

CHAPTER 2

SELF HELP HOUSING

2.1 Introduction

This chapter justifies on the insight of self help housing and the link of self build in relation to the issue. It also categorises and defines self help at international level in which a general interpretation is further discussed in Malaysian context. Many of the housing programs that are done in Malaysia are also reviewed in this section.

In addition, this chapter also discusses many of the housing programs and schemes that have been executed by private and public sectors in Malaysia. The history of the low-cost housing programs is tabled to understand better the means of how the Malaysian government achieves what was planned. It also includes the current housing programs as well as the latest housing policies for the public.

2.2 The History Of Housing In Malaysia

The Malaysian Government has delivered affordable housing components as a broad framework of social development as outlined in the series of Malaysia Plans. There have been numerous extensive studies and reports based on previous Five-year Malaysia Plans that reviewed their achievements and scrutinised failures of not able to meet the target (Yusoff 1993; Agus 2001; Yahaya 2001; Hashim 2010; Tan 2011).

An affordable housing quota of 30 percent to be developed as part of any housing scheme was imposed onto developers and a defined ceiling price of RM25,000¹, which later was increased to RM42,000² depending on the location and the type of house was determined. The reservation of 30 - 50 percent for low cost housing imposed (Malaysia 1981) is parallel with the government's intentions to present opportunities for greater relations amongst the ethnic groups, as well as to eradicate poverty and restructure the society such that economic function and race would no longer be a conflict. In addition, prefabricated systems are encouraged to implement in low cost houses as it expedites construction due to high demand from the market.

During the implementation of New Economic Policy (NEP) in 1970 -1990, Malaysia witnessed the growth of its economic and urbanisation. In 1970, the percentage of urban population (i.e. gazetted areas of population of 10,000 and above) was 28.7%, which only gave about 2.1% increase from 1957. Nevertheless, it was estimated that in 1975, the percentage of urban population was 32% and by 1980, it was 35% (Yap 1991). This indicated that the growth was the result of rural-urban migration, which was due to the implementation of NEP. Yahaya (2001) cited that in 1991, there were 51% of Malaysians living in urban areas and it has increased further to 61% by year 2000. It is predicted that the increase will be up to 84% by 2020. It is without doubt the crisis of shortage in housing would be concentrated in urban areas. However, the need for low-cost houses is still well-founded among those living in rural areas as there are still many poor families who need affordable quality housing.

It has been established that the residential and occupational patterns of the three major ethnic groups in Malaysia are easily apparent. Most of the Malays live in rural

¹ Ceiling price was set in 1982 during 4th Malaysia Plan.

² Ceiling price revised in 1998 due to economic crisis and government's steps to encourage participation in construction industry.

areas and work in agriculture; urban Malays tend to work for the Government and in the lower ranks of the manufacturing and service sectors. Most of the Chinese live in urban areas and are engaged in commerce; while rural Chinese work in mines (especially in tin mines). Most Indians work on rubber and oil palm estates; while urban Indians work in the professional and service sectors (Yap, 1991).

NEP policies were devised to change these stereotype patterns and were seen as a medium for economic development as well as intensive efforts to engage Malays in urban activities. The problems of urbanisation have already been extensively documented, but the monotony of the rural economy and the accessibility of better-paid employment opportunities, health, education and other social services all combine to constantly attract rural dwellers to the urban areas (Yap, 1991).

The Seventh Malaysia Plan (1996 – 2000), Eighth Malaysia Plan (2001 – 2005), Ninth Malaysia Plan (2006 – 2010) and Tenth Malaysia Plan (2011 – 2015) have outlined Malaysian government's commitment to provide adequate, affordable and quality housing for the population, particularly the low income group. This is parallel with Istanbul Declaration on Human Settlement and Habitat Agenda (1996) to guarantee sufficient shelter is being provided for all.

According to Malaysian Housing Policy Review (1996), the needs for numbers of housing can be based on the population growth taking into account the number of population at one particular time and total number of housing needed. The slow progress in the implementation of housing programs was attributed to several factors. Refer to Figure 2.1. These included unsuitability of site or locations, financial and management problems of developers, misuse of funds collected from house-buyers,

incompetent contractors and delays in getting plan approvals. These resulted in many housing projects being delayed or abandoned.

2.3 Implementation Of Housing Policies

In many developing countries, public sector has been associated with low-cost housing for lower income groups. Public intervention in housing markets ranges from the provision of subsidies for low-income households to the construction of public low-cost housing for poorer households. The provision of cheap housing as a basic social need has been emphasised in Malaysia's social development programs.

The public housing programs in Malaysia falls under the social sector of the national strategy. Housing policies can be grouped into 3 categories:

1. Before 1970 – British Colonial Administrative Housing Policy (1948-1960) and Policy On Home-Owning Democracy (1961-1970)
2. 1970s to 1990
3. After 1990s

Government agencies were directly accountable in providing housing for the poor not only in urban areas but also rural districts through establishment of the State Economic Development Corporations and various development agencies. A Ceiling price for low cost housing was fixed at RM25,000 per unit for people with household income of less than RM750 per month since 1982. This is due to speculative developers, which has turned land as one of the most expensive commodity.

In order to ensure the private sector to construct low cost housing, government through the local authority also impose 30% quota provision of low cost housing in every residential development. In ensuring that targeted groups secure these houses, the government also imposed an open registration system. There is no specific allowance or registered purchaser required for other housing categories.

2.3.1 British Colonial Administrative Housing Policy (1948-1960)

Before independence, the concept of public housing was associated with the provision of institutional quarters. The only program providing housing for the Malaysian people was the resettlement of Chinese (New Villages) during emergency period. It was a part of British's administration strategy to weaken the support for communist insurgency. Since housing during the British Colonial Government was centred on providing quarters for the government officers and British professionals in the public sectors such as hospitals, schools, police departments and local authorities, simultaneously, squatter settlements or some would refer to as informal settlements have started to appear near the urban centres. Hence, a committee had been setup in December 1946 to consider and report the housing problem in Malaya.

During the Emergency Period (1948 – 1960), the British Colonial Administration decided to relocate Chinese community in the rural area to urban vicinity as a political strategy in weakening Chinese supports towards the communists (Agus, 2002). Under Briggs Plan³, a massive program of forced resettlement of Malayan peasantry was undertaken, under which 500,000 (10% of Malayan population – mostly of Chinese decent) were actually removed from their land and 'housed' in guarded camps called 'new villages' (Hussein, 2008) with title and agriculture land (Short, 1975). There are

³ Briggs Plan was a military plan devised by British General Sir Harold Briggs shortly after his appointment in 1950 as Director of Operations in the anti-communists war in Malaya. The plan aimed to defeat the communists, who were operating out of rural areas as a guerilla army, primarily by cutting them off from their sources of support amongst the population.

also few new resettlement villages for Malays as well whereby there were reports of their cooperation to the communist party. Due to these housing patterns, new squatter settlements were seen to accommodate the relatives of those involved in the resettlement program. For this reason, the Housing Trust was established to build more housing units all across the nation. The powers to lease or purchase and hold land or buildings, to build houses, shops and shop houses, and to sell, lease or let land and buildings is made possible through the establishment of a Housing Trust. The Housing Trust is empowered to acquire land in accordance with existing law, and to borrow and raise capital or make loans. The federal government allocated RM10 million to the Trust for supply of housing, instead of RM150 million as indicated in the Draft Development Plan of the Federation of Malaya (Yusoff, 1993).

2.3.2 Democracy In Home Ownership Housing Policy (1961-1970)

After Malaysia's Independence in 1957, for the first time, the concept of public housing has changed from providing government quarters to a new model called Home Ownership Democracy. In this policy, the urgency is given to the *bumiputera*⁴ of Malaysia especially the Malays to own a house.

Second Malaya Plan (1961-1965) was concerned with the provision of cheap housing as a basic social need. Rural public low-cost housing programs implemented by the Housing Trust were targeted specifically towards rural poor households. The targeted group is the low-income families earning RM300 a month in rural area. The original objective of this concept is to ensure that all low-income families own a public house built by the government. The first many low cost housing built for these people is

⁴ The concept of a *bumiputra* ethnic group in Malaysia recognised the "special position" of the Malays provided in the Federal Constitution of Malaysia, in particular Article 153.

known as Khaw Kai Boh⁵ as a pledge from the government to distribute the nation's wealth among the poor through massive low cost housing projects. Unfortunately, only 40 percent of low cost housing was built at strategic places in West Malaysia throughout year 1960s and 1970s.

