

ECONOMIC EFFECTS OF ABANDONED
ONGOING HOUSING PROJECT IN
SELANGOR

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SELANGOR

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for the award of the
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ABSTRAK

Penyelidikan ini bertujuan untuk menangani isu-isu mengenai kesan ekonomi ke atas peninggalan harta kediaman dan projek perumahan di Selangor. Objektif penyelidikan adalah untuk menentukan punca, kesan dan kesan ekonomi dari projek perumahan yang sedang ditinggalkan. Selain itu, takrif ditinggalkan adalah menyerah atau menghentikan projek atau projek kediaman yang sedia ada dan mengeluarkan tanggungjawab seseorang yang diberikan kepada orang yang bertanggungjawab bahu. Kajian ini mengenai punca-punca dan kesan Selangor projek perumahan yang terbengkalai di Selangor akan meliputi semua kes-kes di atas projek perumahan yang sedang ditinggalkan di Selangor dengan berhati-hati memeriksa sebab-sebabnya. Ia juga akan menanggung akibat projek perumahan terbengkalai yang terbengkalai di kawasan yang terjejas. Hasil kajian ini dianalisis dengan menggunakan dua kaedah iaitu; 1) Indeks Kepentingan Relatif 2) Analisis Kekekapan. Selain itu, Selangor mempunyai kadar perumahan terbengkalai tertinggi berbanding 14 negeri di Malaysia. Di Negeri Selangor, daripada jumlah projek perumahan terbengkalai, 82 projek, 67% telah berjaya disiapkan atau disiapkan oleh JPN. Walaupun 5 projek atau 6% berada dalam pelbagai peringkat pemulihan / pembinaan dan 21 projek yang tinggal atau 27% adalah dalam perancangan pemulihan awal. Seterusnya, variasi penyebabnya, yang disediakan dari hasil soal selidik yang telah dianalisis, isu paling kritikal adalah masalah kewangan klien yang paling tinggi. Di samping itu, di antara semua sebab-sebab yang berkaitan dengan peninggalan projek rumah, masalah kewangan klien dari sebab-sebab yang berkaitan dengan klien mempunyai pangkat tertinggi RII ($RII = 0.811$) yang sesuai dengan cadangan penyebab kajian ini yang merupakan isu kewangan. Hasilnya adalah keuntungan dari soal selidik yang diedarkan kepada pihak-pihak yang terlibat dengan masalah projek perumahan terbengkalai. Kajian ini adalah untuk mengenal pasti semua kaedah untuk mengurangkan projek perumahan terbengkalai kerana ia akan menjejaskan ekonomi sesebuah negara. Kesan bahawa penghapusan bangunan dan projek kediaman yang tidak berkesudahan akan membawa beberapa kesan ke atas hartanah dan nilai-nilainya dan ekonomi tidak dapat dinafikan kerana beberapa bangunan terbengkalai dan projek-projek pembangunan menyediakan perkhidmatan asas yang harus meningkatkan sifat sebenar yang dibangunkan. Hasil kajian ini akan mendidik masyarakat umum tentang sebab-sebab dan kesan peninggalan projek perumahan yang berterusan di Selangor dengan tujuan untuk mengurangkan masalah pembuangan projek perumahan yang berterusan di Selangor.

ABSTRACT

The research is to deal with issues regarding on economic effects on abandonment of residential properties and housing project in Selangor. The objectives of the research are to determine the causes, effects and economic effect of ongoing housing project abandonment. Furthermore, the definition of abandoned is giving up or stopping on existing project or residential project and to pull out one's responsibilities that have been given on person in charge shoulder. This study on the causes and Selangor effect of abandoned ongoing housing project in Selangor will cover all the cases on abandoned ongoing housing project in Selangor carefully examining the causes. It will also cover the consequences of the abandoned ongoing housing project in the affected area. This result of this research is analyzed by using two methods, which are; 1) Relative Importance Index 2) Frequency Analysis. Besides that, Selangor has the highest rate of abandoned housing project compared to 14 states in Malaysia. In Selangor State, from the total amount of abandoned housing project, 82 projects, 67% have been successfully completed or completed by JPN. While 5 projects or 6% are in various stages of rehabilitation / construction and the remaining 21 projects or 27% are in the initial planning of recovery. Next, the cause's variation, provided from the questionnaire results that have been analyze, the most critical issues are client's financial problems which it has the highest. Besides that, among all the related causes of house project abandonment, client's financial problems from client-related causes has the highest RII rank (RII=0.811) which suits the propose causes of this study which are financial issues. This result is gain from the questionnaire distributed to the parties involve closely to the abandoned housing project problems. This study is to identify all methods to reduce the abandonment housing project in as it will affect the economics of a country. The impact that the never-ending abandonment of residential buildings and projects would bring several effects on real properties and its values and the economy cannot be overemphasized since some of the abandoned buildings and development projects provide the basic services that should enhance the real properties developed. The results of this study will educate the general public on the causes and effect of abandonment of ongoing housing project in Selangor with a view of reducing the issues of ongoing housing project abandonment in Selangor.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

It is shocking to know that the abandonment rate of housing project in Selangor increasing each year as the unceasing event happen in one of the developing state in Malaysia, Selangor. This never-ending event of abandonment of housing project in Selangor will leads to an unfortunate effect to the country. As this event keep on going on, it will affect the market price and value on the property that is at state of advancement. Thus, the economy that is going towards enhancement will be misled by this unfortunate event as the housing project gives basic needs and services that can make changes to the real properties growth.

The definition of abandoned projects by the Ministry of Urban Wellbeing, Housing and Local Government (MHLG) is more detail and comprehensive. According to the MHLG, a housing project is abandoned when the projects are not completed within or later than the delivery date stated in the first Sale and Purchase Agreement and no significant activity is noticed at the construction site for six (6) continuous months, or petition for winding up has been registered in the High Court under Section 218 of the Companies Act 1965 or other related laws, or the licensed housing developer is wound up and placed under Receivership, Liquidator or the Malaysia Department of Insolvency (MDI), or licensed housing developer is notified in writing to the Housing Controller that they are unable to continue further with the development of the project; and lastly if certified by the MHLG under Section 11 (1) (c) of Housing Development (Control and Licensing) 1966 (Act 118) that the housing project is an abandoned project. Based on this research, the definition of abandoned is giving up or stopping on

existing project or residential project and to pull out one's responsibilities that have been given on person in charge shoulder. The act of stopping activities or maintenance works at a residential project during the period of development of a given project that was agrees in the contract agreement and has no intention of coming back to finish work of construction is also one of the known definition of the abandonment of a developed housing project.

In this research, three causes are being investigated which are; mismanagement, financial issues and law related to construction industry. First, the definition of management of this research is coordinating and organizing the activities that are going to be done during the construction phase in order to achieve the objectives and goals of the housing project constructed. There are many factors to be considered during the construction phase. An engineer should foresee the factor of production including the management of machineries, materials use, and money flows (S-Curve). The person who are involved in the construction phase should foresee the possibilities that might hits in the future during the construction phase to the residences and ongoing project to avoid delays or worse, abandonment of a project.

Next, mismanagement in a construction are one of the major factor that causes the abandonment rate of residential and housing project in Selangor fluctuate each year. Due to lack of experience of developers may have led to mismanagement (Ibrahim 2006). Examples of mismanagement that may lead to abandoned housing projects include 1) lack of proper feasibility studies (Ibrahim 2006) particularly market research inaccuracy (Khalid 2010; Kong 2009), 2) unattractive marketing strategies (Ibrahim 2006), 3) fraud (MHLG, as cited in Kaur 2011; Khalid 2010), 4) project participants conflicts (Dahlan 2010), and 5) financial management is not well managed by the developers (Ibrahim 2006; Khalid 2010).

In this study, finance will be investigated as one of the factors of abandonment of housing project. Finance is defined as managing, creating and study of money, assets liabilities that will shape the financial systems, banking and financial instrument study. Based on the existing study that have been done financial problems are to be stated to

be one of the causes of abandoned housing project. For instance, increases in project costs (Teoh & Lim n.d.) may be due to mismanagement or unfavourable economic conditions; and, the lack of proper feasibility study to determine the right type of development and unattractive marketing strategy in selling the house of undergoing housing project will ultimately affect the sales. Thus, this will lead to financial problem as the money from sales will be used to pay the contractor accordingly to the agreed percentage.

Lastly, the cause that is study in this research is the law related to construction industry. Laws that have been drafted by the government are; Sell and build system is included in the 1) Government policies (Chang 2009), the unavailability of Home Indemnity Insurance (Ibrahim 2006), 3) the limitation of the jurisdiction of the Tribunal for Homebuyer Claims (Ibrahim 2006), and 4) the requirement for private developers to build 30% of low cost houses (Khalid 2010). All these policies have been proven and studied by researchers.

1.2 Statement of the Problem

The concerns of this abandonment event are the causes and effects on the economics of the country. Therefore, this study purpose is to identify causes, effects and economic effect of abandonment of on-going housing project in Selangor. The economic effect that will be investigated is the cost of reviving abandoned properties in Selangor. As the result of non-stop abandonment of housing project in Selangor, the expected properties and its market value in Malaysia are assumed to be worsening. By exploring this context should help in establishing and recognize the causes and effects of abandonment of on-going housing project in Selangor to the citizens, governments, educationalist, policy makers and practitioners. Through this research, it is to eliminate the effects identified and sustaining possible properties values in the economy.

1.3 Objectives of the Study

The following are the objectives of this study:

1. To identify causes of abandonment of on-going housing project in Selangor.
2. To examine the effects of delay and effects of abandonment in on-going housing project in Selangor.
3. To analyse the economic effect of abandoned on-going housing project in Selangor.

1.4 Importance of the Study

The following are the importance of this study:

1. This research result is to educate the public on the causes and effects of abandonment of housing project in Selangor with a broad view in reducing the issues of this unfortunate abandonment event.
2. The result of this study will provide guidance to the government bodies and policy makers on ways to improvise policies in order to reduce the rate of abandoned housing project in Malaysia.
3. This study will also provide information to researchers or scholars whom are interested to carry out further research on this topic and provide to a new explanation based on this study.

1.5 Limitations of the Study

The causes and effect of abandoned housing project in Selangor will be covered in this study and carefully will be examined. Next, it will also cover the economic cost and consequences of the abandonment in the area that are affected.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter will explain in detail the definition of abandoned housing project, the cause of abandoned housing project, the effects of abandonment, costs of construction, cost of losses, cost to deal with the issues of abandonment of residential properties and housing project. This chapter will also explain regarding the government role in setting the rules and regulations in order to cut off the amount of housing project abandonment. In order to find the actual situation that are being dealt with, to be an eye opening to the society, and to widen the perspective of abandonment of housing project in Selangor, this research is being conducted.

There are plenty of project in Malaysia that have been recorded in cases whereby a project failed to be completed according to its allocated time. The industry reputation has been tarnished with the fact that our industry has a very poor managing issues on risks at site that surely will lead to delay of time or worst, abandonment and failure of a project base. This industry is the most crucial, dynamic, risky and challenging. Planning and management must work parallel to one another to ensure the project goes on accordingly. The possibilities of each failure must be foreseen by site engineer and management team to avoid a project from stopping and announce to be abandoned after 6months of site being empty. By looking at the possibilities of any problems that might occur in the future of project construction phase, it can comprehend at the earliest stage before construction and thus avoid failure of a project construction.

2.2 Caused of Abandonment

The causes of abandoned housing projects in Malaysia rooted from many factors. Dahlan (2011), for example, discovered that abandoned housing problems occur due to the Housing provision system and legislations which are complex and problematic. The findings by Dahlan (2011) agreed with Loi (2001), Khalid (2010) and Tan (2011). In this study Loi (2000) and Khalid (2010) had discovered that housing provision in Malaysia is highly regulated and it is governed by so many legislations. Loi (2001) described that the Malaysian Housing Industry is govern 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 workers 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.

Besides above regulation, 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 National, 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).

However, the private developers in this period of time are allowed to advertise and to sell the house units to the public's through pamphlet and brochures after receiving advertisement permit from local authority such as city municipal council. Moreover, the private developers can collect the money from the potential homebuyers. Fen (2007) further highlighted the complexity in the current housing system in Malaysia. According Fen (2007) current housing system in Malaysia exercises Sell-Then-Built or STB. Under this system the potential house buyer required to pay ten to twenty percent down payments upon the signing of Sale and Purchase Agreement. This agreement, which signed, by both the private developer and house buyer does not concern the loan mortgage provider (The Bank) or the contractor. Similarly, by legal agreement the private developer hires the contractor to build the house units. The signed of agreement between private developer and the contractor for particular housing project does not concern the either the homebuyer or the authorities.

Still, the house purchased by the house buyer is not even built yet where it is only matter of artist's impression where the location, size and quality of house bought is beyond the house buyer thought (National Housing Buyer Association, 2004 & Fen, 2007). Moreover, even though homebuyer has signed the Sale and Purchase agreement and mortgage loan there is not guarantee to the completion of house building by the private developers. The loophole in this system leaves the homebuyer unprotected and big opportunity for the culprits and errant developers to abandon the housing projects (Sibly et. al., 2011).

Furthermore, Dahlan (2011) insisted that the weakness in the regulation is a heaven's opportunity for the real culprits (defaulting developers) easily skipfrom further liability and responsibility. The author added that the real victims of complexity are the house purchaser themselves.

The study conducted by Khalid (2010) discovered that the cause of abandoned housing project lies within private developers themselves. According to Khalid (2010) these causes, which inhabit the private developers, are profit maximization, inadequate fund, and poor management. The findings had obtained by Khalid (2010) gets support from Ibrahim (2006). According to the latter, the high profit motives by private developer become apparent when the author discovered that the private developer in Terengganu refused to construct public amenities and produced low quality of work performances.

McConnell et. al. (2005) defined profit maximization as where the quantity of each resource a firm must be fully employed to maximize its profit. According to Gould and Joyce (2003) and Tan (2005), construction's resources composed of human labour (steel workers, plaster, plumber, pipefitter, electrician, bricklayer, glazier, roofer carpenter, pile driver, and cement mason). To maximize the profit, Tan (2005) and Malaysia Employment Federation stated that the private developers reduce their overhead cost such as cost of labour by practicing intensive use of manpower to avoid huge expenses on tools, equipment, safety harness and by hiring cheap-unskilled foreign construction labours from Indonesia (69.4%), Nepal (10.2%), India (6.2%) and Vietnam (4.6%).

Related study conducted by Aman and Shiadri (2008) revealed that the reason behind of low participation among skilled-local construction is that the greediness either private developers or contractor to invest on high-paid wages of skilled workers and to invest on safety harness equipment for their workers. Moreover, Aman and Shiadri, (2008) stated that some private developers intentionally refuse to pay the contractors, material supplier, and other creditors despite the progress of work activities on site. As results, the housing projects end up with abandonment because the contractors must stop work activities on construction sites or the private developer got winding up by court. 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 loses to the developers therefore they choose to abandon their residential housing projects.

2.2.1 Management

Management is another crucial factor in housing development. The management might ensure that the project is well-organized and also completed within budget and time. The risks under this category are weakness in management by inexperienced developer, weakness in management by inexperienced contractor, delay in work due to management failure by third party, risks caused by subcontractor, and partner withdrawals from joint venture.

Some believed that the probability of risks related to management such as weakness in management by inexperienced contractor, delay in work due to management failure by third party, risks caused by subcontractor, and partner withdrawals from joint venture is moderate, and the rest of respondents agreed that the probability of such risks is high. Moreover, there is claimed that the weakness in management by inexperienced developer is considered as a very serious risk (high and very high probability).

It can be concluded that the management generally has a very important role in housing project. An efficient management can assist the project to achieve its desired

objectives. Contractor particularly has a fundamental role at construction site, and if not well-organized, the developer will face many problems. For instance, a contractor by a poor planning, such as miscalculation of materials and machinery at construction site, might cause shortage or excess of materials and equipment. As a result, the project will not be completed within the expected time period and subsequently the developer will face an unexpected budget overrun. Risk related to subcontractor also needs to be given a great attention, as poor performance of subcontractor can make the progress of construction activities ineffective and subsequently lead to problems associated with the abandoned housing projects.

Mismanagement is mentioned by the Ministry of Housing and Local Government (MHLG) (Kaur 2011) as one of the causes of abandoned housing projects. Mismanagement may happen due to the lack of experience of developers (Ibrahim 2006). Examples of mismanagement that may lead to abandoned housing projects include 1) lack of proper feasibility studies (Ibrahim 2006) particularly inaccurate market research (Khalid 2010; Kong 2009), 2) unattractive marketing strategies (Ibrahim 2006), 3) fraud (MHLG, as cited in Kaur 2011; Khalid 2010), 4) conflict among project participants (Dahlan 2010), and 5) incompetent and poor financial management by the developers (Ibrahim 2006; Khalid 2010).

2.2.2 Finance

Financial issue is the most important factor which requires a great attention by parties involved in construction industry since a housing project cannot proceed without sufficient financial sources. The risks under this category are late payment to contractor, unstable finance by third party, over budget, bankruptcy by developer, and financial crisis. By using descriptive frequency, financial-related risks were analysed in order to see if each can be a cause of abandoned housing project.

Almost all financial risks are “over budget” and “bankruptcy by developer.” These issues always occur due to the financial failure in organization. Moreover, it is believed that late payment to contractor has a high probability and financial crisis has a

very high probability. Hence, these risks can be considered as major causes of abandoned housing projects. For unstable finance by third party is the less serious aspects in regard to the housing projects compared to others.

