delivering the projects.

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## APPENDICES

# PROBLEM FACING BY PRIVATE DEVELOPER INVOLVING ABANDONED PROJECTS IN MALAYSIA

Assalamualaikum and Good Morning,

Respected Dato / Datin / Sir / Madam / Mr / Ms,

My name is Muhamad Abdul Hadi bin Ahmad Sabri, currently pursuing Degree at Faculty of Civil Engineering, Universiti Malaysia Pahang (UMP), I am conducting a research under the supervision of Dr. Nur Farhayu binti Ariffin as a partial requirement for my Degree. Your company is selected as one of the significant respondents for this study and your input is highly appreciated to represent your company. For your kind information, the purpose of this questionnaire is to evaluate problem facing by private developers that will contribute the indefinitely delayed construction project or abandoned construction buildings in Malaysia and the method to overcome these abandoned project issue.

Your honest opinion is requested. We can assure you whatever information gathered will be treated with utmost confidentially and used strictly for academic purpose only. This questionnaire consists of four (4) sections to be answered according to the given instruction. It will take you about 10 minutes to complete this survey form. I am greatly appreciated the help of your company and yourself in furthering this research endeavor. If you have any enquirers, please do not hesitate to contact me. Thank you very much for your kind cooperation.

I would like you to fill out the form:

Problem facing by Private Developer involving abandoned projects in Malaysia

Muhamad Abdul Hadi bin Ahmad Sabri  
Degree Candidate  
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[hadisabri93@gmail.com](mailto:hadisabri93@gmail.com)  
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The issue of abandoned building happens across the globe, and it brings nothing positive to the stakeholders as well as to the country economy. In Malaysia, this issue has grown to an unbeatable state, and this study aims to study the abandoned building in Malaysia. Based on previous research, private developer has been identified as the main contributor to this problem. In this study, the questionnaire and review on literature will be conducted to evaluate problem facing by private developers that will contribute the indefinitely delayed construction project or abandoned construction buildings in Malaysia the method to overcome these abandoned project issue.

## Section A - Personal and Organization Background

The primary objective of this section is to know the background of the researched company. Please tick the most appropriate response box.

### i. Gender

- ☐ Male
- ☐ Female

### ii. Age of respondent

- ☐ Less than 25
- ☐ 25-30
- ☐ 31-35
- ☐ More than 35

### iii. Sector of respondent presents

- ☐ Government
- ☐ Private

iv. Occupation

- ☐ Developer
- ☐ Engineer
- ☐ Contractor
- ☐ Technician
- ☐ Consultant
- ☐ Government Sector
- ☐ Local Authorities

v. Experience of the respondent in construction project

- ☐ Less than 1 year
- ☐ 2-5 years
- ☐ More than 5 years

vi. Location

- ☐ Kedah
- ☐ Selangor
- ☐ Johor
- ☐ Pahang
- ☐ Kuala Lumpur
- ☐ Sabah
- ☐ Sarawak
- ☐ Wilayah Persekutuan
- ☐ Terengganu
- ☐ Kelantan
- ☐ Perlis
- ☐ Perak
- ☐ Negeri Sembilan
- ☐ Melaka
- ☐ Pulau Pinang

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## Section B - Perspective of Authorities

Please tick the most appropriate response box.

1.Totally agree 2.Agree 3.Neither agree or disagree 4.Disagree 5.Totally disagree

i. Did you know about abandoned building/housing?

- ☐ Yes
- ☐ No
- ☐ Maybe

ii. Have you experienced with the abandoned housing project?

- ☐ Yes
- ☐ No

iii. Private developer are the main causes of the construction projects abandonment?

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

iv. Is it right for purchaser facing the abandonment stress to blame the approving authorities of the said project?

- ☐ Yes
- ☐ No

### Section C - Problems facing by the Private Developer

There is problems facing by Private Developer which is contributed to the abandonment therefore led to the abandoned building/housing project:

1.Totally agree 2.Agree 3.Neither agree or disagree 4.Disagree 5.Totally disagree

1. Private developer abandoned their projects due to unethical attitude of private developer resulting in misuse of project capital and fraudulence.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. Private developer abandoned their projects due to the lack of sufficient fund and credit which resulting in unable to run construction activities, to buy construction materials, to pay wages and etc.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Private developer facing problems on poor marketing and sale strategy.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



4. Private developers facing lack of management knowledge issues among managers.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. Private developer facing business termination or bankruptcy issue which led to the abandoned project.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

6. Private developers must confront with more complex situation on the development approval from the authorities such as land conversion for housing, drawing of layout plans, building and structure plans, planning of infrastructure and assessment of environment impact.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7. Dispute and disagreement between project consultants and the developers.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

8. Private developer must comply with too many regulatory and act which resulting in delayed the project progress.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. Private developers incapable to apply and implement modern construction methods and technique to achieve project goal and meet project deadline.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. Lack of coordination between contractors and developers which led to abandoned projects.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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## Section D - Solution to Overcome Abandoned Projects

Please choose on of the scale according to questions/statement given.

1.Totally agree 2.Agree 3.Neither agree or disagree 4.Disagree 5.Totally disagree

1. Amending the Housing Development Act of 1966 which provides for the control and licensing of the business of housing development in Peninsular Malaysia and the protection of the interest of the purchasers.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. Encouraging project delivery success through some approaches such as public-private partnerships.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. Rehabilitation (reviving) of current abandoned projects can be a solution to reduce the abandoned housing project.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. Changing the current off-the-plan selling system to a new selling system (such as build-then-sell).

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. Takeover by the Government.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

6. Demolition.

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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