The First Malaysia Plan (1966-70) highlighted the role of the government in providing low-cost housing as 'one of the major efforts of the government to promote the welfare of the lower income groups. Since it is not profitable to open housing projects to private developers, the services of the Housing Trust were utilized to undertake these low-cost housing projects. There is also the need to address the squatter settlement issue in large urban areas. New construction techniques intended to speed up construction and reduce cost were explored.

The concept of democracy in home ownership was not able to sustain for a long time due to government's effort to alleviate standard of living for the majority of the nation population, which are the Malays. Hence, the government introduced rural development concept of major land schemes. FELDA was established to implement this program. It is recorded that this effort was able to house certain number of low income group as well reduce the rural-urban migration to cities (Agus 2002). Table 2.1 illustrated the timeline of housing provision on issues of the government's priorities, related documents produced to assist in the housing supply, policies involved and technology contribution to expedite housing supply.

⁵ Khaw Kai Boh is Malaysia's first Minister of Housing under the First Malaysia Plan (1966-1970). He tabled the first edition of Housing Developer's Act in the parliament. The name of the housing area or type was referred to the minister's name.

Table 2.1: Malaysia Housing Timeline – Colonial Period & Early Independence

Phase	Colonial Period		Early Stage of Independence	
Year	Before 1956	1956-1960	1961-1965	1966-1970
Relevant Documents	Briggs Plan(1952); Land Redevelopment Act (1956); Housing Trust	First Malaya Plan	Second Malaya Plan	First Malaysia Plan
Focus	<ul style="list-style-type: none"> • Town planning began in 1921 with Charles Compton Reade in Kuala Lumpur. • Petaling Jaya was one of the earliest planned new towns based on Garden City and Neighbourhood Concept. 	<ul style="list-style-type: none"> • Housing for government staff quarters based on department requirement. • Resettlement of population during communist insurgencies to new villages for 500,00 people. • FELDA land scheme was introduced as major land schemes: First was in Lurah Bilut, Bentong, Pahang - 1958 	<ul style="list-style-type: none"> • An improvement in the rural standard of living, the provision of greater employment opportunities and a faster economic growth rate, the diversification of agricultural and industrial activities and an expansion of social facilities. • Provision of housing in urban areas for low income group 	<ul style="list-style-type: none"> • To provide improved housing emphasis of low cost housing in urban areas. • Creation of environment in which all the three major ethnic groups could live in dignity and harmony. This is to be achieved through faster rate of economic growth, jobs and equal distribution of nation's wealth.
Policies related to housing	<ul style="list-style-type: none"> • Housing Trust was set up (1952) to assist in technical aid. 	<ul style="list-style-type: none"> • Dominated by the defence and the security sector. • Pre-occupation of finding the revenue to finance the emergency expenditure 	<ul style="list-style-type: none"> • Continuation of colonial government policies with minor adjustments. 	<ul style="list-style-type: none"> • Continuation of colonial government policies with minor adjustments.
IBS contribution			<p>1964:Government launched pilot projects on IBS – 22.7 acres along Jalan Pekeliling with 3000 units of low cost housing and 40 shop lots. Prefab used was large panels system.</p> <p>1965:Government launched second project at Jalan Rifle Range with 6 blocks of 17-storey and 3 blocks of 18-storey flats. Prefab used was French Estoit System.</p>	

2.3.3 New Economic Policy (1971-1990)

The introduction of New Economic Policy in 1971 led to a bigger responsibility and role to the private sectors to meet the demand of public housing. The main objective of initiating this policy is to create national harmony through alleviating poverty by restructuring society through abolishment of ethnic identity of economic and geographical area. Its strategy was to ensure active participation from Malay society in the urban and housing programs created by the government. For example, government encourages the Malays to move into the city centres as to balance the urban population as Chinese dominates them. Regrettably the rapid urbanisation and industrialisation has started a more critical crisis in the housing sector whereby those migrants were not able to obtain a low cost housing unit, which was priced less than RM25,000. It gets worse as finance is difficult to get hold of if applicants have no permanent employment and majority of the Malay families earn an average of RM300 a month. As a result, this led to renting or constructing housing units of squatter settlement around the urban fringe as well as purchasing government-built housing schemes. Refer to Table 2.2 in which drastic actions were taken to address critical housing problems that arised in the rural-urban migration and the technology resources were introducing prefabrication as part of housing solution.

Table 2.2: Malaysia Housing Timeline – First Outline Perspective Plan

Period/ Phase	First Outline Perspective Plan (NEW ECONOMIC POLICY) (20 years)				
	Year	1971-1975	1976-1980	1981-1985	1986-1990
Relevant Documents	Second Malaysia Plan; New Economic Policy 1971.	Third Malaysia Plan	Fourth Malaysia Plan	Fifth Malaysia Plan	
Focus	<ul style="list-style-type: none"> To offer low cost housing to low income groups to all communities irrespective of race in which this program eliminates slum dwelling and squatter living. National housing program is designed to promote multi racial community. Planning for housing includes essential community services so that housing area can be self contained. 	<ul style="list-style-type: none"> To ensure all Malaysian especially the low income groups have access to adequate housing. To improve rural living state through various private and public housing development schemes i.e. major land schemes - FELDA, FELCRA, DARA, LKTT & LKJT). Launched the <i>Kampung Rehabilitation</i> Program in 1979. 	<ul style="list-style-type: none"> Continue to ensure all the lower income groups have access to adequate housing. In rural area emphasise will be to improve quality of houses and provide adequate amenities (water, electricity and sanitation). Houses for settlers in land development schemes by FELDA, FELCRA, DARA, LKTT & LKJT. Ceiling price for low cost housing is fixed at RM25,000. 	<ul style="list-style-type: none"> To provide housing for all levels of groups with emphasis on social facilities i.e. schools, clinics and public halls. Resettlement of new villages, which involved about 400 villages in and around city centres to upgrade living conditions. Housing development based on 'Human Settlement Concept' to create a lively and comfortable environment. 	
Policies related to housing	<ul style="list-style-type: none"> Embodied the New Economic Policy, which aimed to eradicate poverty by raising income levels and increasing employment opportunities. NEP aimed to accelerate process of restructuring Malaysian society and eliminate identification of race with economic function. 	<ul style="list-style-type: none"> <i>Home Ownership Policy</i> with promotional incentives aim at promoting national unity. 	<ul style="list-style-type: none"> Established National Housing Research Department under KPKT to continue to find solution affecting housing industry. Priority to open spaces & recreational facilities Encourage usage of prefab systems Require private developer to reserve 30 – 40% of total number of hsg development for low cost houses. 	<ul style="list-style-type: none"> Established a 'One-stop Agency' to expedite process of beauracracy in housing application. Government prepared a comprehensive Housing Policy that comprised of housing needs, types of houses to build, price, land usage, role of private and public sectors and uniformity of regulations among states. 	
IBS contribution	1981 – 1993: PKNS acquired precast concrete technology from <i>Praton Haus</i> Company to build low cost housing and high cost bungalows.				

2.3.4 Public And Private Sector Collaboration (Early 1980s)

Malaysian Government has introduced the concept of public and private collaboration since the early 1980s. The main strategy in this effort is to encourage economy development, industrialisation and urban development. Ever since NEP was implemented, activities on housing research were minimal. Only two main research was done thoroughly to look into National Housing Policy that is by Wegelin (1978), which studied housing program by Federal Government at micro level, such as indication that the squatters were satisfied with their new physical surrounding due to access to facilities like water, electricity, safety and privacy; while Ibrahim (1984) examined the execution of Public Housing Policy at macro level especially on decision-making made by government officials. Refer Table 2.3 and 2.4.

Each state is responsible to provide low-cost houses through Perbadanan Kemajuan Ekonomi Negeri (PKEN). Each state's PKEN is most active in building low-cost housing schemes making sure that Malay families are given the opportunity to own one. However, due to competition among private developers, some state's PKEN built more housing schemes suitable for medium and high-income households.