Several sources cited financial problems as a cause of abandoned construction projects (Bavani 2009; Ibrahim 2006; Kong 2009; Rajan 2005; Rusli 2006). However, it is felt that financial problem is the effect of other aforementioned causes prior to being abandoned. For instance, increases in project costs (Teoh & Lim n.d.) may be due to mismanagement or unfavourable economic conditions; and, the lack of proper feasibility study to determine the right type of development and unattractive marketing strategy ultimately affect the sales and hence lead to the financial problem. It is noticed that a big proportion of the available literature (which is mainly news articles) lacks credibility and cannot be held as conclusive findings to represent the actual causes of abandoned construction projects in Malaysia. In addition, almost all of the literature available is mainly concerned with abandoned housing projects. Therefore, the actual causes identified are not comprehensive and representative of the actual causes of abandoned construction projects in this country. Hence, a more detailed research concerning abandoned construction projects that includes housing and non-housing projects in Malaysia is necessary.

2.2.3 Law

Law is one of the important factors that assist the development of housing projects. All parties involved should have high knowledge in law related to this industry. For this category, some risks are identified such as breach of contract, contractual disputes between developer and landlord, delay in resolving contractual disputes, change in law of housing industry, and lack of knowledge on housing industry law by developer. Such risks are not considered as major risks contributing to problems associated with abandoned housing project in Malaysia.

Causes of abandoned housing projects related to unfavourable government policies include 1) the sell then build system (Chang 2009), 2) the unavailability of

Home Indemnity Insurance (Ibrahim 2006), 3) the limitation of the jurisdiction of the Tribunal for Homebuyer Claims (Ibrahim 2006), and 4) the requirement for private developers to build 30% of low cost houses (Khalid 2010).

2.2.3.1 Sell then Build System

Former Prime Minister Abdullah Ahmad Badawi (HBA 2006) and the President of Federated Association of Consumer Malaysia (FOMCA) (as cited in Khalid 2010) stated the sell-then-build system as one of the causes of abandoned housing projects. The sell-then-build system is intended to enable more houses to be built at a faster rate and a lower price (Chen 2007). As the name implies, houses can be sold before the houses are being built, therefore there is more cash flow from the start of the construction phase and less requirement for the developer's own capital. This has enabled more developers of smaller capital to be involved in the business (Alagesh 2013). According to Chang (2009), however, having smaller developers in the housing industry is the main cause of the abandonment of housing projects. Being small, these developers have to rely critically on their sales to meet their cash flow. When the sales are not up to expectation, the cash flow might be affected. Consequently, the projects may be delayed and eventually some might become abandoned. The sell-then-build system is also less risky than a build-then-sell system from bankers' point of view (Teoh & Lim n.d.). This might have resulted in banks not exercising a duty of care by often relying on architects employed by the developer to sign off progress certificates, knowing that they can still collect repayment from house buyers even if a project is abandoned (Heng 2011). This might encourage over claiming of fund by the developer, either resulting in mismanagement of fund or fraud and eventually abandonment of project.

2.2.3.2 Unavailability of home Indemnity Insurance

Home Indemnity Insurance, as practiced in Western Australia, is an insurance policy which a builder is required by law to take out on behalf of the house buyer to assist to ensure that the house can be finished in the event that the builder dies,

disappears or becomes insolvent (Anon n.d.). This insurance is applicable to residential building work worth over 20,000 Australian dollars. In the event of any claims, the law requires the insurance company to pay up to 100,000 Australian dollars or the value of the contract work, whichever is lesser. For loss of deposits, the law requires the insurance company to pay no more than 20,000 Australian dollars. However, this is not practised in Malaysia (Ibrahim 2006). Therefore, when the developer in this country is unable to continue with the development of the project there is no similar protection for the house buyers. Related to this, in February 2011, the Real Estate and Housing

Developers Association of Malaysia (REHDA) proposed a home completion guarantee scheme (Heng 2011). Under this scheme, the government and the developer will each contribute 5% and 2% of the gross development cost of a project respectively into a fund managed by an independent third party. The project would be rated first before entering this scheme, and a seal will be provided to signify a guarantee that the project will be completed.

2.2.3.3 Limitation of The Tribunal for homebuyer Claims

The Tribunal for Homebuyer Claims is a channel for aggrieved homeowner to seek redress against developers without having to go through a lengthy legal process in Malaysia (Chen 2007). Ibrahim (2006) found that the limitation of the jurisdiction of the Tribunal for Homebuyer Claims is one of the causes of abandoned housing projects, but contrary to Ibrahim's (2006) finding, Chen (2007) claimed that the Tribunal for Homebuyer Claims has proven to be very effective. It is however believed that the developers being sued are often insolvent and getting compensation is highly unlikely.

2.2.3.4 Requirement to Build 30% of Low Cost Houses

Khalid (2010) found that the government's requirement for private housing developers to build 30% of low cost houses contribute to the abandonment of some housing projects. The reason given is that the developers will abandon the low-cost projects if the number of purchasers is low, rather than complete the housing projects

and struggle to find purchasers. The low number of purchasers may partly be since the low-cost houses can only be sold to the lower income groups, and that the locations of the projects lack purchasers from these groups. This requirement to build 30% low cost houses is especially affecting smaller size projects as these projects are less flexible in terms of cross subsidy from the non-low cost to the low-cost housing units.

2.3 Effects of Abandonment

Development projects abandonment as earlier theorized involve the complete absconding from accomplishing a project objective, and when this happen, all the social, environmental and economic activities that expects to be supported by the new products and services provision are detracted. The general effects are assumed to include: waste of resources; declining in property value; loss of community and neighbourhoods aesthetics values (Efenudu, 2010). In the case of the declining real properties and its value, Efenudu (2010) suggested that project abandonment affects properties within a neighbourhood by lowering property values. This value loss or reduction is related to the property total value such as the market value, which is the value at which a property would bring when determined by the open market. Others are the property value in use, the property investment value, the property liquidation value, the assessed value of the property, the insurable property value and the property going concern value. Also, there is a loss on community and neighbourhood aesthetics characteristics which the anticipated development projects on completion ought to provide enhancing the built environment. But, the unattractive nature of the property as a result of a lack of the needed facilities has remained incessant in the Malaysia economy. For example, when a building property has been raised and later abandoned, it makes no positive aesthetic values, pleasures and contributions to a neighbourhood instead become eyesores to the vicinity.

Further, development projects abandonment contributes to the effect of wasted resources and loss of tax revenue (Adele and Alabi, 2011) to the governments and other groups in the economy. Real property development projects are usually capital intensive and when abandoned and/or left uncompleted, the expected returns are lost, and the

already capital outlay is apparently wasted. Therefore, every development project should be completed as earmarked. However, the study in the following session would investigate and assesses through a questionnaire survey the causes of development projects abandonment and the overall effect on real properties and its values. Hence, the methodology of this study.

2.4 Abandonment Criteria

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

- I. 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
- II. Notice of winding up or 'Petisyen Penggulangan' has been registered in the High Court under Section 218 of the Companies Act 1966, or
- III. Company is under the Receiver and Manager, or
- IV. Developers are not able to acknowledge in writing to the 'Housing Controller', and
- V. Confirmed as abandoned projects by the Ministry of Housing and Local Government under Section 11(1) of Act 118.

There are several factors behind the abandonment of a housing project. One of the main reasons is the financial problem of the developer, caused by incidences such as the 1997-1998 economic crises. Poor marketing and sales strategies is another reason, so too technical problems faced during construction, as well as crisis within the development company, including disputes between shareholders and embezzlement progress payment collections, problems involving contractors and even disagreement even with landowner. There are also problems of developer who did not carry out feasibilities and market study prior to the development. The Ministry of Housing and Local Government's finding have shown that 70% of the project abandoned were due to financial problems of developers. Another 14% arose from poor marketing and sales strategies while 16% failed over problems arising from squatter resettlement, poor

company management and disputes between developers and contractors or with landowners. (Mastura Atan, 2011)

But while some abandoned projects are caused by unanticipated market conditions and economic uncertainty, including rise in building materials and labour costs, there are many cases where developers have only themselves to blame. Industry observers say there are cases where developers have channelled purchasers' deposit money for personal use while some others deliberately hold back their projects for better resale price. (Mastura Atan, 2011)

There are also instances where developers inflate progress payment claims to draw more money from purchasers and the banks. Observers say this can be done with the help of architects, who are responsible for issuing certificates on the construction progress of the purchased houses, which are then used for progress payment claims. . (Mastura Atan, 2011)

The biggest headache for house buyers when a project is stalled is monetary losses – the victims have to settle monthly loan repayments and deal with much anguish as, more often than not, there's little chance of reviving these projects and getting the houses completed. (Mastura Atan, 2011)

The crux of the problems in our housing industry is simply put down to one factor. Purchasers have to be well aware of their legal rights as a purchaser and demand for the conditions and terms set by the housing ministry. Unfortunately, most purchasers do not have an idea of their legal standing in any contracts either with the developers or the bank. This gave ways to developers the loopholes on claims and damages from the purchasers each time any payment is sought from them. Developers too, have come to accept that standards and quality are something to be forgiven knowing the eagerness of purchasers to take over the premises and will not waste time seek for compensation if the project is delayed in handing over. (Mastura Atan, 2011)

The main purpose of the Housing Development Act 1966 is to protect purchasers. They should use this act to protect them. In SEA Housing Sdn Bhd vs Lee Poh Choo, the purchaser sued the developer for breach of contract and for delivery of the title to a house he has purchased. The property in question was completed after 23 months instead of 18 months as stated in the SPA. The issue before the court was whether the developer could be excused for the delay due to acute shortage of building materials, a state of affair which was at that time public knowledge. The developer relied on Clause 32 of the agreement which purported to exempt it if non-fulfilment of any term was caused by circumstances beyond its control. The High Court trial judge held that the 1966 Act and 1970 Rules were passes by the authorities to protect the interest of the public and the developer could not contract out of the Rules. The developer's appeal to the Federal Court was dismissed. (Mastura Atan, 2011)

The built then sell (BTS) concept which was mooted in the 80s faced stiff resistant from developers. In some countries, the concept of built and sell have proven to be successful that it has become that it has become a standard to see a property of certain reasonable percentage of structure before any agreement is made and signed on and these are from financially healthy developers who are able to sustain the projects till completion with accurate forecast of timeframe and material cost fluctuations. The built and sell concept is actually workable if the government regulate, implement and enforce it. What we normally have here i.e. the sell then built concept, purchasers are actually the financier of the project. (Mastura Atan, 2011)

They are the investors who are giving the developer the money first to build something for them before they even see the finish product and the completed house in their return. (Mastura Atan, 2011)

Whatever the reasons may be, it is certainly crucial for developers to uphold their responsibilities towards house buyers by ensuring proper feasibility studies are conducted to ascertain a project's viability before it is launched and duly complete their projects on time. (Mastura Atan, 2011)

2.5 Economic Effects of Abandoned Housing Project

Construction projects involve a high level of uncertainty and risk because they are complex, take long time, and involve numerous participants. Risk is defined as a variable in a construction project that brings uncertainty to the final cost, duration, and quality of the project (Boykin et al, 1984). Exposure to risk during the rehabilitation of abandoned projects may influence completing the remaining construction work successfully. As such, several risks are anticipated to create unfavourable conditions, thus affecting the rehabilitation process. Empirical studies on risks involved in the rehabilitation process are still lacking. However, a limited number of studies have indicated potential risks, which can be grouped under four categories, namely legal and regulatory, financial, managerial, and technical risks.

Dahlan (2011b) indicated the following risks pertaining to abandoned housing projects: unsettled legal actions, risks related to the new selling system, lack of developers' liabilities, contractors' capacity to deliver the project, lack of appropriate funding resource, developer's failure to sell all bridging loans, and inadequate homebuyers. These risks can be regarded as legal and regulatory as well as financial risks. In addition, Dahlan (2011b) highlighted other potential risks, which can be categorized as managerial risks, namely construction delay, project not considered abandoned anymore if auctioned off to other parties or the application for reviving the project is rejected (project not viable for rehabilitation), lack of compromise and collaboration (e.g. consultant with holding necessary information about the projects), and problems related to the ownership of land. Lastly, technical risks include soil conditions and landslides, lack of complete sets of information about the abandoned project, price increase of building materials, poor building quality, and shortage of manpower (Dahlan, 2011b; Jamaluddin and Hussein,2006; Sulaiman et al, 2012).

2.5.1 The Definition of Abandoned Project

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).

2.6 Overview

If we considered the existence of abandoned housing projects from the perspective of housing provision, one can see that there could be a link between them. This is because developers must fulfil all requirements, especially in terms of the formal institutions such as rules and regulations by local authorities, i.e. planning requirements, land policy and housing policy might be the causes of housing abandonment. In addition, the strictness of approving bridging loans imposed by financial institutions could also be one of the causes of abandoned projects. However, informal institutions such the behaviour of developers in misuse and mismanagement of project funds could also be relevant factors contributing to the housing abandonment. In this context, developers also need to respond appropriately to market signals before entering the housing market. This is because the successful of housing provision is also based on the market environments. Therefore, market signals will be extremely important perspectives that could contribute to the existence of abandoned housing projects. In other words, the existence of abandoned housing projects is not exclusively temporary or as a result of the economic cycle during the recession period, as reported by MHLG (2005). In relation to this, Kamal and Ab. Wahab (2004) state that there are some factors that are associated with the abandoned housing development; these include oversupply, uncompetitive selling prices and the developer has been winding up his business. According to the report by the MHLG (2006)²⁴, some of the factors that are attributed to abandoned housing project are financial, management, and marketing factors.

In conclusion, it can be understood that various factors could be related to abandon housing projects. Therefore, this study will identify the causes of abandoned housing projects from the perspectives of neo-classical and institutional economic approaches. In doing so, this research could contribute to the body of knowledge in which a combination of these two theories is capable of analysing the issue of abandoned housing projects.

CHAPTER 3

METHODOLOGY

3.1 Introduction

As discussed in chapters two, there are some factors which might be expected to cause projects to be abandoned, owing to the nature of housing provision which is highly regulated and governed by various institutions; these include formal and informal rules or institutions; institutions as organizations and signal mechanisms. Therefore, this study has highlighted a series of research questions, such as the appropriate theoretical approaches that are relevant in understanding the causes of abandoned projects; the institutions relevant in explaining the housing development, the institutions perceived as a barrier to the housing development; whether the institutions explain the existence of abandoned housing projects and how the information signalling interacts with project abandonment. The purpose of this chapter is to describe the research design and method used in the study. Doing so is very important, as the research design guides the researcher during the collection of relevant data.

3.2 Data Collection Method

Before further discussion on the method of data collection, it is useful to outline the types of data collected in this study. Data for this study were collected in Malaysia between 2009 to 29th February 2018. There are two main sources of the data collected in this study: primary data and secondary data.

3.2.1 Secondary Data

Secondary data refer to data that already exist in different forms. For example, secondary data can be found in books and documents such as government documents, official reports, annual reports, economic reports and national statistics. For the purpose of this study, secondary data have been gathered from both published and unpublished sources. The secondary data collected were used to analyse the existence of abandoned housing projects from various perspectives i.e. the definition, statistics on abandoned projects, actions which have been taken by the government in order to avoid the existence of abandoned projects and to update the current situation of the problems. In addition, the information gathered from the survey questionnaire and interviews was also used to help the researcher understand more about the phenomenon of abandoned housing projects in Malaysia. Instead of gathering secondary data on the abandoned housing projects, the secondary data also provided information about the economics perspective and its relation to housing development.

3.2.2 Primary Data

In addition to the collection of secondary data for the purposes of this study, primary data were also collected. Primary data are also known as original data, or data collected at source. Research using such data is known as primary research. For instance, the primary research data, which include survey data, were gleaned for the purposes of this study in an uncontrolled scenario by means of a questionnaire. The following section contains further discussion on the survey method used in this study. It also describes the advantages and disadvantages of the survey method employed to

study the perceptions of construction personnel towards the causes of housing abandonment in Malaysia.

3.3 Survey Research Approach

The survey research method was employed in this research to investigate construction personnel behaviour and construction personnel relationships with the various institutions that govern housing provision that might be a contributory factor to the abandoned projects. Specifically, the perceptions of construction personnel about how institutions affect housing development in Malaysia and the role played by market information and interrelationships in project abandonment. It was also used to investigate perceptions about the various factors that might cause the existence of abandoned housing projects. The respondents in this study were a sample of the population of person involved in construction industry and house buyers in selected states in the country (Selangor). Kerlinger (1986) contends that the sample survey can also identify the interrelations among sociological and psychological variables, such as the opinions and attitudes of the respondents. However, of course the survey research method has its own advantages and disadvantages if it is compared with other methods. In terms of the advantages of the survey method, several authors, such as Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997), have discussed this matter. Tayib (1998) summarises the work done by Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997) on the advantages of the survey method. Some of these advantages are listed below:

1. The scope and coverage are wider. More information can be obtained, compared with other methods. This approach seems to be versatile and can be applied to almost types of research, e.g. market research, political research, psychological and social research.
2. It is useful for finding out about large populations, and it is considered to be a cost-effective approach.

3. In terms of the administration of the fieldwork, the survey method can be administered in different ways, allowing geographically scattered respondents to answer the same questions.
4. It can be constrained in scope to meet budgetary constraints related with the research. Nevertheless, it would not necessarily jeopardise the value of the findings.