Allocated budget in Malaysia Plan showed that when housing is placed in social sector, less amount were distributed as compared to developed countries, such as United States and Singapore, which has housing as part of the economy sectors and allocation is more than 30%.

Table 2.3: Malaysia Housing Timeline – Second Outline Perspective Plan

Period/ Phase	Second Outline Perspective Plan (NATIONAL DEVELOPMENT POLICY) (10 years)	
	Year	1991-1995
Relevant Documents	Sixth Malaysia Plan, National Development Policy, 1991	Seventh Malaysia Plan
Focus	<ul style="list-style-type: none"> • To implement housing for all income levels based on holistic concept whereby social facilities i.e. schools, clinics, recreational spaces, religious centres & commercial spaces are provided. • Low cost housing component 60% of total housing target. • Low Cost Housing Fund was established in 1993 to private sector to finance construction. • Yayasan Perumahan untuk Rakyat Termiskin established in 1994 contributions from both private & public sectors. • 5. Hsg devt based on Human Settlement Concept emphasis on sustainable development. 	<ul style="list-style-type: none"> • SPNB established 21 Aug 1997 to provide quality affordable homes. • To provide accessibility to adequate, affordable & quality houses priority to low cost & low medium cost housing. • Greater emphasis on Program Pembangunan Rakyat Termiskin. • New designs introduced for LCH to optimise land-use, higher density & reduce construction cost. • Program Perumahan Rakyat Bersepadu launched Dec 1998 resettling squatters in urban centres. • Revised ceiling price for low cost housing based on criteria.
Policies related to housing	<ul style="list-style-type: none"> • Modernising the traditional 'kampung' through new concept. • Introduce new programs i.e. Regrouping of Traditional Kampung Program & Kampung Rehabilitation Program to increase quality of life in rural areas. 	<ul style="list-style-type: none"> • Housing activities in rural areas will become integral component of a development package with infrastructural support & economic assistance via traditional kampung regroup, sites & services and rehabilitation of dilapidated houses programs. • Extended Low Cost Housing Revolving Fund (LCHRF) to private sector to implement new projects.
IBS contribution	<ul style="list-style-type: none"> • R&D activities were undertaken by government agencies and higher learning institutions looking into joint & tolerances in buildings, modular coordination as a tool towards building industrialisation. 	<ul style="list-style-type: none"> • R&D emphasised on production of cheaper materials & better construction techniques, development of building products, using indigenous source of raw materials to discourage imported building products.

Table 2.4: Malaysia Housing Timeline – Third Outline Perspective Plan

Period/ Phase	Third Outline Perspective Plan (VISION DEVELOPMENT POLICY) (10 years)	
Year	2001-2005	2006-2010
Relevant Documents	Eighth Malaysia Plan, Housing Standard CIS 1 & CIS 2, Vision Development Policy, 2001, Agenda 21 (UNCHS), 1994, The Habitat Agenda, 1996.	Ninth Malaysia Plan, Construction Industry Master Plan Malaysia 2006-2010.
Focus	<ul style="list-style-type: none"> • Objective housing development programs is to increase accessibility to adequate, affordable & quality houses for all. • After 27/02/02 - PAKR LCH cost increase RM25,000 - 35,000 • Public & private sectors step-up efforts implementing housing programs to meet high demand. • Housing developers to build more low-medium cost so demand on low cost housing is reduced. • Provision of housing in rural area continues which include basic facilities aimed to improve quality of life. • Squatter elimination by year2005 	<ul style="list-style-type: none"> • Continue effort from previous Msia Plan on accessibility to adequate, affordable & quality housing for all. • Continue with PPRT for hardcore poor and PPMS to eradicate poverty among rural poor. • Govt continue construct PPR for low income families & SPNB continue construct PPMR.
Policies related to housing	<ul style="list-style-type: none"> • A change in implementation strategy, whereby Federal Govt is involved directly in selection of site to expedite construction, and state govts will handle sales & end-financing for buyers. • Low cost houses continued to be provided by respective Regional Devt Authority (RDA). • Local Agenda 21 Program applied for community participation. 	<ul style="list-style-type: none"> • Local Agenda 21 extended to all local authorities to facilitate the involvement of local communities. • Implementation of IBS using the roadmap of implementation strategies. • Govt provide incentives i.e. green lane bldg plan approval & exemption from CIDB levy when use modular coordination components. • Introduction to Green Building Index in 2010 for all types of building.
IBS contribution	<ul style="list-style-type: none"> • Govt published IBS Roadmap 2003-2010 to guide players in construction industry in implementing the plan and Construction Industry Master Plan Malaysia 2006-2010 introducing the seven strategic thrusts recommending in achieving the vision and mission of CIDB. • Established MAHSURI Malaysian Human Settlement & Urbanisation Research Inst. • Research on housing design & technology, alternative building materials & industrialised building systems to ensure sustainable housing development. 	<ul style="list-style-type: none"> • R&D in usage of alternative building materials & technology under IBS design and Modular Coordination concept for housing, sustainable bldg service& cleaner technology based on3R concept (reduce, reuse & recycle).

2.4 Public Housing Programs

In order to improve the living condition of Malaysians during the development and urbanisation, Malaysian government has established many housing programs that have one crucial objective that is to provide comfortable and affordable housing units (Agus, 2002). There are two main organisations that were created to respond to the needs of providing a certain targeted number of housing units per five-year plan period. The Jabatan Perumahan Negara (JPN) under the Ministry of Housing and Local Government, which represents the public housing sector, while Syarikat Perumahan Negara Berhad (SPNB) under the Ministry of Finance, which has been corporatized in August 1997. Clearly there are other private developers, which are also involved in the provision of low cost housing. These private developers are controlled by the government policy to provide 30% of the total number of housing units to be allocated solely for low cost housing.

2.4.1 Jabatan Perumahan Negara (JPN) – National Housing Department

JPN plays the role of providing public low cost houses, to be built according to the targeted number in every Malaysia Plan. Under it, there are many divisions to ensure all programs that have been established in Malaysia Plans are being implemented. Such programs are as follow:

1. ***Program Perumahan Awam Kos Rendah - Public Low Cost Housing Program (PAKR)*** is aim to supply houses for the low-income families in rural and sub-urban areas together with basic infrastructures and facilities for the community. This is one of the government's programs to alleviate poverty in the country as an effort to improve the quality of life among the low-income families. PAKR projects are funded from federal government, while state government identifies sites to

implement the projects. Using a bottom-top approach, allocation for number of low cost houses needed in a state is determined by the state government themselves.

2. ***Program Perumahan Rakyat Bersepadu - Integrated People's Housing Program (PPR Bersepadu)*** was introduced in the 7th Malaysia Plan with an objective to relocate squatters mainly around Klang Valley either in city centre or the suburb as well as Selangor State. This is inline with one of the Malaysia's Policy to eliminate squatters by year 2005. JPN acts as an executive agency with responsibility in the early planning, consultants' appointment, tender management etc., whereby state government provides land. Implementation of this program opts a "fast-track" approach to expedite completion of housing units.

3. ***Program Perumahan Rakyat Dasar Baru - New Policy Public Housing Program (PPR Dasar Baru)***, which has made changes in its policy and implementation into two types by February 2002 (Negara 2006).
 - a. Previously known as PAKR is now referred to as ***PPR (dimiliki – owned)*** is being built by SPNB. The federal government is responsible to fund total cost of land and subsidise 50% of construction cost from the PPR (owned) Revolving Fund. The sales made from these housing units are credited into this Revolving Fund to implement new projects.
 - b. Previously known as PPR (bersepadu) is now referred to as ***PPR (disewa – rented)*** is a responsibility of JPN. As land is provided by state, the construction of the project is fully funded by federal government. Upon completion of the project, the housing development will be handed over to the state to administer rental agreements and maintenance. The rent is still maintained at RM124 a month.

Both current housing programs, PPR (owned) and PPR (rented), are using the National Housing Standard for Single and Double Storey Low Cost Housing (Construction Industry Standard - CIS 1:1998) and National Housing Standard for Low Cost Flats (CIS 2:1998) for their specifications in house design and planning. Refer to Table 2.5.

Table 2.5: The features of housing offered under the public housing programs (KPKT, 2002)

Housing Program	Monthly Income Level per household (RM)	Dwelling type	Size of Dwelling (min area)	Spaces provided	Other criteria
PAKR Program	Below 1,500	1. 5 storey apartment in towns; 2. terrace or detached house in suburb	60 meter square (650 square feet)	3 bedroom 1 living space 1 Kitchen 1 bathroom 1 toilet	
PPR (Integrated) Program 1998	Squatters with income below 1,500	1. 11-14 or 16-18 storey apartment in urban centres 2. 5 storey apartment in small cities	60 meter square (650 square feet)	3 bedroom 1 living space 1 Kitchen 1 bathroom 1 toilet	Rent at RM124 a month
PPR (New Policy) 2002:					
1. Owned	Refer to National Housing Standard CIS 1 : 1998 and CIS 2 : 1998				
2. Rented					

It is evident that the squatter settlement in urban centres is as a result of rural urban migration where people are searching for a better living environment as well as job opportunities. Due to this uncontrolled number of squatter settlements, which basically grew rapidly in and around the urban areas, the government introduced a policy to eliminate squatters by 2005 (Agus 2001; Malaysia 2001) through these resettlement housing programs of PPR. As cost of land in urban areas is outrageously high, housing program such as sites and services project is not feasible. Therefore multi-storey low

cost housing are being built producing high density, high rise buildings to house the poor.

2.4.2 *Syarikat Perumahan Negara Berhad (SPNB) – National Housing Company*

SPNB was established on 21 August 1997 as a wholly owned subsidiary of the Minister Of Finance (MoF) with the objective of providing quality affordable homes for every family in Malaysia in accordance with the National Housing Objective. SPNB has been entrusted to build affordable and comfortable houses through the implementation of two major housing programs in addition to help revive abandoned housing projects. SPNB is also involved in developing government quarters and special housing projects.

Besides these main responsibilities, SPNB is also committed in offering houses for the less fortunate and poverty stricken families in Malaysia through some amount of the company's annual profits towards welfare works such as repairing or reconstructing dilapidated houses under **Special Housing Projects** via the **Amal Jariah Scheme**.

Currently, there are two main housing programs that are being implemented under SPNB to address some of the low cost housing demand, but it is still insufficient:

1. ***Program Rumah Mampu Milik– Affordable Housing Program (RMM)*** that focuses construction of affordable houses that includes low cost houses, middle-low cost houses and middle cost houses.
2. ***Program Rumah Mesra Rakyat Program – People-friendly Housing Program (RMR)*** is developed to assist the low income group (whose income with RM1500 or less a month), owns a piece of land and is facing difficulty to obtain credit loans from financial institution to build their own houses. Houses built under this scheme

are mostly single storey detached houses that consist of 3 bedrooms and 2 bathrooms in a space of 1000 square feet. One third of the development cost is financed by the Federal Government Special fund, while the other two third is borne by the participants through an interest-free finance base on Al-Qardhul Hassan Concept.

Nonetheless, there are also a few other programs that are implemented and funded under SPNB such as the following:

3. **Rehabilitation of Abandoned Housing Program** is a program whereby abandoned housing projects are revived through *Tabung Pemulihan Projek Perumahan Terbengkalai* (Rehabilitation of Abandoned Housing Fund - TPPPT). However, the Ministry of Finance declared on the 29th September 2006 that the responsibility to rehabilitate the abandoned housing projects for the whole of Malaysia will be taken over by the JPN. As of today, SPNB has revived 255 abandoned housing projects consisting of 74,376 houses.

4. **Government Quarters Program** under SPNB collaborates with Lembaga Tabung Angkatan Tentera (LTAT) to build houses for Malaysian Armed Forces civilian employees of the Ministry of Defence throughout the nation.

5. **Program Amal Jariah (PAJ) Housing Scheme** are initiatives by various establishments, organisations and government bodies in carrying out a corporate social responsibility (CSR) program to restore old, damaged or dilapidated houses of the hardcore poor nationwide under the “Program Amal Jariah” (PAJ). Through this program, it is able to contribute some amount of the companies’ annual profits towards providing housing for the less fortunate and poverty stricken families

through welfare works such as repairing or reconstructing dilapidated houses with maximum allocation ranging from RM5000 - RM10, 000 per house (Figure 2.1).



Figure 2.1: Before and after the restoration of the house
Source: Development Financial Institutions Report (2012), presented by
Datuk Adinan Maning, CEO of Bank Simpanan Nasional.

2.4.3 1 Malaysia Development Berhad (1MDB)

Due to the current changes of housing pattern and economies, the Malaysian government has initiated an enabler company 1 Malaysia Development Berhad (1MDB) to examine and propose not only tourism, agribusiness and energy resources but also real estate development. Property growth that has been gripping Malaysia these days has made housing developments within urban areas to be priced for those with extensive financial wealth. It is increasingly difficult nowadays to search for a decent home costing below RM220,000 in the Klang Valley. It is no myth that a family earning RM6,000 – 8,000 still cannot afford to buy a house in urban areas, hence some are willing to commute by buying houses in nearby major cities for quality and comfort of a house, which is affordable to them.

Due to this situation, the Malaysian government, announced in the 10th Malaysia Plan (2011-2015) as well as in the National Housing Policy (2011) that featured 6 thrusts and 20 policy statements, intends to provide adequate affordable housing scheme. It guarantees that young adults that have just started working with a salary of

RM3,000 and below to be able to have access to quality affordable housing with 100% financing in a 30-year repayment period.

Recently in March 2011, the Malaysian government has launched “**My First Home Scheme**”, that aimed at fresh graduates who earned less than RM3,000 a month to obtain a 100% loan. The scheme only offers to applicants below 35 years old who seek to purchase residential property costing between RM100,000 to RM220,000. This initiation is in response to the predicament that is faced by the younger generation.

Later in June 2011, to show the seriousness of government in ensuring that people of medium income group also have access to affordable housing, another scheme is initiated, whereby partial of Sungai Besi area, renamed Bandar Malaysia (a site located just at the peripheral of Kuala Lumpur) is allocated for **Perumahan Rakyat 1Malaysia or better known as PR1MA** (1Malaysia Housing Programme). It is specifically targeted for the moderate-income Malaysians earning less than RM6,000 with the houses priced at RM220,000 – RM300,000 a unit. The offered units will be of 3-bedroom condominium with a total built-up area of 850-1000 sq. ft. The site assigned will be developed by a reputable developer – YTL Land & Development with other high-end houses listed from RM1.8 million and above in the same site. Prima offers condominium units below the market value as these units are for first time buyers. Recently 20 more sites, such as in the area of Rawang and Seremban, have been identified to construct 42,000 houses with this scheme. Reputable developers such as Sime Darby, Putrajaya Holdings and SP Setia have been approached to join force in making this scheme a success. It is hope that these initiations will not be just another ostentatious schemes which began as a good intention but later slide to nowhere due to the developers’ maximising the profit.

2.4.4 Ministry Of Rural And Regional Development

Another government agency that also addresses housing shortages specifically in rural area in Ministry of Rural and Regional Development. During one of the researcher's presentations to the ministry regarding self build housing system on 20th June 2011, it is discovered that there are an allocation of 100,000 housing units every year that are distributed in the rural area across Malaysia under Housing Aid Program (Program Bantuan Rumah – PBR). This program provides financial and management support to enable the target groups to own individual houses. The target groups for this program are the hardcore poor which are already registered in the ministry's data system. One of the main criteria for a family to be eligible is that one must own a piece of land. There are three main categories under this scheme:

1. Rebuilding or build new
2. House repair works
3. Repair damaged house due to disaster

Table 2.6 and 2.7 are the rates that have been stated since 2007 for new construction and assistance for repairs. The maximum cost listed is an additional cost over and above the rate given. Despite the choice of building materials, the cost remained the same. Apparently, many of those living in the East Malaysia prefer timber design houses.