Tayib (1998) also concluded the work done by Kerlinger (1986), Babbie (1990), and McCormack and Hill (1997), on the disadvantages of the survey method. Some of these disadvantages are highlighted below:

1. The information gathered from the survey does not penetrate very deeply below the surface. In fact, the information obtained also depends on the number of samples selected from the total population. In other words, if the sample size is reasonably large; more information can be gathered that would allow the researcher to go probe more deeply into the matter.
2. This approach requires large investments of time, energy and money. It can be time consuming before a certain percentage of the respondents can be covered in the survey.
3. There are many ways in which error can creep into the process and undermine the usefulness of the survey method; for example, the respondents might not be able to answer questions, either because the questions are unclear or they do not know the answers.

3.3.1 Justifications of the Employment Survey Approach

Even though the survey method has certain disadvantages, this study uses the survey method as it appears to be the most appropriate and suitable method, owing to the quite large sample population of private housing developers comprising successful developers and failure developers. There are about 50 respondents within the sample study area. For the purposes of this study, failure developers are defined as “developers who had failed to complete housing developments, either one off or more, and the government had to intervene for reviving purposes. The particular projects are still abandoned, and the government is trying to revive those projects through Syarikat

Perumahan Negara Berhad. In addition, the Ministry of Housing and Local Government have categorised these developers as not being capable of continuing the project” (Source: adopted by the definition of abandoned housing projects by the Ministry of Housing and Local Government).



Figure 1: Selangor Maps

3.4 Primary Data

For primary data, the researcher was used a quantitative research which is use a questionnaire survey. The questionnaire survey was used to identify the factors and determine the most contributing factors towards abandoned housing projects. Besides that, the respondent will dominate which is the most appealing effects of project delays. A questionnaire survey was prepared and distributed among the selected respondents.

3.4.1 Questionnaire Design

The questions have been proposed carefully to ensure that all questions are related to research objectives. The questions are divided into two part or sections which section A is, section B. Section A highlighted in respondent’s information. Section B

more focus factors toward abandoned house project in Selangor and effects of abandoned housing project. Besides, the respondents must tick on the scale that given according to the scale given. The questionnaire comprises several sections. For section A, factors contributing towards abandoned housing projects is divided into 4 related factor which are; client-related, contractor-related, consultant-related and external-related. Next, section B of the questionnaire comprises of a few effects of construction delays.

3.4.2 Measurement Variables

This research has use Likert scale technique as a measurement of the variables. Likert scale illustrates the quantitative to qualitative data; to make it agrees with the analysis statistics. Moreover, for section A, it is measured by using interval scale that known as Dichotomous scale and category scale. For section B and C, researcher used Likert scale as a measurement variable. The respondent has to tick or circles to scales that given according to the represent by these numbers.

1	2	3	4	5
Strongly Disagree	Disagree	Natural	Agree	Strongly Agree

3.5 Data Analysis

The purpose of data analysis is to use all the data to calculate one or more results. The data was collected and analysed by using frequency analysis and relative importance index technique. This tool is suitable for a quantitative research method appropriate for analysing the relationship between two or more variables.

3.5.1 Frequency Analysis

The frequency analysis is used to obtain result of data analysis of the number of response that the respondent gives to variation variable in the questionnaire.

The formula of Frequency Analysis is a below:

$$\text{Percentage (\%)} = (n/N) \times 100\%$$

Where:

n = numbers of respondents

N = total numbers of respondents received

3.5.2 Relative Importance Index (RII)

It is used determine the relative importance of the various causes and effects of delays. The same method is going to be adopted in this study within various groups (i.e. contractors, project engineers, owner and site supervisor). The four-point scale ranged from 1 (very little degree affect) to 5 (very high degree affect) is adopted and transformed to relative importance indices (RII) for each factor as follows:

$$\text{RII} = \Sigma W / (A * N)$$

Where, W is the weighting given to each factor by the respondents (ranging from 1 to 5), A is the highest weight (i.e. 5 in this case), and N is the total number of respondents. Higher the value of RII, more important was the cause of delays.

3.6 Research Process

The flow chart below shows the step of research process which is use to complete this research. First step of the research is problem identification. Researcher has identified what is the most critical problems in abandoned housing project in Selangor. Next, researcher has determined objectives of the study. Furthermore, the step will proceed to determine the literature review of this research. After that, know the population and sampling.

The population of this study are personnel involved in construction industry and house buyers. After that, researcher has developed questionnaire where the question is related to the outcome that researcher needs to study which are the factors that contributes towards abandoned housing projects and effects of construction delay. The outcome has been produced, and result analysis will be discussed in the next chapter. Then conclusion and recommendation are made for the research. Complete report has been conducted.

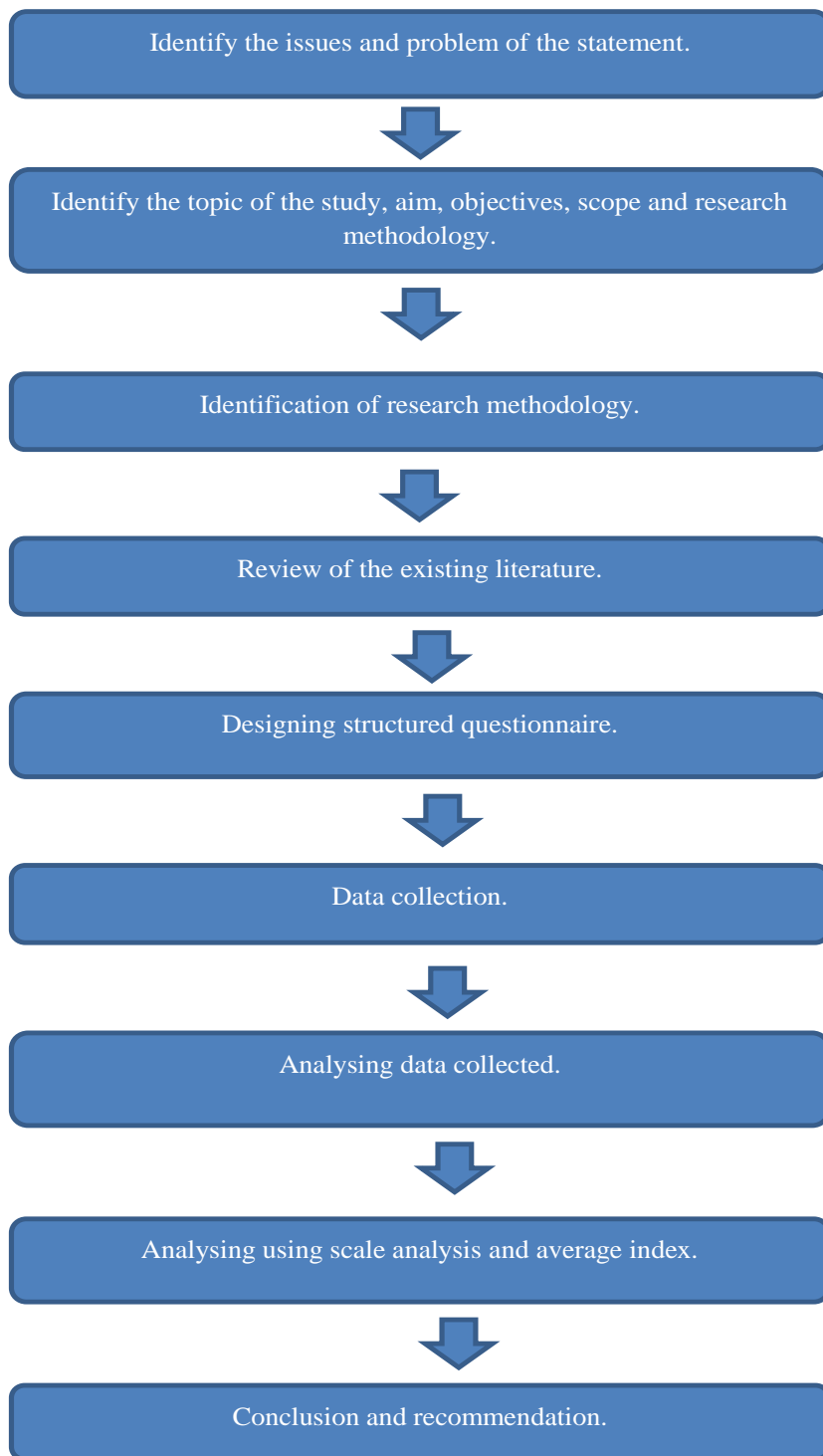


Figure 2: Methodology Flow Chart

3.7 Conclusion

This chapter has provided an explanation and justification of the research design and the methodology employed for this research. The research used a descriptive research design in data collection and analysis. The purpose is to describe the characteristics of the population regarding the issue of housing abandonment. This includes the description of the sample population's perceptions and opinions on the issues related to institutions that affect housing development, as well as the role played by market information, and on the causes of abandoned housing projects. For the study, the field survey method was used, as it was considered the most appropriate method owing to the nature of this study. This enabled the researcher to gather information from many respondents within a relatively short period of time.

This chapter also provided the explanation and justification of the employment of semi-structured interviews for gathering further information covered in the survey questionnaire. The results obtained from the interviews were used as backup information for discussing the issues of housing abandonment. The chapter also contained a discussion on the selection of the sample population chosen for this study and the selection of the sample study areas. The purpose of the pilot test based on the survey questionnaire was also highlighted.

The following chapter will discuss on the data analysis of this study.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

In this chapter, results and analysis of data will be presented and discussion based on collected data from Jabatan Perumahan Negara (JPN) including findings of the questionnaire survey that have been distributed. As stated in the previous chapter, RII method is used to achieve that have been set up at the early stage of this research. Next, findings from data analysis are highlight in appropriate tabulations. Lastly, based on this research finding, researcher will draw conclusions and propose recommendation to reduce abandonment of housing project in Selangor and Malaysia.

4.2 Primary Data from Jabatan Perumahan Negara

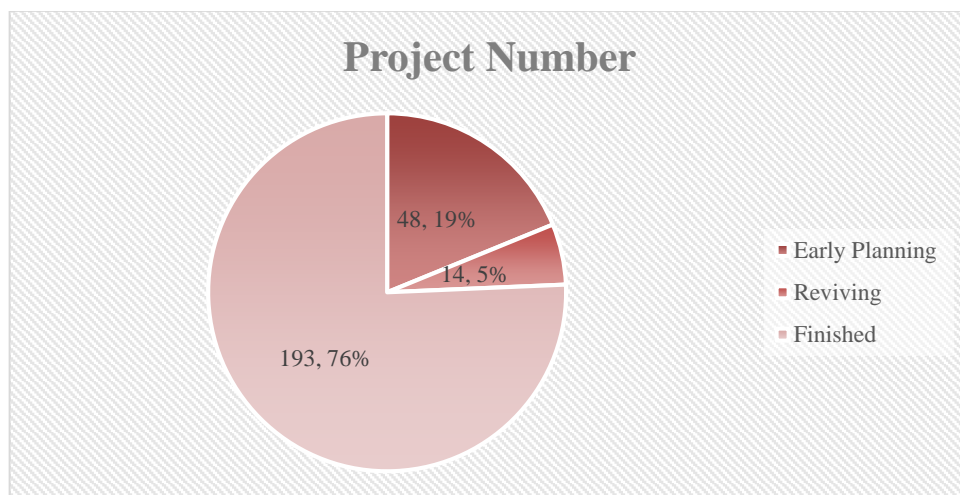
Data gain from Jabatan Perumahan Negara Malaysia is based on the statistic collected by the Government body as they contain and keep track on the abandoned housing project as this housing project will affects the economic state of the country, Malaysia. Only Jabatan Perumahan Negara has the right to announce a project as ‘abandoned’ accordingly to the rules and regulation that have been set up by the government.

4.2.1 Statistic of Abandoned Housing Project

No.	Status	Project No.	No. of house unit	Total buyers
1.	Early Planning	48 (19%)	7,694	5,334
2.	Reviving	14 (6%)	4,121	2,954
3.	Finished	193 (75%)	52,825	35,398
	Total	254 (100%)	64,640	43,686

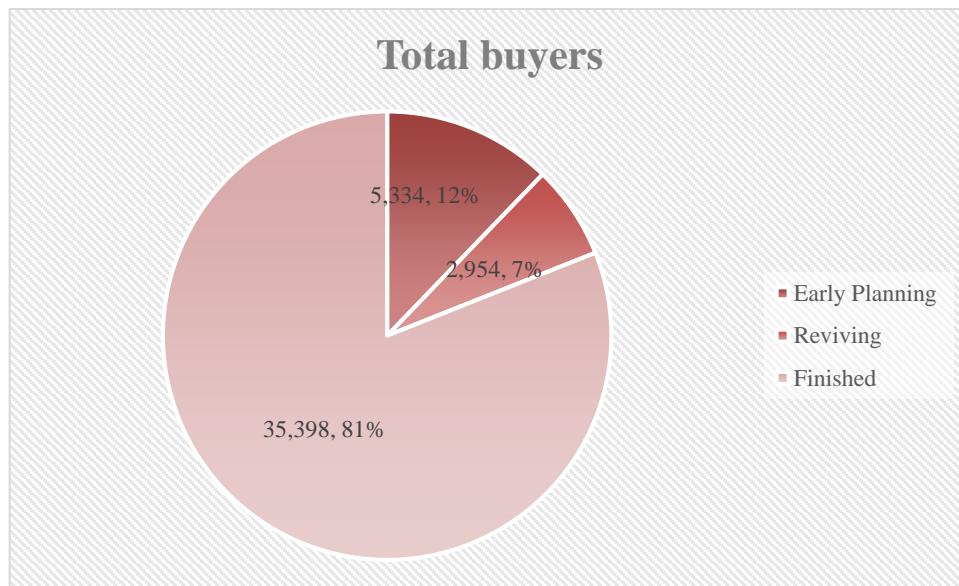
Table 1 : Statistic of Abandoned Housing Project

From the year 2009 to 28 February 2018, 254 private housing projects have been announced as abandoned throughout Peninsular Malaysia as stated under the Housing Development (Control and Licensing) Act 1966 [Act 118]. From the total abandoned project, 193 projects or 75% have been successfully completed or completed by JPN. While 14 projects or 6% are in various stages of rehabilitation / construction and the remaining 47 projects or 19% are in the initial planning of recovery.



Graph 1: Project Number

From the total amount of 64,640 number of abandoned house buyers, 35,398 or 81% houses of the home buyers have fully been completed by JPN. While 2,954 or 7% number of abandoned home buyers' houses are in a various stage of rehabilitation / construction and the remaining 5,334 or 12% number of abandoned home buyers' houses are in the initial planning of recovery.



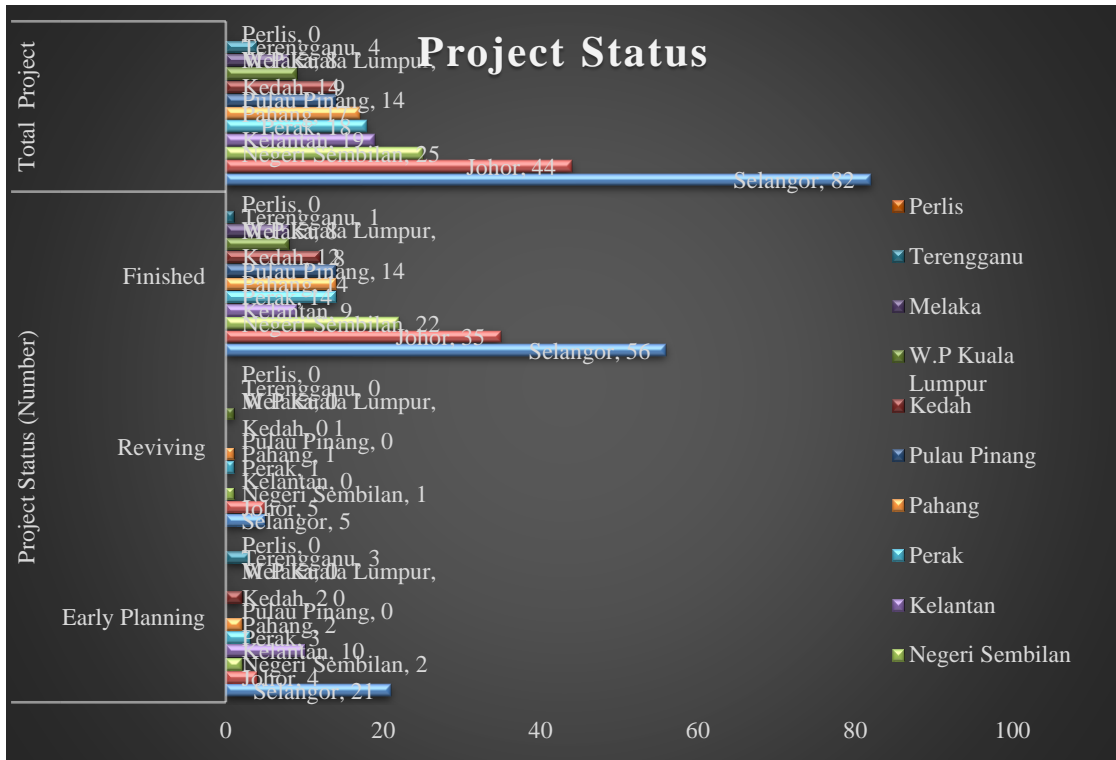
Graph 2 : Total Buyers

From the total amount of 43,686 unit of abandoned house, 35,398 or 82% unit of abandoned house have fully been completed by JPN. While 4121 or 7% unit of abandoned house are in a various stage of rehabilitation / construction and the remaining 7,694 or 12% unit of abandoned house are in the initial planning of recovery