Table 2.6: Rates for new construction**Source: Ministry of Rural and Regional Development (2008)**

AREA	TYPE OF HOUSE	RATE OF HOUSE (RM)	MAXIMUM COST (RM)
Peninsular Malaysia	1-room unit	21,000	9,000
	2-room unit	37,000	
	3-room unit/ terrace/ semi-detached	40,000	
East Malaysia	1-room unit	26,500	12,000
	2-room unit	46,500	
	3-room unit/ terrace/ semi-detached/ long house	50,000	

Table 2.7: Rates for repair works**Source: Ministry of Rural and Regional Development (2008)**

TYPE OF REPAIR	PENINSULAR MALAYSIA	EAST MALAYSIA
Maximum Cost of Repairs (RM)	11,000	12,000
Maximum Extreme Cost (RM)	1,000	2,000

It is also the ministry's vision to implement such program through community participation or mutual help (Utusan Malaysia, 2014: pg. 8-9). The program is implemented through a few agencies that are under the ministry such as KEDA (Lembaga Kemajuan Wilayah Kedah – Kedah Region Development Board), KETENGAH (Lembaga Kemajuan Terengganu Tengah – Central Terengganu Development Board), KEJORA (Lembaga Kemajuan Johor Tenggara – Southeast Johor Development Board), KESEDAR (Lembaga Kemajuan Kelantan Selatan – South Kelantan Development Board, RISDA (Rubber Industry Smallholders' Development Authority), FELCRA (Federal Land consolidation and Rehabilitation Authority), JAKOA (Jabatan Kebajikan Orang Asli – Department of Orang Asli Welfare) and MARA (Majlis Amanah Rakyat – (Malay for Indigenous Trust Council).

2.5 Guidelines For House Pricing Implementation

Ever since 1982, the price of a low cost housing has remained at ceiling price of RM25,000 a unit. The current cost of land, infrastructure facilities, construction and labour demand have increased tremendously over the years causing the government and developers to face the dilemma of providing low cost housing especially in urban centres (Chua, 1987; Yusoff, 1993; Agus, 2002). A new revised pricing has been prepared by the government based on land value, location, market demand and targeted group. These guidelines have been approved in June 1998 with further revision in 2002. The revision was done due to the price increase in building materials (Table 2.8).

Table 2.8: New pricing for low cost housing based on area, targeted group and type of dwelling. Source: (KPKT 2002)

Selling price/unit (RM)	Location/Area (Value of land per metre square)	Monthly income level per household (RM)	Type of appropriate dwelling
42,000	A Urban centres & cities (RM45 and above)	1,200 – 1,500	Apartment more than 5 storey
35,000	B Cities & its outskirts (RM15 – 44)	1,000 – 1,350	5-storey apartment
30,000	C Small towns and its outskirts (RM10 – 14)	850 – 1,200	Terrace & cluster housing
25,000	D Rural area (below RM10)	750 – 1,000	Terrace & cluster housing

The revised pricing of low cost housing also effect housing under PAKR program and PPR (owned) program. Refer to Table 2.9.

Table 2.9: Selling Price for PAKR and PPR (owned) housing units

Source: (KPKT 2002)

Area based on land value per meter square	Type of appropriate dwelling**	Selling price/unit (RM)
A RM45 and above	Apartment more than 5 storey	35,000
B RM15 – 44	5-storey apartment	30,000
C RM10 – 14	Terrace & cluster housing	28,000
D RM10	Terrace & cluster housing	25,000

Current property growth in Malaysia has made housing developments expensive and unaffordable to the general income group. The latest announcement made in the 10th Malaysia Plan as well as in the Malaysian Housing Policy is its intention to provide affordable housing schemes especially in urban areas. However, these affordable houses are priced above RM220,000, due to price hike in construction materials. Recently in March 2011, as an initiation in response to the predicament that is faced by the younger generation, the Prime Minister has launched “My First Home Scheme”, that aimed at fresh graduates earning less than RM3,000 a month to obtain a 100% loan. This scheme is only eligible to applicants below 35 years old who seek to purchase residential property costing between RM100,000 to RM200,000 with a 30 year repayment period. Recent scheme that demonstrated the government’s seriousness in providing affordable housing is referred to as Perumahan Rakyat 1Malaysia (1Malaysia People’s Housing), which will be located at the outskirts of Kuala Lumpur. Unfortunately, it is specifically targeted for the moderate-income Malaysians earning less than RM6,000 with the houses priced at RM220,000 – RM300,000 a unit. The offered units will be of 3-bedroom condominium with a total built-up area of 850-1000 sq. ft. The issue on affordability has never been discussed and researched thoroughly. The term ‘affordable’ has been generally used by housing developers in Malaysia for marketing strategy purpose. No facts or affordability indicators were assigned to measure a more accurate

data before setting the prices (Hashim, 2010). Even with all the necessary measures taken by government and other agencies to provide low cost housing, the demand for an affordable house is still critical.

Currently, REHDA⁶ is requesting for government to revise ceiling price from RM42,000 to RM60,000 per unit nationwide and RM75,000 per unit for urban areas of Klang Valley, Penang and Johor Bharu (REHDA 2008). Simultaneously, REHDA is trying to re-establish the responsibility of providing low-cost houses to the government as most private developers would like to focus more on meeting the demand for market driven products.

2.6 Criticisms And Issues In Housing

Many of the criticisms such Burgess (1978) questioned if the production of housing commodity can best be identified on the basis of user-control and the system of construction. It is understood that self help housing is mainly (not all) donor sponsored. The reasons behind such support can be construed as a genuine attempt to improve living conditions of the poor but it could also be read as a scheme to monopolise capitalism by maintaining status quo at international level. Though self help offers advantages in better manipulation of social decisions which are achieved through organisation and distribution of benefits at national level, it is also seen as exploitation of labour twice over, first at work and second during the construction of homes (Ward, 1972).

The need for involvement of the people or the beneficiaries of the low-cost housing programs in planning and implementation has been widely recognised as critical to

⁶ Real Estate and Housing Developers' Association Malaysia (2000) formerly known as Housing Developers' Association (HAD) in 1970 is established to represent private sector in property development in Malaysia.

ensure steady and sustained improvements. The 'people-oriented' approach in some of the housing programs is still dependent on bureaucracy for its implementation. Hence, it is no surprise that results are sterile in relation to its objectives and purposes (Korten, 1984), which led to a new concept of 'people-centred' approach when dealing with self help housing.

Burgess (1978) argued that Turner's recommended policies on the nature of housing; popular, government and private sectors; and role of State and Planner in the case of State-assisted self help housing versus Official Housing could only be implemented alongside the existing State policies. He also mentioned that there is a greater chance that self help housing as introduced by Turner will only be used on a limited scale to further petty commodity interests in ways that are not detrimental to the maintenance of capitalist relations of production in general. A general summary of criticism on self help are listed in the following points:

1. Access to resources is essentially an economic and political problem rather than technical one.
2. The effect of prices on building materials, which could also extend to recycle materials is not guaranteed by legislation alone.
3. Market valuation of land especially in urban areas is effected by those large-scale purchases.
4. There would be a great increase in the demand for infrastructure.
5. Unpaid labour are limited.

As the costs of living space, recreational areas, urban services, infrastructures, energy and raw materials increased drastically over the years, it is seen that the trend of

living sustainably in which the self help philosophies could and should also be considered as a solution: build your own house, grow your own food, bicycle to work, become an artisan, go into recycling. Even though some of the third world countries are not that far from starvation, self reliant is what teaches those people to be sustainable. In developing countries, self help housing offers an alternative housing approach given their inability to provide adequate housing for the fast growing population. Self- help housing is complimented by the serious consideration given to associate concepts such as intermediate technology and merits of localized scale production and organization. This concept has been supported by World Bank and Habitat to help create and mobilise government with other institutions to accept it as one of an alternative solutions for housing the poor. This formal acceptance has in fact contributed to the success of many self help housing projects across the globe regardless of developed or developing nations.

Self help housing is an opportunity to build a new home with no down payment and monthly mortgage payments that are affordable. It is a group of six to eight families working cooperatively to build their own and each other houses. Two types of self help housing may be defined: First, at its most simple it refers to specific and largely unrelated actions in which an individual or group takes partial responsibility for organizing and carrying through the installation of particular work for example a sewerage system, and building and financing the development of their homes. Malaysians would refer to it as gotong-royong – an act of organizing an activity with a closed group.

The Second, more complex level of group may involve itself in several actions integrated vertically and aimed at transforming the local social and economic structure,

for example the group not only constructs dwellings but also produces the basic materials such as bricks, tiles, cement, and elements of infrastructure. In this way, housing becomes a means of affecting the local economic structure. This second approach faces objections from vested interest groups (traditional suppliers of housing and building materials).

However, a counter argument which is relevant for the case of Malaysia, that self help housing, whether assisted or not is never really autonomous but must accommodate itself in the spaces left by others or for that matter must survive amongst other housing factors and limitations. Individual housing development being essentially self-help in nature should therefore be viewed in this light with a prospect of enhancing the role that individual builders can play in housing provision. In order to understand better how self help housing issues are relevant to Malaysian context, a briefed history of housing schemes and development has been discussed in the following sections (Section 2.1 – 2.4). As the need to own a house has been identified under successive Malaysia Plans as one of the major social objectives, where the common goal is to guarantee that all Malaysians have access to sufficient affordable housing. Despite the issues of housing is being familiarise by most of the countries, there is a shortfall in supply to house the poor in developing and third world countries, which is still getting worse if not better (Hamdi, 1995 and Agus, 2002). Malaysia, in an effort to curb such problems, has blueprint numerous public housing schemes from different organisations and agencies either from public or private sectors (Agus, 2001).

Bakhtyar et. al (2012) pointed out that official statistics released by the relevant ministry concerned showed that low-cost housing targeted from the beginning of 6th Malaysia Plan onwards has not been sufficient and it is still evident through the reports

at the end of each Malaysia Plan (7th MP, 8th MP and 9th MP). It is not stated in details in Malaysia Plans methods of specific consideration or assistance to meet the low-cost housing targets. The number of housing built is always insufficient causing hundreds and in some states thousands to back logged. Under the Public Low-cost Housing Programs, many of these affordable houses are sold to eligible buyers. Only after mid 1990s, a computerised open registration system administered by respective state government agencies were implemented. However in 10th Malaysia Plan, only 78,000 units of low-cost housing were targeted to be built when Malaysia is facing 1.3 million people under poverty line taking into account additional 440,000 workers with less than RM700 of monthly income (Bakhtyar et. al., 2012). Refer to Table 2.10.

Table 2.10: The highlighted rows are comparing the revision made in 1998 (before and after) in terms of house pricing and the income of the targeted group.

Category	House price per unit	Target groups/Income per month
Before June 1998:		
Low Cost	Below RM25,000	Below RM750
Low Medium Cost	RM25,001 – RM60,000	RM751 – RM1,500
Medium Cost	RM60,001 – RM100,000	RM1,501 – RM2,500
High Cost	Above RM100,000	Above RM2,500
After June 1998:		
Low Cost	Below RM42,000 (depending on location – Refer Figure 2.9 and 2.10)	Below RM1,500 (depending on house type – Refer Figure 2.9 and 2.10)
Low Medium Cost	RM42,001 – RM60,000	RM1,501 – RM2,500
Medium Cost	RM60,001 – RM100,000	Not stated
High Cost	Above RM100,000	Not stated

Table 2.11: The shortage of houses built against the earlier planned housing projects from 6th – 9th Malaysia plan

Program	6 th MP (1991-1995)		7 th MP (1996-2000)		8 th MP (2001-2005)		9 th MP (2006-2010)	
	Planned	Built	Planned	Built	Planned	Built	Planned	Built
Public Sector	174,00	84,542	230,00	121,62	312,00	188,66	709,40	
1. Public LCH	24,430	10,669	29,000	45,583	175,00	81,108	67,000	
2. Land Schemes	56,100	8,075	9,300	7,188	3,000	6,420	5,000	
3. Sites & Services	15,570	4,707	12,000	3,603	1,000	480	-	
4. Hsg	-	-	23,000	13,626	15,000	9,536	20,000	
5. Inst & Staff Hsg	32,600	18,776	102,70	12,015	62,000	43,620	48,400	
6. Medium & High	45,300	42,315	54,000	39,609	56,000	47,500	57,405	
Private Sector	399,00	562,91	570,00	737,85	303,00	655,37	511,59	
1. Private	386,40	551,61	555,00	724,15	289,00	632,22	492,59	
a. LCH	215,70	212,00	137,00	127,51	39,000	94,029	77,700	

Table 2.11: continued

Program	6 th MP (1991-1995)		7 th MP (1996-2000)		8 th MP (2001-2005)		9 th MP (2006-2010)	
	Planned	Built	Planned	Built	Planned	Built	Planned	Built
b. Med & High	170,70	339,61	418,00	596,63	250,00	538,19	414,89	
2. Co-op societies	12,600	11,305	15,000	13,703	14,000	23,151	19,000	
a. LCH	1,300	2,886	3,000	2,084	1,000	3,265	2,700	
b. Med & High	11,300	8,419	12,000	11,619	13,000	19,886	16,300	
TOTAL:	573,00	647,46	800,00	859,48	615,00	844,04	709,40	

Ooi and Phua (2007) reported that even though Malaysia is categorised as one of the higher income countries among other developing countries in the Southeast Asian region, private sectors developers are more interested in building homes for the middle to high-income market. Malaysia's rapid development of new real estate comprising condominiums and shopping malls has led to "gridlocked traffic conditions, severe environmental conditions (air, noise, and river pollution), unstable squatter tenements sandwiched between prime commercial complexes and high class condominiums, loss of heritage edifices, and neglect of human development" (Lee, 2006).

The rural economy that has been influenced by the informal and small agricultural sectors has provided acceptable accommodation even though the houses are semi-permanent housing in general. In the past, the mass of the rural population has a house of their own built on their own land. As land is normally available at a comparatively low price in the rural areas, the expenses for building a new house is likely to be minimal. Meanwhile, in the plantation sector, most of the plantation workers are provided with housing by their employers. Overall, rural population growth is slow and hence there has been little pressure for housing provision.

On the contrary, cities of Malaysia experienced a very rapid rate of population growth in the 1970s, which generally exceeded the rate at which housing, infrastructures and community facilities can be expanded to support the population

growth. These sudden urbanisations are as a result of rapid economic development and the increase of urban-based economic activities specifically industrialisation, service industries and public bureaucracy. Consequently, there was a massive rural-urban migration to the major urban centres for employment, education and satisfaction of urban facilities and services (Hashim, 2010).

The low-cost housing programme through both the Federal and State Governments have collaborated in implementing numerous low-cost housing projects, such as Skim Pinjaman Perumahan, Rumah Mesra Rakyat, Rumah Mampu Milik, Program Perumahan Rakyat, skim Rumah Pertamaku and PR1MA. Refer to Table 2.12. The State Governments are responsible to categorise and allocate suitable lands, supported by the Ministry's National Housing Department in tender procedures and the supervision of the physical implementation of housing projects. It is the State Governments duty to identify eligible buyers and make the necessary arrangements for financing facilities.

In addition of State Governments, some other Government agencies are also active in the provision of housing such UDA Holdings Sdn Bhd, a corporatised former statutory body, various State Economic Development Corporations, Land and Regional Development Authorities are among the agencies which also assume housing development projects. However, the housing projects are mainly concentrated in the urban and semi-urban areas. The Government also encourages various co-operatives to build and sell houses to their members as well as to the public. To facilitate this, the Housing Developers Act exempts co-operative societies and Government Agencies engaged in housing development from having to obtain housing developer's license and sales and advertising permits.