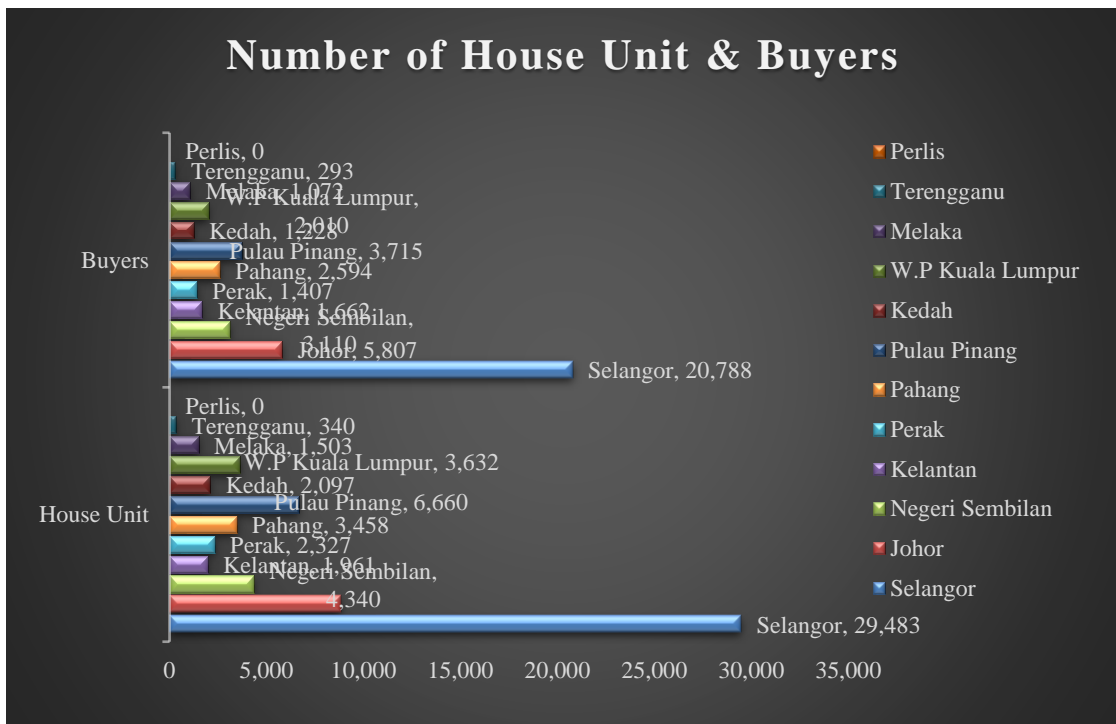
The breakdown of projects by state and project recovery status is as follows. The state of Selangor has the most complete state / completed private abandoned housing project since 2009 to 28 February 2018 which is 56 compared to other states.

State	Project Status (Number)			Total Project	Number	
	Early Planning	Reviving	Finished		House Unit	Buyers
Selangor	21	5	56	82	29,483	20,788
Johor	4	5	35	44	8,839	5,807
Negeri Sembilan	2	1	22	25	4,340	3,110
Kelantan	10	-	9	19	1,961	1,662
Perak	3	1	14	18	2,327	1,407
Pahang	2	1	14	17	3,458	2,594
Pulau Pinang	-	-	14	14	6,660	3,715
Kedah	2	-	12	14	2,097	1,228
W.P Kuala Lumpur		1	8	9	3,632	2,010
Melaka	-	-	8	8	1,503	1,072
Terengganu	3	-	1	4	340	293
Perlis	-	-	-	-	-	-
Total	47	14	193	254	64,640	43,686

Table 2 : Project Status in Malaysia



Graph 3 : Project Status



Graph 4 : Number of House Unit & Buyers

From the table above, the number of abandoned projects inclusive revived projects in the State of Selangor is the highest recorded in 2018 at 82 projects. This amount involved 29,483 housing units and 20,788 buyers. This is followed by 44 for Johor State (8,839 housing units and 5,807 buyers). Table shows the overall status of abandoned housing projects inclusive revived projects by state in 28th February 2018. A total of 250 listed housing projects were abandoned in February 2018. From these, 82 projects were in Selangor, 19 projects in Kelantan, 44 projects in Johor and 105 projects again is in other states.

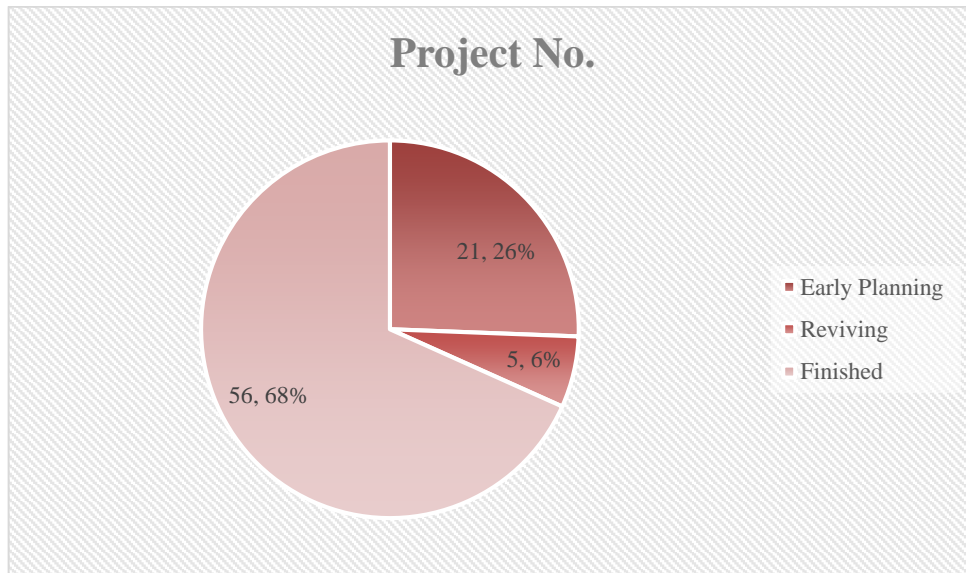
In addition, it is reported that in the year 2016 there are 26 new abandoned projects exclusive revived project, 14 projects in Selangor, 9 projects in Kelantan and 1 project in Pahang, Terengganu and Johor respectively. For the 15 completed abandoned housing projects, 4 projects involving abandoned housing projects in Selangor, 2 projects in Kelantan and 1 project in Johor and Perak respectively. The restoration of 8 abandoned projects throughout the year 2016 has left 66 projects on abandoned housing projects listed on December 31, 2016. Of these, 28 projects involving abandoned housing projects in the State of Selangor, 10 projects in the State of Kelantan and the balance of 28 projects involving abandoned projects in other states.

4.2.2 Statistic of Abandoned Housing Project in Selangor State (2009 to 29th February 2018) Primary Data

No.	Status	Project No.	No. of house unit	Total buyers
1.	Early Planning	21 (27%)	4,323	2,893
2.	Reviving	5 (6%)	1,186	746
3.	Finished	56 (67%)	23,974	17,149
	Total	82 (100%)	29,483	20,788

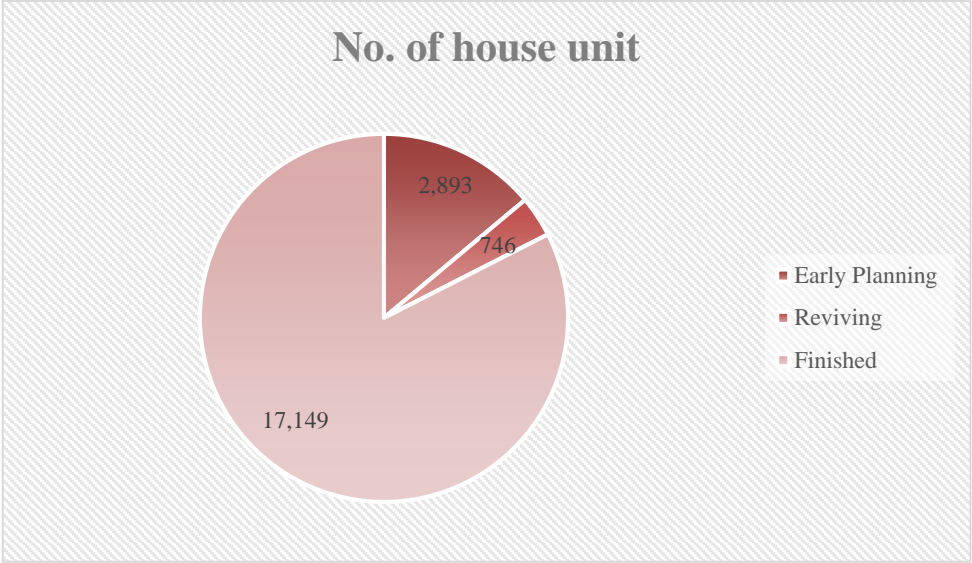
Table 3: Statistic of Abandoned Housing Project in Selangor State

In Selangor State, from the total amount of abandoned housing project, 82 projects, 67% have been successfully completed or completed by JPN. While 5 projects or 6% are in various stages of rehabilitation / construction and the remaining 21 projects or 27% are in the initial planning of recovery.



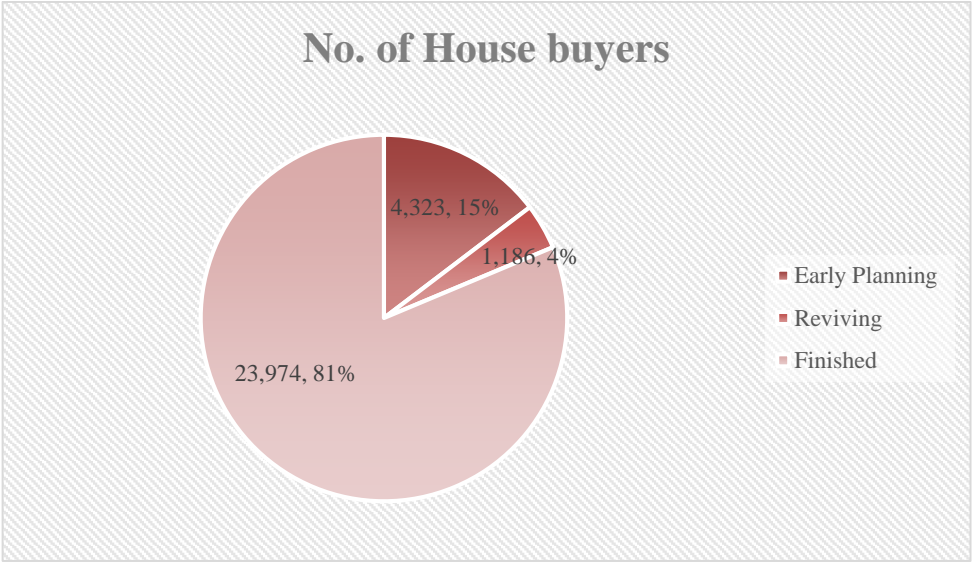
Graph 5: Project Status

In Selangor State, from the total amount of 29,483 unit of house, 23,974 or 81% unit of house have fully been completed by JPN. While 1,186 or 4% unit of house are in a various stage of rehabilitation / construction and the remaining 4,323 or 15% unit of house are in the initial planning of recovery.



Graph 6: Number of House Unit

In Selangor State, from the total amount of 20,788 number of abandoned house buyers, 17,149 or 82% houses of the home buyers have fully been completed by JPN. While 746 or 4% number of abandoned home buyers' houses are in a various stage of rehabilitation / construction and the remaining 2,893 or 14% number of abandoned home buyers' houses are in the initial planning of recovery.



Graph 7: Number of House Buyers

4.2.3 List of Abandoned Housing Project in Selangor State (Updated 2018)

No	Project	Original Developer	Unit No.		Abandoned Date	Status
			Build	Sell		
EARLY PLANNING						
1.	Kondominium Casa Suria, Taman Kemacahaya, Hulu Langat	Megatalent SB	84	84	3.7.2014	Early Planning
2.	Projek Penswastaan Bandar Baru Serendah, Serendah	Manco Enterprise SB	49	49	18.9.2013	
3.	Lembah Beringin, Kerling, Hulu Selangor	Lembah Beringin SB (digulung)	902	689	31.12.2001	
4.	Taman Selayang Mutiara, Selayang	Delpuri Corporation SB (digulung)	1436	686	18.2.2013	
5.	Taman Desa Kencana, Klang	Suasana Ehsan (M) SB (digulung)	37	31	22.4.2014	Early Planning
6.	Lot 1919, Hulu Langat		29	29	18.9.2013	
7.	Taman Impian Langat, Hulu Langat	Pencala Properties S/B	110	40	18.9.2013	
8.	Golden Village, Klang	Chong Hin Development S/B (digulung)	84	84	18.9.2013	
9.	Taman Desa Utama, Sepang, Selangor	Aras Dimensi Sdn Bhd	10	10	1.12.2016	

No	Project	Original Developer	Unit No.		Abandoned Date	Status
			Build	Sell		
10.	Taman Daya (Astana Square), Selayang, Selangor	Sedaya Sdn Bhd	176	170	1.12.2016	
11.	Taman Bahagia Indah, Kajang, Selangor	Bahagia Indah Properties Sdn Bhd	150	94	1.12.2016	
12.	Taman Nustalgia, Shah Alam, Selangor	Evergreen Acres Sdn Bhd	48	43	1.12.2016	
13.	Taman Qismul Maya II, Shah Alam, Selangor	SPS Setia Sdn Bhd	44	44	1.12.2016	
14.	Taman Qismul Maya III, Shah Alam, Selangor	SPS Setia Sdn Bhd	23	23	1.12.2016	
15.	Taman Saga 4, Klang, Selangor	Sumbangan Daya Sdn Bhd	46	31	1.12.2016	
16.	Taman Meru Makmur, Klang, Selangor	Vorpac Sdn Bhd	30	17	1.12.2016	
17.	Taman Meru Makmur, Klang, Selangor	Mekarkota (M) Sdn Bhd	100	78	1.12.2016	
18.	PK Villa, Klang, Selangor	Mari-One Developmet Sdn Bhd	44	40	1.12.2016	

No	Project	Original Developer	Unit No.		Abandoned Date	Status
			Build	Sell		
19.	Pangsapuri Impian Meru, Klang, Selangor	Wawasetia Sdn Bhd	195	192	1.12.2016	
20.	The Boss, Klang, Selangor	Hotwer Development Sdn Bhd	377	310	1.12.2016	
21.	Sungai Chinchin Residensi, Gombak	Ganda Selat S/B	350	149	10.11.2017	
REVIVING						
1.	Taman Salak Maju, Sepang	Bandar Murni SB (digulung)	119	60	18.9.2013	Progress 45%
2.	Apartment Selasih, Gombak	Panji Selasih S/B	240	50	18.9.2013	Progress 60%
3.	Gombak Perdana Villa, Gombak	Aga Dev SB (digulung)	222	187	31.12.2003	Progress 79%
4.	Selayang Spring, Gombak	Barisan Tenaga Perancang SB	558	434	22.4.201	Progress 13%
5.	Taman Desa Rahimah, Sepang, Selangor	Aras Dimensi Sdn Bhd	47	15	1.12.2016	Progress 90%

Table 4: List of Abandoned Housing Project in Selangor State

The government has registered 253 abandoned private housing projects in Peninsular Malaysia since 2009, involving 64,290 residential units. A housing project in Malaysia is regarded as abandoned if construction project is not completed or the housing units are not ready for occupation. Abandoned housing projects in the UK or the US refers to buildings that are unoccupied and show visible signs of physical

distress (i.e., boarded up, burned, exposed to the elements, or have deteriorated) (Jacobson, 2007). The abandonment of housing projects during construction appeared during mid-1980s, during the first economic recession that hit Malaysia. By the end of 1986, 126 housing projects were reported to have been not completed as scheduled and left completely abandoned. The number of housing units abandoned at that time was 14,568, affecting 6,834 buyers (Khalid, 2010). In 1990, Bank Negara had set up the Abandoned Housing Project Fund (AHPF) to provide special assistance to abandoned housing projects. The total fund approved at the end of 1993 was RM 382 million, which targeted to revive 23,287 housing units (Hussin, 1994).

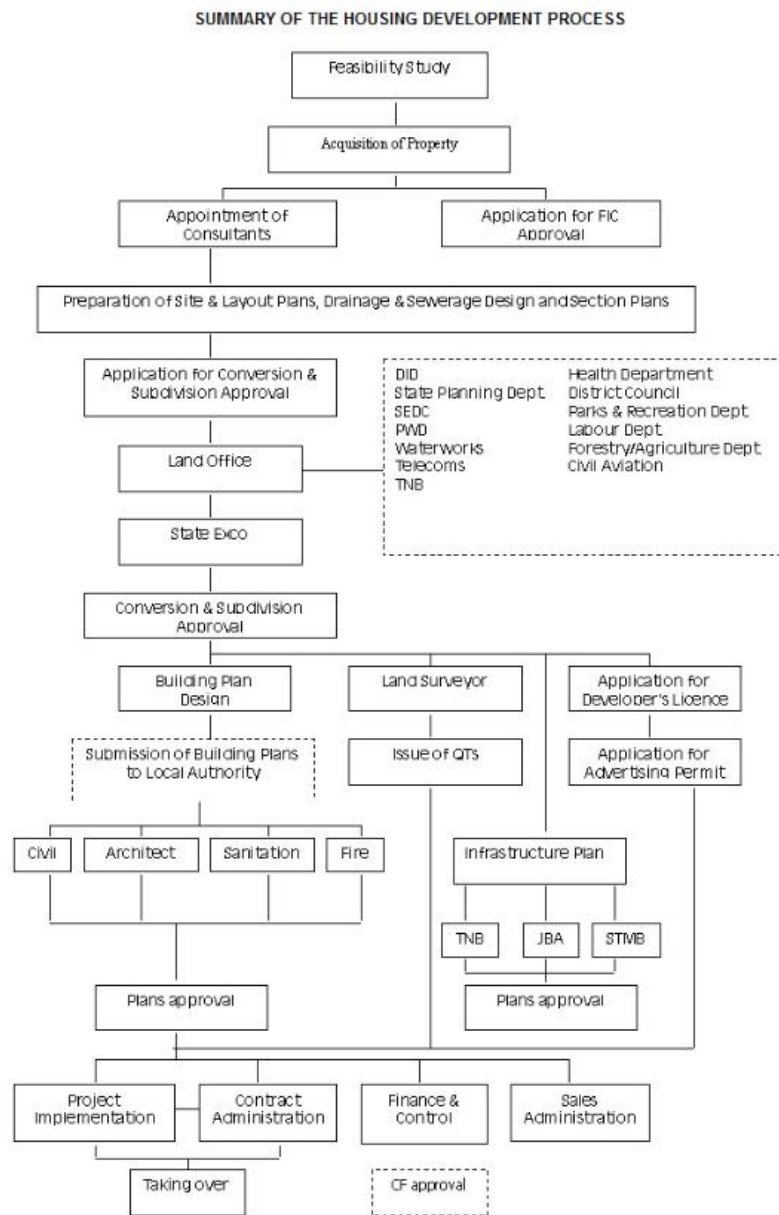


Figure 3: Summary of Housing Development Process

Above illustrates the various steps in housing development process and the different government departments a developer has to deal with to obtain approval. Housing plan approval is necessary to ensure houses built meet the minimum structural standards under the Uniform Building By-laws (UBBL) 1984 for safety purpose. In view of the many steps involved in getting approval, delays caused by clearance from

various technical agencies were often put forward by developers. Also, procedures for approval were often different for different local authorities and this non-uniformity of procedures have also created problems for developers.

Various measures undertaken to improve the above situation are as follows: -

- I. Exemption from requirement of CFO for individually constructed bungalow
- II. Amendment to the UBBL which provides for CFO to be deemed to be issued after 2 weeks of submission (provided the Borang E is complete and upon satisfaction of the requirements of the bye-law) if the CFO is not issued by the relevant local authority within that 2 weeks period. So far 7 states have gazetted this amendment i.e. Wilayah Persekutuan Kuala Lumpur, Perak, Selangor, Melaka, Johor, Pahang and Terengganu. The other states are in the various stages of gazetting this amendment.
- III. Guidelines on Development Planning Areas have been prepared to streamline the various development approval processes to ensure uniformity in all local authorities. This has been circulated to all local authorities for their comments.
- IV. Time frame to be fixed for technical agencies in giving clearance/approval.

4.2.4 List of Abandoned Housing Projects in Selangor State that have been Completed/Finished (Updated to 28th February 2018)

No	Project	Year of Completion (Suspended)	Abandoned Date	No.		Notes
				House	Buyer	
1	Cahaya SPK, Shah Alam, Petaling Bukit Cahaya The Sanctuary	2009	31.12.2000	358	268	Completed with CFO on 17/08/09
2	Taman Desa Surda, Kajang	1995	31.12.2000	454	454	Completed with CFO on 22/12/09
3	Putra Intan Kondominium, Mukim Dengkil, Sepang	2003	12.05.2010	300	239	Completed with CFO on 10/12/2010
4	Taman Prima Hijau (RPKR) Rawang, Daerah Gombak	2004	31.12.2006	54	47	Completed with CFO on 20/09/2011
5	Taman Subang Permai (Coral Vista Kondominium), Subang Jaya	1999	-	600	156	change of development proposal (2011)
6	Taman Kenanga Fasa 4A & 5A Bandar Baru Salak Tinggi, Dengkil, Sepang	2004	31.12.2002	0	0	Consolidation of licenses (2011)
7	Taman Kenanga Fasa 4B					

No	Project	Year of Completion (Suspended)	Abandoned Date	No.		Notes
				House	Buyer	
	Bandar Baru Salak Tinggi, Dengkil, Sepang					
8	Taman Kenanga 5B Bandar Baru Salak Tinggi, Dengkil, Sepang	2002				
9	Taman Kenanga Fasa 5C Bandar Baru Salak Tinggi, Dengkil, Sepang	2002				
10	Pangsapuri Rimau Indah, Fasa 4, Klang	2004	24.8.2010	0	0	Consolidation of licenses (2011)
11	Taman Serosa Kajang (RTDT) Kajang, Hulu Langat	2000	31.12.2003	63	21	change of development proposal (2009)
12	Taman Serosa Kajang (RPKR) Kajang, Hulu Langat	2000	31.12.2003	110	94	change of development proposal (2009)
13	Taman Serosa Kajang (RPKSR) Kajang, Hulu Langat	2000	31.12.2003	240	0	change of development proposal (2009))
14	Taman Lingkaran Nur, Fasa 1B, Cheras, Hulu Langat	1991	31.12.2001	160	160	change of development proposal (2009)

No	Project	Year of Completion (Supposed)	Abandoned Date	No.		Notes
				House	Buyer	
15	Taman Khalid Al-Walid, Lot 3236, Seksyen 30 Klang	2003	31.12.2005	48	35	Ready with CFO on 20/03/2012
16	Taman Khalid Al-Walid, Lot 3237, Seksyen 30 Klang	2003	31.12.2005	46	31	Ready with CFO on 20/03/2012
17	Taman Setia Warisan, Kampung Melayu Subang,	1991	31.12.1999	194	194	Ready with CFO on 15/2/2012
18	Taman Sri Aman, Lot No.6978, Klang	1997	1997	63	63	change of development proposal (2012)
19	Lembah Beringin (Heart) Kerling, Hulu Selangor	1998	31.12.2001	-	-	Consolidation of licenses (2012)
20	Lembah Beringin (Iris) Kerling, Hulu Selangor	1999				
21	Lembah Beringin (jasmine) Kerling, Hulu Selangor	1999				
22	Desa Beruntung, Ulu Yam, Hulu Selangor	2000	31.12.2001	875	585	Completed by deposit returns (2009)
23	Bandar Puncak Damai, Semenyih, Hulu Langat	2002	31.12.2001	260 0	110 3	Return of the deposit (2012)
24	Taman Topaz, Dengkil, Daerah Sepang,	2003	31.12.2005	787	367	Ready with CFO on 13.12.2013

No	Project	Year of Completion (Supposed)	Abandoned Date	No.		Notes
				House	Buyer	
25	Taman Malim Mas, Ulu Bernam,	2004	6.4.2012	147	126	Ready with CFO on 21.11.2013
26	La'cottage, Mukim Dengkil,	2008-2009	1.4.2009	541	427	Ready with CFO on 23.1.2013
27	Bandar Alam Perdana (RPKR) Ijok, Kuala Selangor - Kos rendah dipulihkan oleh SPNB	2003	31.12.2005	2500	2500	Ready with CFO on 29.11.2012
28	Bandar Alam Perdana (RPKR) Ijok, Kuala Selangor - Kos sederhana dipulihkan oleh LBCN	2002	31.12.2005	1319	1168	Ready with CFO on 29.11.2012
29	Taman Nuri Indah, Tanjung 12, Kuala Langat,	2000	31.12.2003	54	54	Ready with CFO on 25.1.2013
30	Taman Estana Court, Hulu Kelang, Ampang,	1998	31.12.2001	335	284	Conversion of proposed reserves (2013)
31	Taman Metro Puchong, Puchong,	11/10/09	18.2.2013	79	44	Conversion of proposed reserves (2013)
32	Taman Selayang Mutiara, Selayang,	24/3/2007	18.2.2013	0	0	License union (2013)
33	Subang 2, Bandar Pinggiran Subang Shah Alam,	2003	31.12.2003	672	507	Buyers are offered PPR Valley of Subang 2 (2013)

No	Project	Year of Completion (Supposed)	Abandoned Date	No.		Notes
				House	Buyer	
34	Taman Juara Jaya, Kajang,	2006	16.3.2012	22	10	Return of the deposit (2013)
35	Taman Kenanga, Dengkil,	2003	Nov-03	2130	1885	Ready with CFO on 22/09/14
36	Taman Kajang Villa, Kajang	1998	16.5.2011	900	660	Ready with CFO on 17.9.2014
37	Pangsapuri Nusa Mewah Villa, Hulu Langat	2004	1.6.2004	560	560	Ready with CFO on 27.6.2014
38	Taman Seri Nelayan, Teluk Gong	2000	31.12.2006	470	102	Ready with CFO on 30.5.2014
39	Bandar Baru Kundang, Kundang	2003	31.12.2005	192	139	Ready with CFO on 11.11.14
40	Taman Saujana Puchong Fasa 7, Selangor	2004	18.9.2013	228	228	Ready with CFO on 24.12.2014
41	Platinum Damansara	2007	9.1.2004	1016	680	completed by conversion of proposed development (2014)
42	Bandar Pinggiran Subang,	2000	31.12.2003	840	524	
43	Taman Sri Angsana Hilir, Ampang, Hulu Langat	1998	31.12.2013	175	165	Ready with CFO on 15.01.2015
44	Taman Desaria Fasa 6A (Villaria PJ), Petaling, Selangor	2001	31.12.2004	608	240	Ready with CFO on 31.12.2015

No	Project	Year of Completion (Supposed)	Abandoned Date	No.		Notes
				House	Buyer	
45	Apartment Kelisa Ria, Kajang,	2006	16.05.2011	500	413	Ready with CFO on 12.08.2015
46	Taman Cahaya 2, Batang Berjuntai,	2002	31.12.2003	151	112	Ready with CFO on 18.06.2015
47	Pangsapuri Rimau Indah, Fasa 3 & 4, Klang,	2004	24.08.2010	591	480	The State Government takes over the project recovery through a rollout letter. Bill (4) in LPHS / UPT01 / 02/06 on 18/6/2015
48	Taman Kencana Ampang	1993	31.12.2000	61	61	Conversion of proposed reserves (2015)
49	Taman Lestari Permai, Sepang	2015	30.7.2015	454	454	Ready with CFO on 2.4.2005
50	Taman Lestari Permai, Sepang	2015		114	114	Ready with CFO on 2.4.2005
51	Taman Suria Indah, Dengkil	2003	31.12.2004	130	12	Return of deposit (issued in 2009)
52	Taman Tradisi Indah, Klang	2005	18.9.2013	50	43	Ready with CFO on 2.12.2016
53	Taman Salak Idaman, Sepang	2012	22.4.2014	50	50	Ready with CFO on 22.12.2016
54	Ukay Perdana, Gombak, Selangor	2006	22.4.2014	252	136	Ready with CFO on 7.6.2017

No	Project	Year of Completion (Supposed)	Abandoned Date	No.		Notes
				House	Buyer	
55	Alam Mutiara, Kuala Selangor	2002	31.12.2006	924	652	Completed by conversion of proposed development (released in 2018)
56	Taman Saujana Putra, Kuala Langat, Selangor	2010	1.12.2016	664	245	Ready with CFO on 7.6.2017 (released in 2018)

Table 5: List of Abandoned Housing Project in Selangor that have been Completed/Finished

The causes of residential housing projects in Malaysia rooted from many factors. Dahlan (2011), for example, discovered that abandoned housing problems occur due to the Housing provision system and legislations which are complex and problematic. The findings by Dahlan (2011) agreed with Loi (2001), Khalid (2010) and Tan (2011). In this study Loi (2000) and Khalid (2010) had discovered that housing provision in Malaysia is highly regulated and it is governed by so many legislations. Loi (2001) described that the Malaysian Housing Industry is govern 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 workers 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. Besides above regulation, 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).

The study conducted by Khalid (2010) discovered that the cause of abandoned housing project lies within private developers themselves. According to Khalid (2010) these causes, which inhabit the private developers, are profit maximization, inadequate fund, and poor management. The findings had obtained by Khalid (2010) gets support from Ibrahim (2006). According to the latter, the high profit motives by private developer become apparent when the author discovered that the private developer in Terengganu refused to construct public amenities and produced low quality of work performances.

4.2.5 Abandoned Housing Project Recovery Cost in Selangor State by Using Government funds

Out of 54 projects completed from 2009 to February 28, 2018, nine (9) projects in the State of Selangor have been restored using the Government Fund with total expenditure of RM 59.7 million. The total of 9 abandoned housing projects that have been restored by JPN KPKT are the largest amount compared to other states in Peninsular Malaysia which have been recovered using government funds from 2009.

No.	Project	Cost (RM)
1.	Taman Prima Hijau, Rawang, Selangor	1,700,000.00
2.	Taman Setia Warisan, Subang, Selangor	2,644,283.00
3.	Taman Topaz, Dengkil, Selangor	8,709,501.75
4.	Taman Malim Mas, Ulu Bernam, Selangor	5,915,016.90
5.	Bandar Baru Kundang, Kundang, Selangor	1,319,319.87
6.	Taman Saujana Puchong, Puchong, Selangor	3,515,470.00
7.	Taman Cahaya 2, Batang Berjuntai, Selangor	8,994,930.86
8.	Apartment Kelisa Ria, Kajang, Selangor	24,233,048.31
9.	Taman Tradisi Indah, Klang, Selangor	2,666,799.90
Total		59,698,370.59

Table 6: Abandoned Housing Project Recovery Cost by using Government Funds

In recent years, the concept of sustainability has become central not just in environmental preservation, but in the consideration of the quality of development in human settlements (Choguill, 2007). In the context of housing, several researchers indicated that housing policies based on sustainability criteria – meeting basic housing needs – must be viewed as a necessary. As stated by Currie (1980), housing is a human right and a basic need and must have priority.

Meeting housing needs for all has long been an objective of national policy in Malaysia. As a result, housing policies and programs are developed and implemented to increase the homeownership rate in the country, particularly the low-income group. Governments often perceive housing solely as a welfare issue (Arku, 2006), In fact, housing is a productivity activity that can forms an important and integral part of either

developed or developing countries. Researchers justified the role that housing could play in the economic development. Studies that focused on the role of housing in economic development included those of Burns and Tjioe (1967), Strassman (1985, 1987), Tu (1999), Phang (2001) and Arku (2006). These studies focus on employment and income effects, labour productivity, and growth effects of housing provision.

Despite efforts by the Malaysian government, there are various issues relating to a housing delivery system that have undermined the success of housing achievement for the past 30 years. Firstly, public and private house builders have been giving low priority to the low-cost housing program, which falls below the targeted level. The construction of medium- and high-cost housing, on the other hand, has exceeded the targeted level during the Five-Year Malaysia Plans (Malaysia, 2001; Malaysia, 2006). Secondly, a massive over construction of medium- and high-cost housing has contributed to the problem of property overhang (Ministry of Finance's Valuation and Property Service Department, 2009). These unsold houses do not attract the target market nor cater to the housing needs of the targeted house buyers (Tan, 2008).

4.2.6 List of Current Abandoned Housing Projects Located in Gombak District

No	Project	Original Developer	No. Unit		Date of Abandonment	Status
			Build	sell		
EARLY PLANNING						
1.	Taman Selayang Mutiara, Selayang, Gombak	Delpuri Corporation SB (digulung)	1436	686	18.2.2013	Early planning of recovery
2.	Sungai Chinchin Residensi, Gombak	Ganda Selat S/B	350	149	1.12.2016	
3.	Taman Daya Astana	Sedaya	176	170	1.12.2016	

No	Project	Original Developer	No. Unit		Date of Abandonment	Status
			Build	sell		
	(Astana Square), Selayang	Indah S/B (digulung)				
REVIVING						
4.	Apartment Selasih, Gombak	Panji Selasih S/B	240	50	18.9.2013	Progress 65%
5.	Gombak Perdana Villa, Gombak	Aga Dev SB (digulung)	222	187	31.12.2003	Progress 83%
6.	Selayang Springs, Gombak	Barisan Tenaga Perancang SB	558	434	22.4.201	Progress 80%

Table 7: List of Current Abandoned Housing Projects Located in Gombak District

A. Without License

NO	DEALER NAME	PROJECT NAME	NO. (UNIT)	TYPE	PROJECT STATUS
1	Nurangkai Development Sdn Bhd	Taman Seri Puteri 4 Lot 4947, Mukim Setapak, Daerah Gombak, Selangor.	177	Terrace & Apartment Houses	The site cannot be accessed due to the entrance to the landslide. Letter from Selayang Municipal Council reference number: (19) MPS.5 / 8-14Jld 4 dated August 28, 2015 states that the developer has applied for Planning Permission but was

NO	DEALER NAME	PROJECT NAME	NO. (UNIT)	TYPE	PROJECT STATUS
					rejected by the Town Planning Department of the Majlis Perbandaran Selayang. No application has been made at the Selayang Municipal Council Building.
2	Tegoh Timber & Properties Sdn. Bhd.	Taman Bayu Lot 2980, Setapak, Gombak.	180	Low Cost Apartment	No information
3	Shaman Properties	Taman Garing Mengandungi 57 Unit Jenis A, 47 Unit Jenis B Dan 39 Unit Jenis B2), Mukim Rawang, Daerah Gombak, Selangor.	143	2 Storey Terrace House	Completely 65%. Stops since 2008. Build & Sale concept. In the Real Estate Sales Process - CANCEL SUMMONS (22/2/2011)
4	Q-vista Sdn Bhd	Taman Seri Puteri 5 Lot 4935, Mukim Setapak, Gombak, Selangor.	96 38 19 28	12-Level Medium Cost Apartment 2 Storey Terrace House	Completed 5%; - Only land work is carried out

NO	DEALER NAME	PROJECT NAME	NO. (UNIT)	TYPE	PROJECT STATUS
			— <u>181</u>	(18'x65 '), 1 storey terrace house (18'x70 ') 2 Storey Terrace House (16'x70 ')	
5	Intelligent Mission S/B (Tuan Tanah : Epic Quest Sdn Bhd)	Taman Jasa Murni - GM 662-624, Lot 2146, 2148 & 2150, Sg Tua, Mukim Batu, Daerah Gombak, Selangor.	49	1 & 2 storey terrace house	(LPHS: Announcement from MPS developer has applied for extending approval period which expired in 2003)

Table 8: Dealer without License

In the year 2016 the total of 26.6% (575) involved the issuance of Housing Development License and New Advertising and Sales Permit and 73.4% (1,584) were Renewable Housing Development Licenses and Advertising and Sales Permit.