Table 2.12: Government Housing Schemes

Skim Pinjaman Perumahan	Rumah Mampu Milik	Rumah Mesra Rakyat	Skim Rumah Pertamaku	PR1MA (Projek Perumahan Rakyat 1Malaysia)
Implementation through a trust account referred to as Housing Loan Fund for low income household	Houses are built by SPNB equipped for 3 bedrooms and 2 bathrooms. A friendly-concept and comfortable.	PMR was developed to assist low-income households who own land and wanting to build a house.	A scheme to assist young adults who have just started working and earn RM3000 a month to own a house.	A government program to promote greater home ownership, among middle income households by providing 'affordable' houses in major cities nationwide.
Launched: 17 December 1975	Launched: March 2011	Launched: August 2002 – Skim Perumahan Keluarga Nelayan September 2002 – expanded to Peninsular Malaysia under Program Perumahan Mesra Rakyat (PPMR).	Launched: In RMK10 (2011)	Launched: 4 th July 2011
Objective is to allow lower income household without other financial aids to build or buy fully built	Location: Nationwide Developer: Syarikat Perumahan Negara Berhad (SPNB).	Location: Nationwide Developer: Syarikat Perumahan Negara Berhad (SPNB).	Location: Nationwide Developer: Syarikat Perumahan Negara Berhad (SPNB).	Location: Precinct 11 Developer: Putrajaya Holdings Sdn. Bhd.
Price: RM45,000	Price: Low cost: 700 sq. from RM35,000 – RM50,000; Low-medium cost: 750 sq. from RM50,000 – RM70,000, Medium cost: 800 sq. and above RM80,000 – RM100,000	Price: RM65,000 with subsidy by government RM20,000 – RM45,000 through Islamic finance, monthly loan repayment is RM150 on land.	Price: Min – RM100,000 Max – RM400,000	Price: 420 units – 815 sq. – RM120,000 140 units – 1,006 sq. – RM150,000
Eligibility: 1. Malaysian; 2. Age 21-60 years old; 3. Non-government employees, agencies or institutions; 4. HHI RM750 – RM2500 per month; 5. Applicant does not own a house.	Eligibility: 1. Malaysian; 2. Age 21-50 years old; 3. Non-government employees, agencies or institutions; 4. HHI <RM2000per month; 5. Applicant does not own a house nor a land.	Eligibility: 1. Malaysian; 2. Age 18.65 years old 3. Married or single parent with dependency; 4. HHI <RM3000per month; 5. Applicant must own a land.	Eligibility: 1. Malaysian; 2. First home buyers 3. <35 years old 4. Gross income <RM3000 per month	Eligibility: 1. Malaysian 2. Age 21 years old at the time of application 3. HHI <RM6000 per month 4. Open to those owning more than one house and those who are in need of one.

Formal housing activities as carried out by Government agencies and licensed developers are subject to planning processes and approvals by the relevant authorities before they are delivered in the market. According to housing stock data the formal housing units constituted only about 29% of the total stock accounted in 1991. It may be concluded that, in the past, the number of houses built by the informal sector, specifically those built by individuals within their own means, are substantially more but mostly of traditional or wooden type of houses in rural areas (KPKT, 1999). However, in recent years demand for contemporary houses has gain momentum in states like Johor, Melaka, Kedah, Negeri Sembilan, Pulau Pinang and Perak, and is expected to remain so until the nation reaches developed status by 2020.

Regardless of the urban phenomenon, the low-income families in both rural and urban areas are still unable to obtain an ‘acceptable accommodation’ as set by the standards. Government regulations require that each house must have a minimum area of 700 square feet for low cost houses (Housing Planning Guideline, 2011), and composed of three bedrooms, a living room, a kitchen, bathroom and toilet. It is perceived that this concept is able to accommodate an average household of five members and type of houses was determined. The reservation of 30 - 50 percent for low cost housing imposed (Malaysia 1981) is parallel with the government’s intentions to present opportunities for greater relations amongst the ethnic groups, as well as to eradicate poverty and restructure the society such that economic function and race would no longer be a conflict. In addition, prefabricated systems are encouraged to implement in low cost houses as it expedites construction due to high demand from the market.

2.7 Forming An Understanding Of Self Help Housing

The theory of self help housing is always associated with other relevant programs such as sites and services, mutual aid, housing co-operatives or self build housing. The inhabitants of spontaneous or squatter settlements in the third world countries define the term as the process of self-improvement. However, there are contemporary ideas and current policies on self build housing that describe the meaning of the term itself through experiences. The ability of the people in providing their own housing to “do so much with so little” (Turner in Ward, 1982:102) became known as self help housing.



Leeds (1969) described self help housing as the spontaneous settlement that was built towards the end of World War II by the owners themselves through incremental self build approach. During this crucial period there has increased urbanisation in cities all over Europe resulting in such spontaneous settlements. These settlements are illegal, unplanned and uncontrolled development that has its own trait. These settlements include the invasion of available empty lots/land as well as land division into smaller plots with lack of infrastructure.

Wates (2006) introduced self help as one of the methods to approach community planning and management, which involve different levels of contribution at different stages of a project, refer to Figure 2.14. A systematic format to start a community-planned project is created with a list of general principles to adopt and adapt as seen fit according to communities. This is followed by another selection of methods and tools to help people get engage in the process. Wates described self help where people take responsibility, individually or collectively for solving their problems using the most established or common methods of community planning that has been done

internationally. He also described that the methods or approaches for each community varies to meet the requirements of local conditions and responsive to context.

Table 2.13: Participation Matrix – the matrix illustrates various levels of participation at different stages of a project, Wates (2006), pp. 10.

		Project stages			
		Initiate	Plan	Implement	Maintain
Levels of community involvement	Self Help	Community initiates action alone	Community plans alone	Community implements alone	Community maintains alone
	Partnership	Authorities & community jointly initiate action	Authorities & community jointly plan & design	Authorities & community jointly implement	Authorities & community jointly maintain
	Consultation	Authorities initiate action after consulting community	Authorities plan after consulting community	Authorities implement with consulting community	Authorities maintain with consulting community
	Information	Authorities initiate action	Authorities plan & design alone	Authorities implement alone	Authorities maintain alone

 Most active community planning
 Crucial action in cooperative planning and design

The definition of self help varies widely according to the literature and the difficulty in defining the term has often been noted. Burgess (1982) mentioned that in developing countries, “self help” is a spontaneous process that begins with the occupation of illegal land and eventually leads to the construction of permanent homes; and the term “self help” does not necessarily mean ‘self-built’. A degree of self-help is obviously involved in most types of housing activity - many people structurally alter their own houses even when they are provided with a ready-made unit. Primarily, it is associated with a housing process where participants use their labour and skills either in organised or spontaneous abilities to produce their own dwellings. Harms (1982) adopted a broader set of descriptions ranging from normative to ideological perspectives. Normatively, self help means “individual household or group self help, relating to the more technical

aspects of house construction”. Ideologically, self help refers to “collective actions, around housing, relating more strongly to organisational and political actions in order to improve living conditions beyond housing”.

Harms (1982) stated that self help housing was the standard mode of housing preceding the capitalistic approach of housing production. “Housing was produced in a simple process of production; local building materials were transformed in a labour process with simple tools and a low division of labour into a shelter or house for its immediate use-value (Ward, 1982: pg. 45). Turner revealed the issues of use-value and market-value of housing to outline the basic issue of ‘what it does versus what it is’ (Turner, 1982: pg. 105).

Abrams (1964) documented that provision of shelters had been a normal role of human activity since early cave-dwelling days. During those days before industrial revolution began, dwellings were built either by immediate family members or by the help of villager with local trades people assisting them. Local materials were used with traditional methods and tools. These traditional practices were suited to local situations and proven through many evolutionary years.

Others such as Duncan & Rowe (1993) used the terms “self-provided” and “self-built” to describe a situation where the household does all the work from managing finance, buying land and overseeing construction to eventually owning the end product. They distinguish this process from “self-promoting” in which the household promotes and gains from the development while the construction of the house goes to someone else.

Alternatively, Gilbert (1994) and Turner (1982) provide definitions similar to those offered by Burgess (1982) and Harms (1989). Using the term “spontaneous settlement” they define this type of housing using four categories: (1) most of the dwelling is built by the family who originally occupied or presently occupy it; (2) settlements involve some degree of illegality or lack of planning permission; (3) settlements lack most forms of infrastructure and service; and (4) such settlements that are occupied by the poor. All definitions combined describe the process involved both organised and incremental invasion of public and private land where no purchase of the land is involved. In some instances, houses are built on rented land and permission to build on communal land is sometimes granted by tribe, local government or private owner. In most part of Africa and Asia, individuals use direct labour to build houses and are therefore accustomed to self help approach to housing exhibiting the importance of human capital development in housing sector.