Before a developer can develop any piece of land for housing, application for licence and permit is necessary under the Housing Developers Act (Control and Licensing) 1966. This Act has been formulated to control and monitor the activities of housing developers and protect the interest of house purchasers.

The Ministry has received numerous complaints pertaining to projects being abandoned, poor workmanship, delay in the issuance of certificate of fitness, delay in handing over vacant possession, refusal of developers to pay compensation of late delivery, interest being charged by the developers for late progressive payments and perennial problems associated with the payment of maintenance charges. Table 3 illustrates the number of complaints received by states and types for year 2000. A total of 1,823 complaints were received in 2000 of which 66.54% or 1,213 have been settled. Table below shows the number of abandoned projects by states. The government has identified 56 projects with potential to be revived of which 46 projects involving 13,855 units of houses (35% of which are low cost) and 9,331 buyers with estimated cost of RM1.313 billion have been assigned to Syarikat Perumahan Negara for revival exercise.

**No. of Abandoned Housing Projects by States
As At December 2000**

No.	State	No. of Projects	No. of Houses	No. of Buyers	Estimated Cost (RM Million)
1.	Perlis	15	1,591	564	91.27
2.	Kedah	23	3,795	2,983	148.92
3.	Penang	41	8,364	3,754	633.21
4.	Perak	78	12,742	8,406	596.55
5.	Selangor	80	17,544	12,914	1,622.65
6.	W. Persekutuan	25	15,107	9,104	1,980.9
7.	N. Sembilan	52	11,170	5,947	521.73
8.	Melaka	29	5,146	3,518	383.5
9.	Johor	69	20,067	14,423	939.71
10.	Kelantan	37	4,241	2,218	191.72
11.	Terengganu	33	1,557	790	78.35
12.	Pahang	32	6,378	3,719	53.9
	Total	514*	107,702	68,340	7,542.41

* 324 projects (63.04%) of this total have been revived.
 19 projects taken over by other developers.
 115 projects were totally abandoned with no chance of revival.
 56 projects have been identified as having potential to be revived.

Figure 2: Number of Abandoned Housing Projects by States (December 2000)

After having lengthy discussions with the various parties concerned, the main amendments being proposed to the Housing Developers Act to address the shortcomings of the existing act are as follows: -

- I. Increasing the paid-up capital of licensed housing developers;

- II. bringing in all the statutory bodies and cooperative societies under the ambit of the Act;
- III. appointment of Deputy Controller to smoothen the efficiency and expedite the issuance of licences;
- IV. increasing the penalty two-fold and in certain instances as many as five times;
- V. powers to compound;
- VI. Setting up a tribunal to investigate the problems faced by homebuyers known as the "Tribunal for Homebuyer Claims". It is envisaged the tribunal would save costs and unnecessary delays faced by homebuyers at the present moment;
- VII. The power to enter any premises and their search for, seize and detain any property, book or other document. This power is necessary in order to ensure an effective way of enforcing the law especially housing developers who collect money without a housing developers licence; and
- VIII. Power vested on the Minister to terminate the Sale & Purchase Agreement if it is found that 75% of the homebuyers do not want to continue the purchase.

To overcome the problems, it is envisaged and expected that the above amendments to the Housing Developers Act would bring much improvement to the housing industry at large and offer greater protection to individual homebuyer.

4.3 Questionnaire Survey

This survey was distributed and conducted in February 2018 and distributed to parties that are involve closely in construction industries and house buyers of abandoned housing project. The total of questionnaire survey distributed are 50 sets. This sets of question are distributed among Developer, Contractor, Consultant, Authority and House buyers who have experience in managing abandoned housing project. Several methods are being used to distribute this questionnaire, via email and google doc form links, and all 35 respondents replied and returned the questionnaire completely. Mentioned by (Takim et a. 2002) response rate in the construction industry using postal or blast email method of questionnaire is around 20-30% are acceptable.

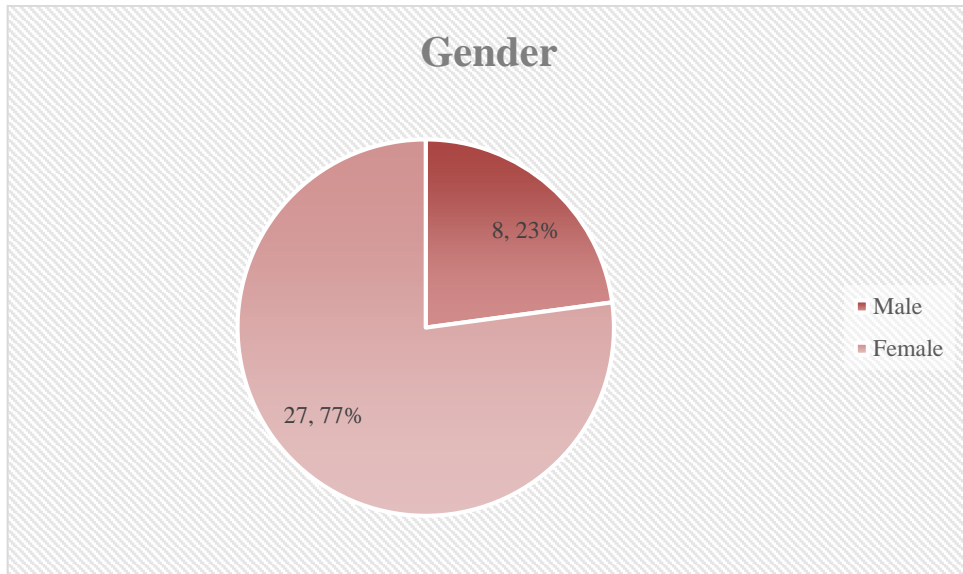
This survey is divided into 2 section which are; section A and section B. Section A is questions on personal particulars and demographic of respondent such as position in construction industry, gender, age, work experience, types of abandoned housing project, and price of house of the abandoned housing project. On the other hand, section B contain 2 types of question which are the causes variations which are; client-related, consultant-related, contractor related and external-related. Next, for question 2 in section B, construction delay effects of abandoned housing project to determine the most relevant effects of abandonment of housing project. In section B of this questionnaire, respondents are to scale from 1 to 5, from strongly disagree to strongly agree. From the result gain, Relative Importance Index method (RII) will be used to interpret data collected.

4.4 Demographic of the respondents

Section A of the questionnaire distributed are regarding personal particulars from the respondent that includes position in construction industry, gender, age, work experience, types of abandoned housing project, and price of house of the abandoned housing project. Background of respondent are very essential to ensure the quality and reliability of the data received.

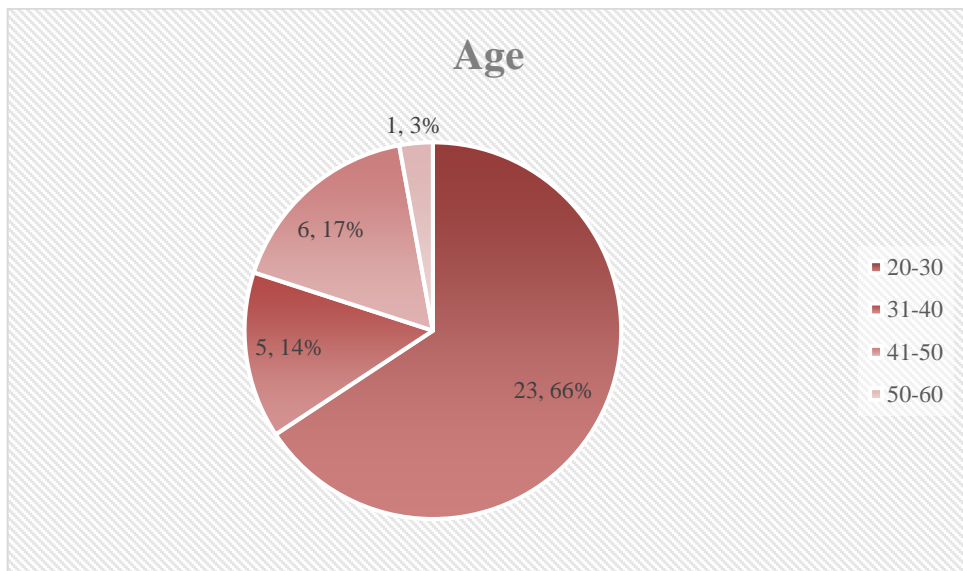
4.4.1 Gender and Age of the Respondents

From the graph below, there are 8 or 23% male respondents and 27 respondents 77% female respondents. Besides that, the respondent is categorized into a narrow scope of age.



Graph 8: Gender

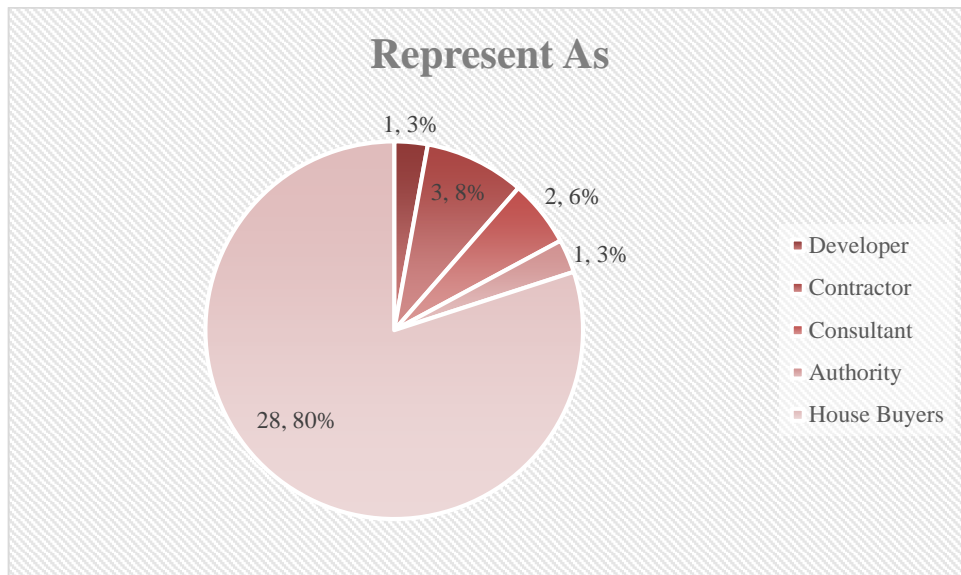
Besides that, the respondent is categorized into a narrow scope of age. As per data shown below, the highest percentage for respondent age is in range age (20-30) which are 66%, followed by 17% for range age (41-50), 14% for range age (31-40) and the least is 3% for range (50-60).



Graph 9: Age

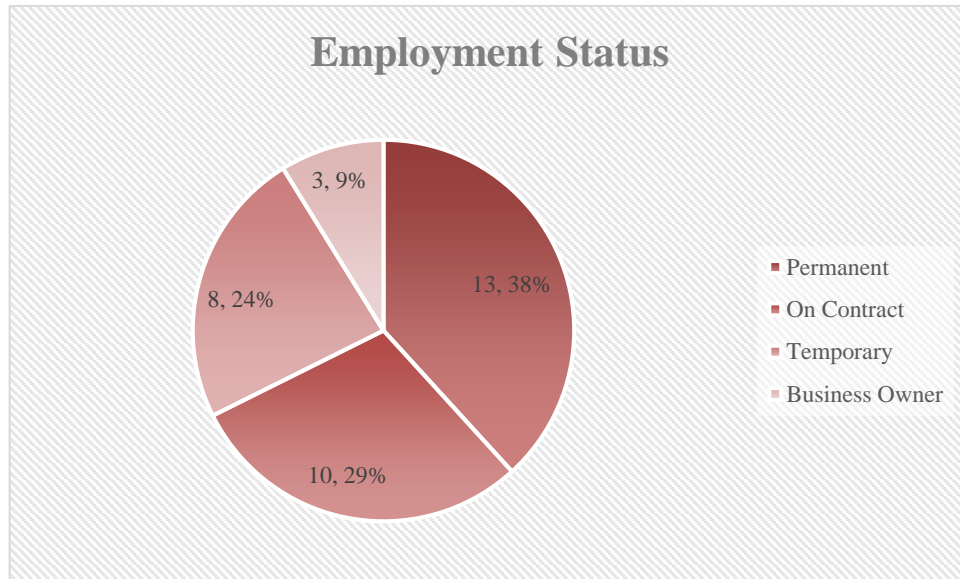
4.4.2 Respondent position and employment status

The respondents are person who are closely involved and related to abandoned housing project. The graph below presents the respondent's involvement in the abandonment of housing project in Selangor State.



Graph 10: Represent As

Graph above shows the position of the respondents who are involved in the construction team and house buyers of abandoned housing project in Selangor. House buyers has the highest percentage (80%) compared to the others and followed by Contractor that holds up 8% of response. The other respondent's position is Consultant (6%), and the developer and authority hold up to the same percent of respondent which are (3%).the participants of this survey are those who have been involved in the case of abandonment projects and are much relevant to the objective of this research.

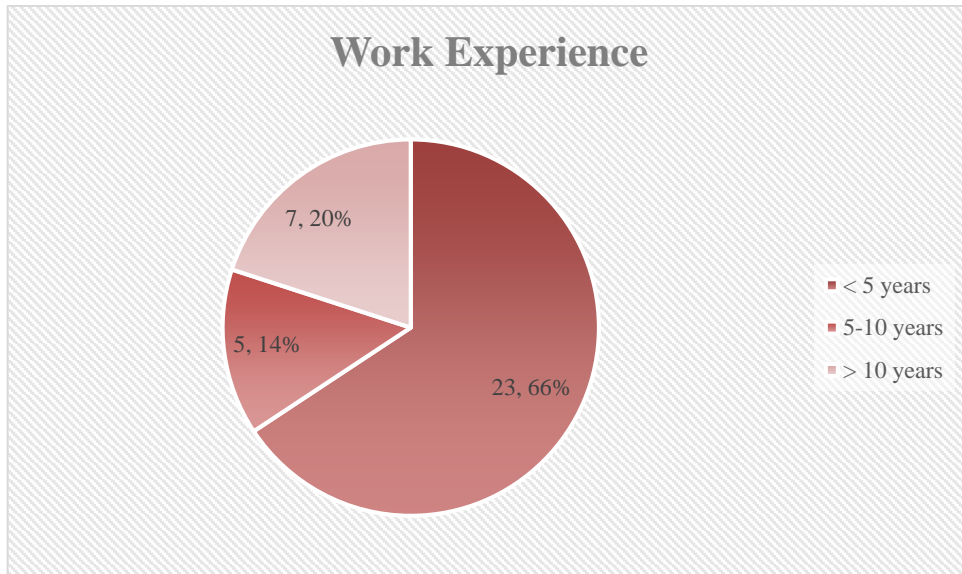


Graph 11: Employment Status

The graph above represent the employment status of the survey respondent as all the respondents are strictly involved either in construction phase or house buyers whom has bought and abandoned house. First, permanent employment status holds up the highest rate of percent which are 38% followed by 29% which represents workers that is under contract. Temporary job holders that have committed in answering the survey is 24% and lastly business owner who represents the home buyers holds up 9% share in the pie chart above.

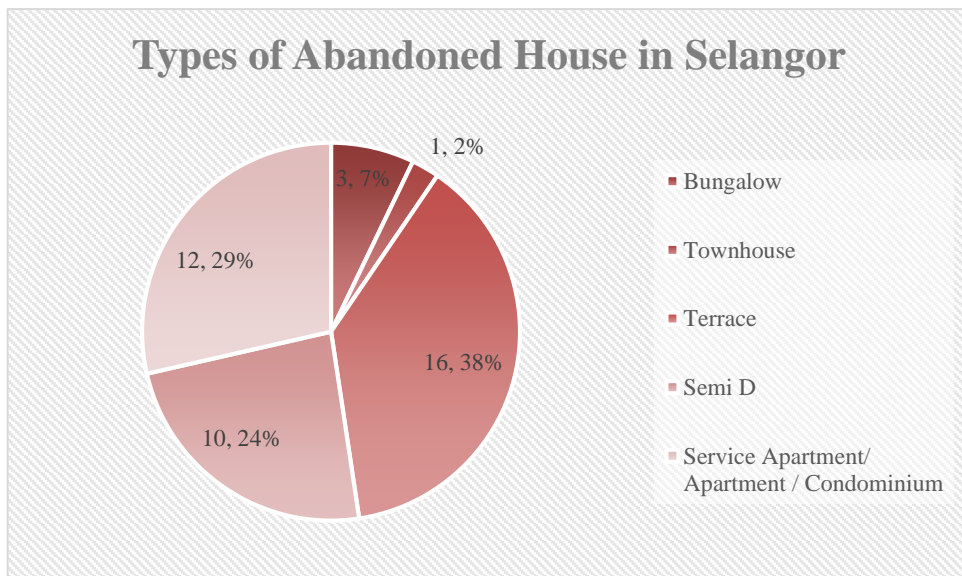
4.4.3 Years of Working Experience in Construction Industry

Graph below illustrates the respondents working experienced in construction industry and involvement in the abandonment of housing project in Selangor which divided by 3 categories accordance to their working experience in their own field. From the data it shows that respondents who have work experience less than 5 years are 66% and respondents who have been working more than 5 year and bounded to 10 years are 14%. 20% of the respondents have strictly involve in their own field for 10 years.



Graph 12: Work Experience

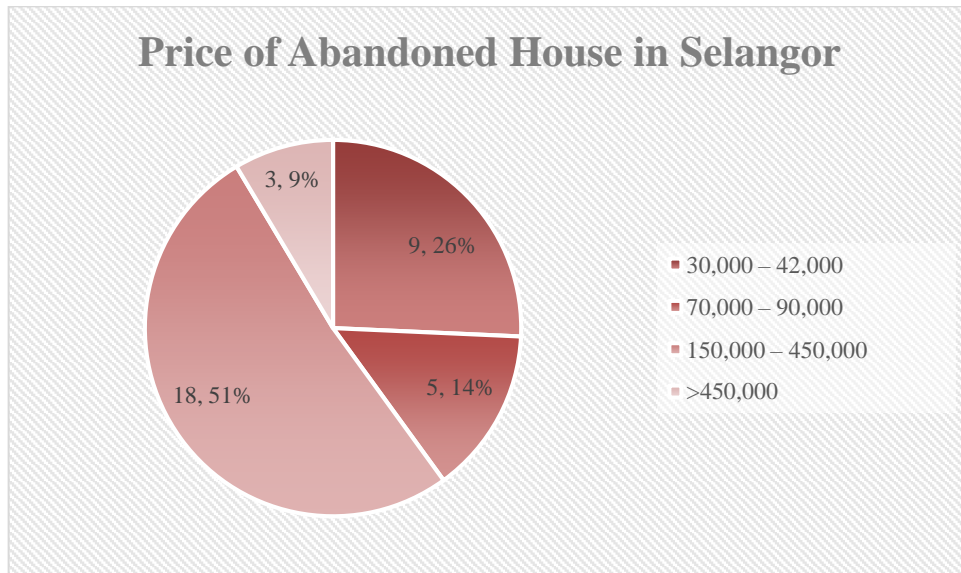
4.4.4 Types and Price of Abandoned Housing Project in Selangor



Graph 13: Types of Abandoned House in Selangor

As per the respondent involvement in abandoned housing project, many of them acknowledge terrace housing project as one of the abandoned housing project that share 38% in the pie chart above. Apartment building is rated 29% and Semi D is rated 24%

by the respondent. Bungalow holds the second least abandonment which is 7% and lastly 2% for townhouse as not many townhouses are available in Malaysia.



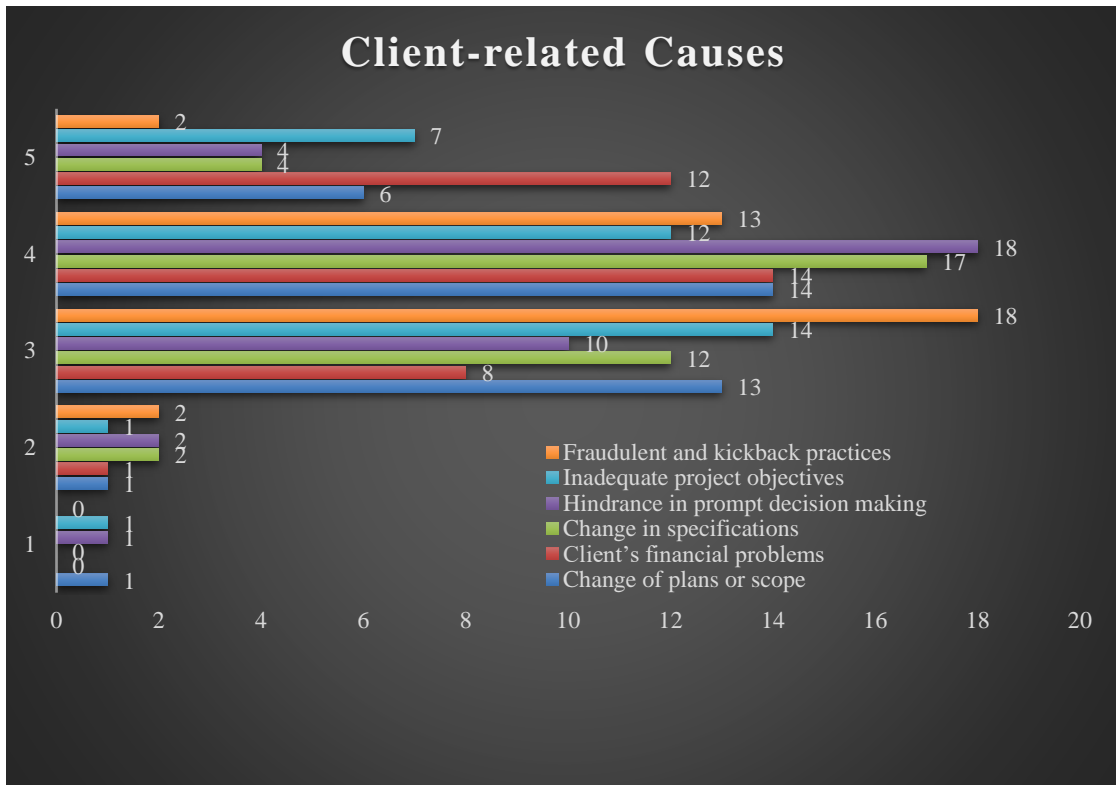
Graph 14: Price of Abandoned House in Selangor

In developing state like Selangor, the housing price are to be known as quite expensive at certain developed area. The rate of houses of respondent's involvement are 51% for the house pricing (150000-450000) and for second rate 26% will be house pricing (30000-42000). (70000-90000) holds up 14% of the pie chart. Lastly, price of 450000 and above is 9%.

4.5 Cause Variations of Abandoned Housing project in Selangor

Section B of the questionnaire consists of 2 questions which are the cause's variations which are; client-related, consultant-related, contractor related and external-related. The respondent is the answer the questions by rate factor using Likert Scale based on their experience and problems in construction industry regarding the abandoned housing project issue. Likert's Scale is used to measure the level of respondent agreement for the 4 related causes. Below shows the level of agreement based on the Likert's Scale.

4.5.1 Data Analysis of Client-Related Causes



Graph 15: Client-Related Causes

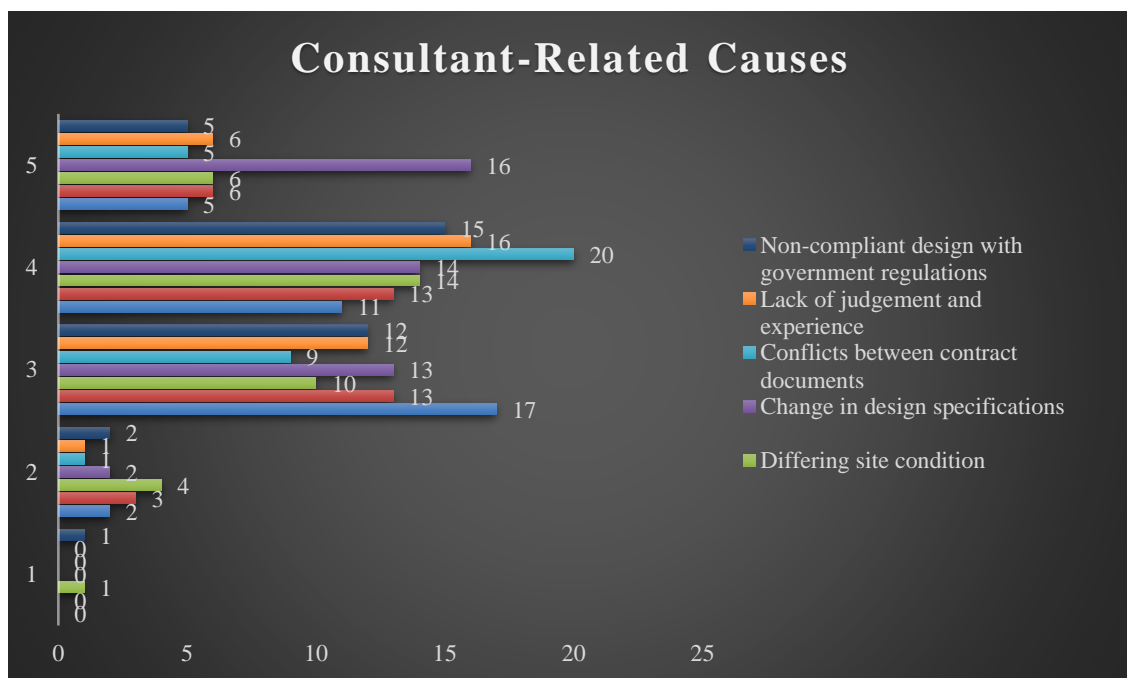
No	Causes of Variations	RII	Ranks
1	Change of plans or scope	0.731	2
2	Client's financial problems	0.811	1
3	Change in specifications	0.731	3
4	Hindrance in prompt decision making	0.725	5
5	Inadequate project objectives	0.731	4
6	Fraudulent and kickback practices	0.686	6

Table 9: Client-Related Causes Data Analysis by using RII Method

Based on the RII result calculated, the rank goes on as shows in above table. Clients' financial problem produce the highest value of RII which is 0.811 and from this we can conclude, that financial plays the main role for site to keep going on as work

done. Almost all of financial risks are “over budget” and “bankruptcy by developer.” These issues always occur due to the financial failure in organization. Moreover, it is believed that late payment to contractor has a high probability and financial crisis has a very high probability. A number of sources cited financial problems as a cause of abandoned construction projects (Bavani 2009; Ibrahim 2006; Kong 2009; Rajan 2005; Rusli 2006).

4.5.2 Data Analysis of Consultant-Related Causes



Graph 16: Consultant-Related Causes

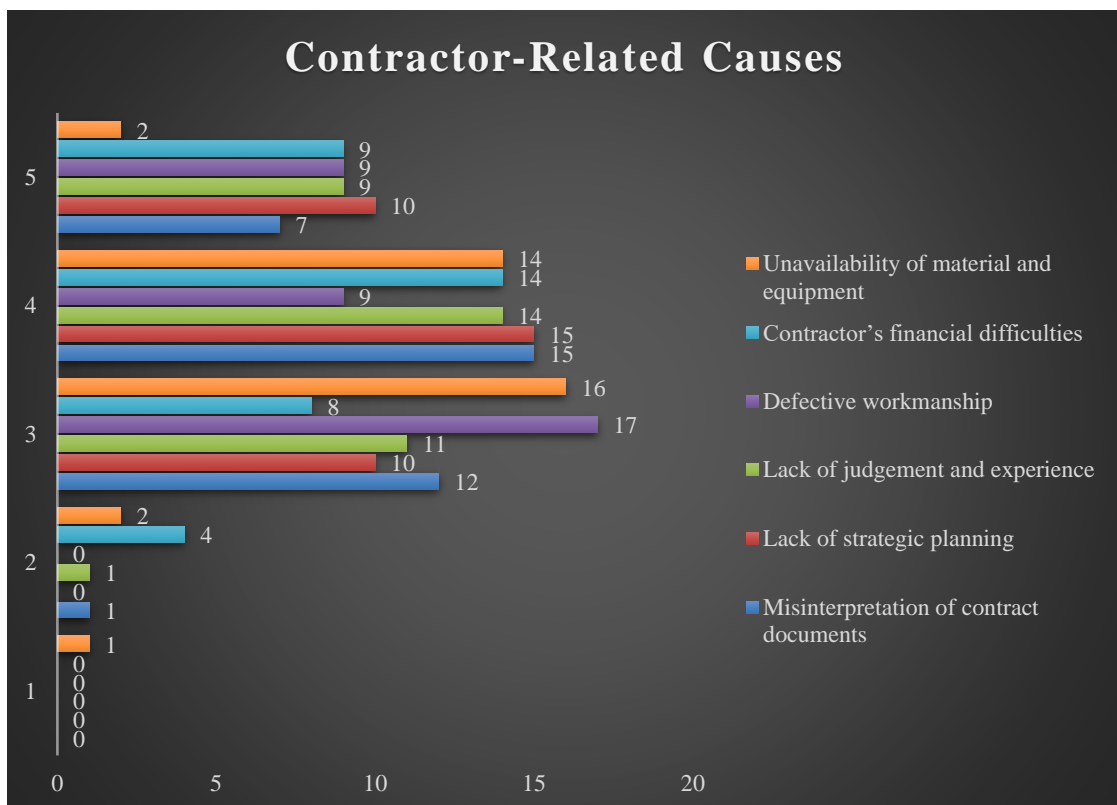
No	Causes of Variations	RII	Ranks
1	Design discrepancies	0.709	7
2	Inadequate working drawings	0.726	4
3	Differing site condition	0.714	6
4	Change in design specifications	0.737	3
5	Conflicts between contract documents	0.766	1

6	Lack of judgement and experience	0.754	2
7	Non-compliant design with government regulations	0.720	5

Table 10: Consultant-Related Causes Data Analysis by using RII Method

Based on the above data, conflicts between contract documents holds up the highest rank (RII=0.766) and second runner up is lack of judgement and experience (RII=0.754). From this analysis, this data result can be conclude to have a mismanagement issue. Mismanagement is mentioned by the Ministry of Housing and Local Government (MHLG) (Kaur 2011) as one of the causes of abandoned housing projects. Mismanagement may happen due to the lack of experience of developers (Ibrahim 2006).

4.5.3 Data Analysis of Contractor-Related Causes



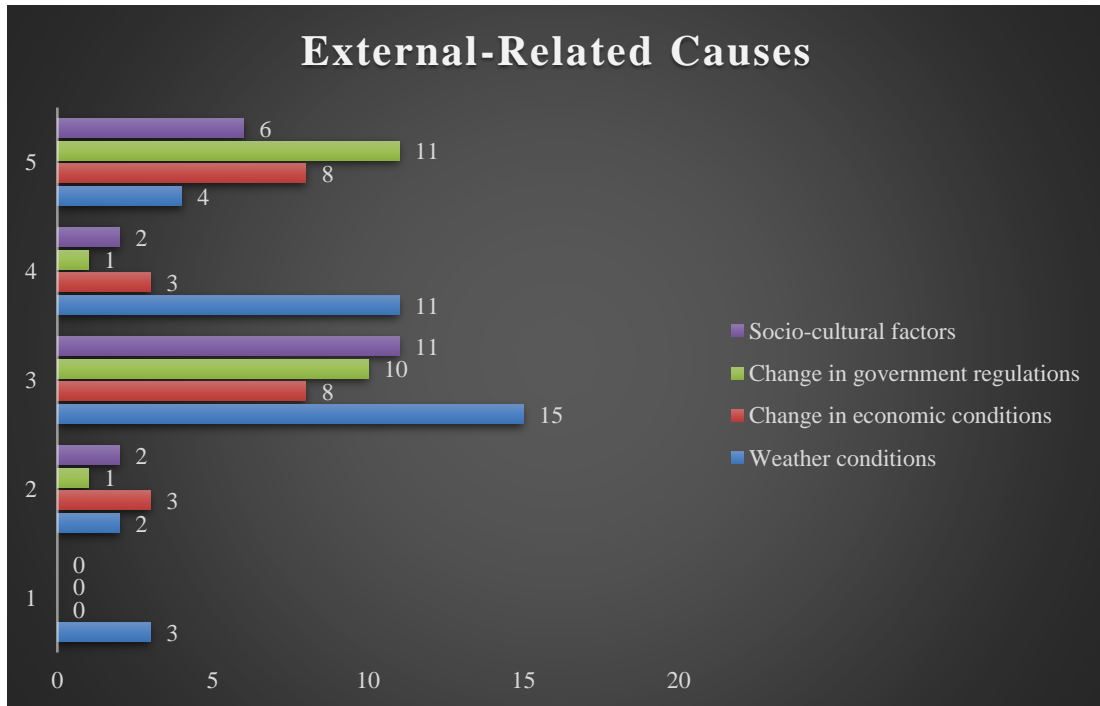
Graph 17: Contractor-Related Causes

No	Causes of Variations	RII	Ranks
1	Misinterpretation of contract documents	0.760	3
2	Lack of strategic planning	0.800	1
3	Lack of judgement and experience	0.777	2
4	Defective workmanship	0.754	5
5	Contractor's financial difficulties	0.760	4
6	Unavailability of material and equipment	0.680	6

Table 11: Contractor-Related Causes Data Analysis by using RII Method

Planning is one of the main causes of abandonment based on the data collected. Planning can be inclusive in issues of management which planning plays major role to managing project schedule. Mismanagement may happen due to the lack of experience of contractor in scheduling (Ibrahim 2006). Based on the questionnaire findings, lack of strategic planning RII=0.800 which is the highest for contractor-related issues causes.

4.5.4 Data Analysis of External-Related Causes



Graph 18: External-Related Causes

No	Causes of Variations	RII	Ranks
1	Weather conditions	0.663	4
2	Change in economic conditions	0.766	2
3	Change in government regulations	0.794	1
4	Socio-cultural factors	0.749	3

Table 12: External-Related Causes Data Analysis by Using RII Method

Change in government regulations is voted at the highest rate by the respondent of this questionnaire which it has RII=0.794. In this study, laws are one of this research main causes study. Causes of abandoned housing projects related to unfavourable government policies include 1) the sell then build system (Chang 2009), 2) the unavailability of Home Indemnity Insurance (Ibrahim 2006), 3) the limitation of the

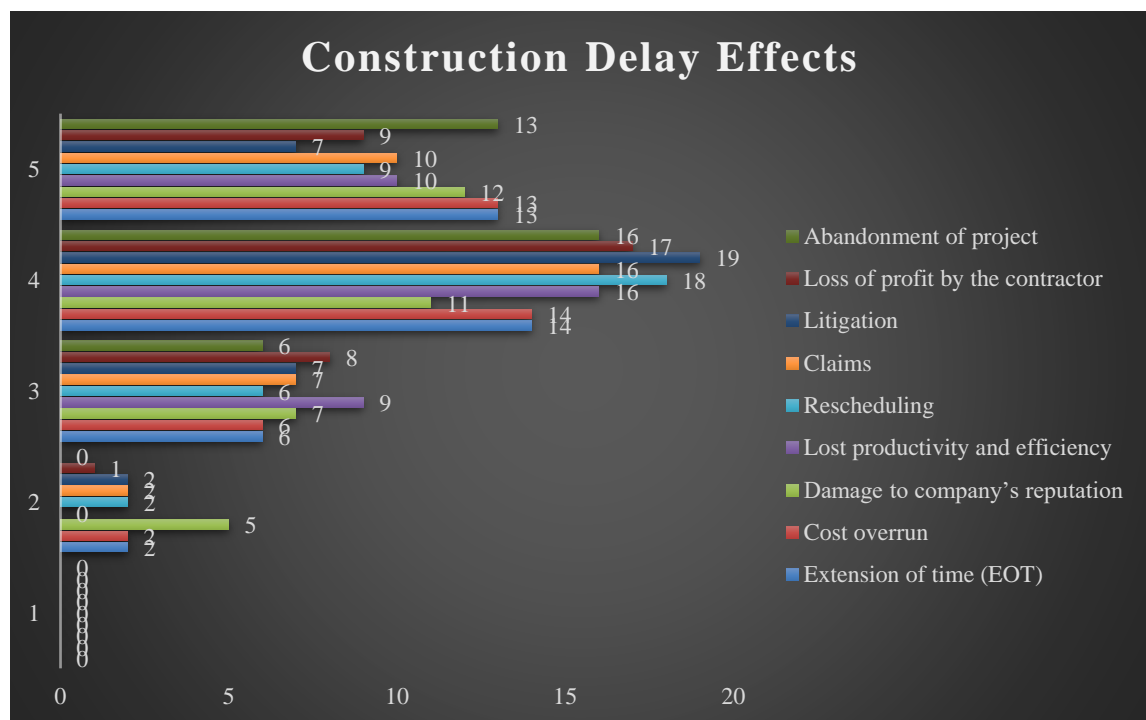
jurisdiction of the Tribunal for Homebuyer Claims (Ibrahim 2006), and 4) the requirement for private developers to build 30% of low cost houses (Khalid 2010).

4.6 Construction Delay Effects of Abandoned Housing Project in Selangor

Next, in question 2 for section B of the questionnaire that have been distributed to the respondents, the respondents were given questions based on the most common construction delay effects of the abandoned housing project in Selangor to rate accordingly by using Likert's Scale.

4.6.1 Data Analysis of Construction Delay Effects

After analysing the factors, here is the additional part of this study to see the effect of abandoned housing project towards house buyer, socio economy and socio environment. This additional part of this study is also important to see who get impacted when the residential get abandoned. The data was collected and also analysed by relative importance index technique. The results are as follows;



Graph 19: Construction Delay Effects

No.	Construction delay effects/Ranks	RII	Ranks
1	Extension of time (EOT)	0.817	2
2	Cost overrun	0.817	3
3	Damage to company's reputation	0.771	9
4	Lost productivity and efficiency	0.806	4
5	Rescheduling	0.794	5
6	Claims	0.794	6
7	Litigation	0.777	8
8	Loss of profit by the contractor	0.794	7
9	Abandonment of project	0.840	1

Table 13: Construction Delay Effects Data Analysis by Using RII Method

Construction delay will lead to abandonment of a housing project. The abandonment of project has the RII=0.840 which is the highest among all. Second, most of the respondent agreed that extension of time will lead to project abandonment.

4.7 Conclusion

Selangor has the highest rate of abandoned housing project compared to 14 states in Malaysia. In Selangor State, from the total amount of abandoned housing project, 82 projects, 67% have been successfully completed or completed by JPN. While 5 projects or 6% are in various stages of rehabilitation / construction and the remaining 21 projects or 27% are in the initial planning of recovery. Besides that, the cause's variation, provided from the questionnaire results that have been analyse, the most critical issues are client's financial problems which it has the highest. Besides that, among all the related causes of house project abandonment, client's financial problems from client-related causes has the highest RII rank (RII=0.811) which suits the propose

causes of this study which are financial issues. This result are gain from the questionnaire distributed to the parties involve closely to the abandoned housing project problems.

Next, after analysing the factors, here is the additional part of this study to see the construction effect of abandoned housing project. The data was collected and also analysed by relative importance index technique. Based on the results obtain, the highest rank towards the construction delay effects is abandonment of project (RII=0.840), second rank of the effects is extension of time (EOT) (RII=0.817) that will eventually lead to abandonment of housing project. The delay effects are a step ahead before abandonment occurs. In addition, Dahlan (2011b) highlighted other potential risks, which can be categorized as managerial risks, namely construction delay, project not considered abandoned anymore if auctioned off to other parties or the application for reviving the project is rejected (project not viable for rehabilitation), lack of compromise and collaboration (e.g. consultant with holding necessary information about the projects), and problems related to the ownership of land.

CHAPTER 5

CONCLUSION

5.1 Introduction

This chapter presents the summary of this research. In this chapter, researcher will include summary research process and findings' highlight according to the objectives that have been establish in chapter one of the research. The data analysis will be discussed and compared to draw conclusion towards the end of this research. Recommendations for future research will be establish to improve and enhance the study of economic effects of abandoned housing project in Selangor. Through this recommendation, it can help to create the idea of understanding on Malaysia's housing development.

5.2 Conclusion for Objectives of Study

The three (3) objectives of the study are achieved. The conclusion that can be drawn is as follows:

5.2.1 To identify causes of abandonment of on-going housing project in Selangor

The first objective of this study is to identify the causes that contribute to abandonment of ongoing housing project in Selangor. The top causes that leads to abandonment of a project have been analyse by using Index are as follows:

Client-Related causes

- i. Client's financial problems (0.811)
- ii. Change of plans or scope (0.731)
- iii. Change in specifications (0.731)
- iv. Inadequate project objectives (0.731)
- v. Hindrance in prompt decision making (0.725)
- vi. Fraudulent and kickback practices (0.686)

Consultant-Related causes

- i. Conflicts between contract documents (0.766)
- ii. Lack of judgement and experience (0.754)
- iii. Change in design specifications (0.737)
- iv. Inadequate working drawings (0.726)
- v. Non-compliant design with government regulations (0.720)
- vi. Differing site condition (0.714)
- vii. Design discrepancies (0.709)

Contractor-Related causes

- i. Lack of strategic planning (0.800)
- ii. Lack of judgement and experience (0.777)

- iii. Misinterpretation of contract documents (0.760)
- iv. Contractor's financial difficulties (0.760)
- v. Defective workmanship (0.754)
- vi. Unavailability of material and equipment (0.680)

External-Related Causes

- i. Change in government regulations (0.794)
- ii. Change in economic conditions (0.766)
- iii. Socio-cultural factors (0.749)
- iv. Weather conditions (0.633)

From the index, it can be concluded that client's financial problem is the main cause that contribute to the abandonment of housing project in Selangor with the RII value of 0.811 under the category of Client-related causes. Thus, prove that financial problem is one of the main of abandonment of on-going housing project in Selangor.

5.2.2 To examine the effects of delay and effects of abandonment in on-going housing project in Selangor

This is the second objective of the study which is to examine the effects of delay and effects of abandonment in on-going housing project in Selangor. It is successfully achieved and illustrate as per below:

- i. Abandonment of project (0.840)
- ii. Extension of time (EOT) (0.817)
- iii. Cost overrun (0.817)
- iv. Lost productivity and efficiency (0.806)
- v. Rescheduling (0.794)
- vi. Claims (0.794)
- vii. Loss of profit by the contractor (0.794)
- viii. Litigation (0.777)
- ix. Damage to company's reputation (0.771)

From the result above, through the index of the consequences of the effects delay shows that abandonment of project is the most common effects of delay in ongoing housing project in Selangor with index values of 0.840 under the category of 'Most Effect'.

5.2.3 To analyse the economic effect of abandoned on-going housing project in Selangor

- i. Taman Prima Hijau, Rawang, Selangor (1,700,000.00)
- ii. Taman Setia Warisan, Subang, Selangor (2,644,283.00)
- iii. Taman Topaz, Dengkil, Selangor (8,709,501.75)
- iv. Taman Malim Mas, Ulu Bernam, Selangor (5,915,016.90)
- v. Bandar Baru Kundang, Kundang, Selangor (1,319,319.87)
- vi. Taman Saujana Puchong, Puchong, Selangor (3,515,470.00)
- vii. Taman Cahaya 2, Batang Berjuntai, Selangor (8,994,930.86)
- viii. Apartment Kelisa Ria, Kajang, Selangor (24,233,048.31)
- ix. Taman Tradisi Indah, Klang, Selangor (2,666,799.90)

From above value, it can be concluded that the cost of reviving a project caused a lot to the government as process of electing new contractor and continuing unfinished construction.

5.3 Proposals to Manage the Problem

Since the causes of abandoned construction projects discovered mainly converge into 1) the standard of practice of the owner, and 2) the role of government regulations, it is proposed that any effort to solve the problems should focus on 1) raising the standard of practice of the owner in terms of their know how and financial strength, and 2) renewing government regulations. The proposals can be divided into short term and long-term measures.

5.4 Long Term Measures

In the long term, it is proposed that there should be 1) higher standards of education, 2) dissemination of latest research findings, 3) higher awareness, and 4) the implementation of BIM (Building Information Modelling). For higher standards of education, it means the incorporation of the latest research findings into the syllabus of courses at institutions of higher learning. For dissemination of latest research findings, it means the dissemination of the latest research findings through publications, seminars for developers, and even direct dissemination of the latest research findings to the developers by the government. For higher awareness, the public should be informed of the problems through the media so that they are wiser in choosing a good development project to invest their money.

5.5 Short Term Measures

In the short term, it is proposed that there should be 1) tighter conditions for owner while maintaining competitiveness, 2) more effective policing of fraud, and 3) using risk management principles on the uncertainties identified. First is concerning tighter conditions for owner while maintaining competitiveness. It is learned from this research that, for housing projects, the STB (sell then build scheme) enabled smaller developers with lesser know how and financial strength into the business, thus causing the problems of abandonment, and that there are suggestions both from the questionnaire survey and semi-structured interviews for the BTS (build then sell scheme). However, for the BTS, an interviewee cautioned that the house price would be higher because the cost of financing is now factored in, and especially so at the beginning of the implementation of the BTS due to the lack of competition. But then, the interviewee also said the lack of competition / monopoly is temporary as smaller developers would eventually merge into bigger ones in several years. However, it is felt that the BTS is an extreme measure that benefits the large developers and penalise the society in terms of higher house price.

Therefore, it is proposed that a middle ground approach be adopted. It is proposed that, through government regulation, a certain percentage, say 50% of the

financing be borne by the developer and 50% be borne by the house buyers. Since there is a higher percentage of financing borne by the developer, it is now the burden of the financial institution to choose a stronger developer whom they could trust. It is felt that the adverse effect of higher house price would be lower than the BTS with this approach. Then it is also proposed that the government monitor the rate of abandonment of projects closely, and that the initial percentage of 50:50 developer versus house buyer financing be adjusted accordingly, i.e. to lower the developer's financing percentage to decrease house price but with increasing rate of abandonment, or to increase the developer's financing percentage to decrease rate of abandonment but with increasing house price.

5.6 Conclusion

The aim of this work has been to manage the problems of abandoned construction projects in Malaysia. To achieve this aim, three objectives have been outlined, i.e. 1) To identify causes of abandonment of on-going housing project in Selangor, 2) To examine the effects of delay and effects of abandonment in on-going housing project in Selangor, and 3) To analyse the economic effect of abandoned on-going housing project in Selangor.

The issues surrounding the problems have been reviewed in Chapter 1. The issues cover adverse consequences to the economy, society and environment. Perhaps, the most severely affected victim is house buyers, followed by contractors. Despite the issues, there has been lack of research on the subject matter. Existing literature focused mainly on housing projects; the sources of literature consisted of mostly news article, a few unpublished theses and conference papers; the methodologies of the unpublished theses lack the ability to generalise the findings to represent the whole construction industry.

Existing research on the causes of the problems have been reviewed in Chapter 2. The causes of abandoned construction projects from the literature review are found to be related to 1) mismanagement, 2) unfavourable government policies, 3) Financial

problems. For the effects of abandonment, it has impacted the house buyers, contractor and the government as the funding and license are to be at risk.

The causes, effects, and economic effect of abandoned construction projects have been investigated via the triangulation method, i.e. using both the quantitative and qualitative methods together to achieve synergy. The quantitative method has yielded the following results:

1. The ranking of causes of abandoned construction projects as presented in Chapter 4. The top causes of abandoned housing projects accordingly to the related causes in Selangor are; 1) Client's financial problems (Client-Related, RII=0.811), 2) Conflict between document contract (Consultant-Related, RII=0.766), 3) Lack of strategic planning (Contractor-Related, RII=0.800) and 4) Change in government regulations (External-Related, RII=0.794).
2. Next, the top ranking of construction delay effects of abandoned housing project in Selangor are; 1) Abandonment of project (RII=0.840), 2) Extension of time (RII=0.817) and 3) Cost overrun (RII=0.817).
3. Besides that, the cost of revivation of abandoned housing project has also been presented in chapter 4. The value of revivation has cost the government a lot on reviving the project. To come to an agreement with the house buyers on reviving the project or to create another solution such as; giving the house buyers another house at another space. Most of the abandoned housing project are being revived as the house buyers has agreed on reviving the project, the government will elect a new contractor in order to achieve the goals of the housing project.

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APPENDICES

Questionnaire Survey:

I am a final-year student of Universiti Malaysia Pahang, Bachelor of Civil Engineering would like to make a survey based on my final year project regarding abandoned housing projects in Selangor state. Below are questions accordance to the topic of my research.

This survey is to study the economic factors that caused the abandonment of housing projects and other factors that leads to abandonment of housing project. Besides, this is also to study the impacts of abandoned housing projects in order to achieve the objectives of my research. This questionnaire is divided into 2 sections.

I would appreciate if you could spend time on answering this questionnaire with honesty. Thank you in advance.

SECTION A:

1) Gender:

- Male
- Female

2) Age:

- 20-30
- 31-40
- 41-50
- 50-60

3) Represent as:

- Developer
- Contractor
- Consultant
- Authority
- House buyer

- 4) Employment status: Permanent on contract
 Temporary others (please specify) _____
- 5) Work experience:
 < 5 years
 5-10 years
 > 10 years
- 6) Type of abandoned house in Selangor?
 Bungalow Terrace
 Townhouse Semi D
 Serviced apartment / apartment / condo
- 7) Price of abandoned house in Selangor:
 30,000 – 42,000 150,000 – 450,000
 70,000 – 90,000 >450,000

SECTION B:

1	2	3	4	5
Strongly Disagree	Disagree	Natural	Agree	Strongly Agree

Causes of variations

Causes of variations/ Ranks	1	2	3	4	5
Client-related causes					
Change of plans or scope					
Client's financial problems					
Change in specifications					
Hindrance in prompt decision making					
Inadequate project objectives					
Fraudulent and kickback practices					
Consultant-related causes					
Design discrepancies					
Inadequate working drawings					
Differing site condition					
Change in design specifications					
Conflicts between contract documents					
Lack of judgement and experience					
Non-compliant design with government regulations					
Contractor-related causes					
Misinterpretation of contract documents					
Lack of strategic planning					
Lack of judgement and experience					
Defective workmanship					
Contractor's financial difficulties					

Unavailability of material and equipment					
External-related causes					
Weather conditions					
Change in economic conditions					
Change in government regulations					
Socio-cultural factors					

Construction delay effects

Construction delay effects/Ranks	1	2	3	4	5
Extension of time (EOT)					
Cost overrun					
Damage to company's reputation					
Lost productivity and efficiency					
Rescheduling					
Claims					
Litigation					
Loss of profit by the contractor					
Abandonment of project					