Alexander (1985: *pg. 41-47*) defines housing by improving the structure of the production system in order to create characters of a house. So the houses that are created should make a person feel more alive when the seven general principles that Alexander highlighted are answered with a different outlook from the conventional process (Refer Table 2.14):

Table 2.14: Alexander’s response when explaining his principles

Aspects/Issues	Questions	Response
Key Players	What kind of person is in charge of the building operation itself?	A new type of master builder who manages all aspect of planning, design, and construction in a high priority manner - however that person only has direct charge of no more than a few dozen houses at a time, answerable only to the families involved to help them meet their requirements and responsibility.

Table 2.14: continued

Aspects/Issues	Questions	Response
	Who would lay out and control the common land between the houses, and the array of lots?	The groups of families, in small scale so people can talk to each other and reach agreements, able to work in clusters, have control over common land, lay out their own lots according to own designs and wishes.
Responsibility	How local is the construction firm responsible for the building to the community?	Possibility to introduce a system of decentralised builder's yards, whereby one or more for each small neighbourhood, every few blocks, as each one is responsible for the physical development of the local neighbourhood.
Design	Who lays out the plans of individual houses?	Families should be able to design their own houses within a fixed budget; hence each house is meets the need and requirement of individual families.
Construction system	Is the construction system based on the assembly of standard components, or is it based on acts of creations, which use standard processes?	The system of construction is treated as a standard process such as tile setting, bricklaying, painting, spraying, cutting etc., but the actual sizes and shapes of what is done varies according to the requirements of the individual building.
Cost	How is cost controlled?	Each house are made within a fixed budget, however without controlling the exact way in which the budget is spent, thus allowing each house to be different in the ways it to satisfy the family needs.
Method	What is the day-to-day life like, on -site, during the construction operation?	Each family contributes as much or as little as they want to, but the most important thing is the construction process of building the house together with the families and builders.

These principles has actually described self help housing without using the term “self help” itself. The decentralisation of making construction materials is much related to many case studies in self help projects (Stallen, 1994; Gough, 1996; Wells et. al., 1993 & 1998; Ahmed, 1998; Tibaijuka, 2009 and Poh, 2009). While Laquian (1983) refers to such housing initiatives as ‘basic housing’ with the main ingredients being ‘ideas of mutual aid’, self help, community action, core housing and progressive development are extracted from actual practices of squatters and slum dwellers. Two such approaches are ‘community upgrading’ and ‘sites and services’.

Skinner, R.J. and Rodell, M.J. (1983) made a comparison between Abrams' and Turner's approach in self help housing. Refer Table 2.15.

Table 2.15: Self help approaches between Abrams (1950s) and Turner (1970s)

After Abrams (1950s)	After Turner (1970s)
Basic understanding of self help:	
<ul style="list-style-type: none"> • Labour for self help is from immediate household members which does not involve any 	<ul style="list-style-type: none"> • The investment is decided by the household members
Construction process:	
<ul style="list-style-type: none"> • Illegal land. • Materials are from recycled or waste objects. • Labour is free and working time is during night and weekends. • Construction period begins the moment the owner occupies till the 	<ul style="list-style-type: none"> • Varies and unpredictable • Construction period could be within a day or 10 years. • A decent shelter may be the end product or part of the construction process.
The self help users:	
<ul style="list-style-type: none"> • Immigrants who refused to stay in sub-urban areas. 	<ul style="list-style-type: none"> • Anyone especially the low- or medium-income households that have been practising self help
Implication in policies:	
<ul style="list-style-type: none"> • Basic theory – self help housing reduce cost of construction in whatever type of dwellings. • Success factor depends on reducing the cost in all aspects. • Issues to be addressed – scarcity of land (urban); lack of financial support to purchase construction materials; irregular planning; lack of construction skill and knowledge. • Government intervention required – to provide land and infrastructure, house design, assisting in purchasing of materials and supervision during construction. 	<ul style="list-style-type: none"> • Basic theory – in certain situations, self help housing could elevate investment such as an opportunity for employment and generate income for resources that have been used during the construction. • Investment in self help occurs when households had to wait to own or rent a house for 5-6 years and the housing requirement lacking for the households. • Issues to be addressed – lack of suitable sites; land and building use standards would jeopardise approach of self help housing; lack of public services; and lack of support from financial institutions.

Table 2.15: continued

After Abrams (1950s)	After Turner (1970s)
<ul style="list-style-type: none">• An ideal project – self help housing that fully meet the requirement of a basic housing.• Result – an acceptable quality housing scheme that is affordable for the low-income households.	<ul style="list-style-type: none">• Government intervention required – acquire land and provision of infrastructure.• An ideal project – varies according to situations.• Result – housing units with variety of cost and affordability for the low-income households.

Collin Ward (in Turner, 1976) outlined three main principles of housing. 1.) In Turner and Fichter (1972), it is believed that major decisions made by dwellers when contributing in the design, construction and management aspect of their housing, the process and the environment produced would stimulate individual and social well-being. This becomes the key commitment in housing process which would have no barrier to personal fulfilment. 2.) Housing should not be looked at as what it is but rather what it does. Housing has impact on people's lives which is related to dweller satisfaction, as opposed to the imposition of standards or rules and regulations (Turner, 1976). 3.) Any defects and imperfections in a house build by one is more tolerable knowing for a fact that they are their own responsibilities than if they are somebody else's (Turner, 1976).

With all of the above principles provided by Turner, it is clear that housing should be in the control of the 'people sector' or referred to as the 'third sector', informal sector' or 'community sector' whereby central government must accommodate and enable this sector by providing a framework, rules and access to resources. A formulation of good understanding on what Turner's self help housing is all about is emphasised in the following points:

1. The concept of housing should be viewed as a verb rather than a noun (Turner, 1972: pg. 148), thus expressing the value of the house is on 'what it does' versus 'what it is'. If houses are defined by material standards and quality then it cannot adequately measure against the value to the users.
2. Housing is to be treated as an activity and addressed by its use value, 'decision making power must, of necessity, remain in the hands of the users themselves' (Turner, 1972: pg. 154). Many housing needs that exist varies with family cycle, relocations, priorities and opportunities. Large organisations would always have standardised procedures and products to meet the perceived needs resulting in mismatches where people are forced to accept such provision. This does not necessarily imply that the dwellers must build their own houses, but 'rather that households should have the options to choose their own houses, to build or direct its construction and to use and manage it in their own ways'. (Turner, 1972: pg. 154)
3. Turner's advocacy for autonomous user controlled housing systems does not exclude the role for centralised housing organisations from local government or federal level. The organisations are needed to control local access to resources which include infrastructure such as road network, sewerage treatment, land matters, credit, electricity and water supply etc. The government are seen to be one that sets rules and regulations to enable participation of users in their housing process.
4. Turner believes that when people are given the opportunity, they are able to draw upon their own initiatives, skills and resources to help themselves especially in the housing issues.

2.8 Global Practice On Self Help Housing

The genesis of self help housing in the developing world is stereotypically depicted as a cost-effective response to mass urbanisation and the inability of the state to house burgeoning urban populations. In this regard, the pioneering work of Turner (1976) on Latin America is often invoked to illuminate the international rise of self help housing strategies in the 1960s and 1970s. However the practice of encouraging the poor to participate in the construction of their own housing was common long before this.

In the self help housing practice, housing is considered as a process rather than a product. One of the main features of self help is personal assistance. In Turkey, it is seen in squatter settlements, where migrants coming from rural areas settled on the outskirts of large cities. They bought materials such as doors, window frames and other basic equipment mostly second hand. They built their houses with the aid of family and friends overnight. This process is referred to as “gecekonu”.

In Britain, the individual built his house either with the help of family, friends and whatever specialist assistance he can afford, or he builds a sub-standard shack and improves it over time (Ward, 1976). While Keare and Paris have pointed out that self help can be organised in four ways:

1. Mutual help where families work together in groups. The individual builds their own house with the help of family and friends where construction, knowledge of skills, material supplies, financial resources and land matters are directly managed by dwellers. This form of self help is seen both in developing and developed countries.
2. Self help construction where the household hires a contractor to build the shelter.
3. Self help construction where the household hires and supervises individual labourers.

4. Self help construction where the household uses its own labour to build the house.

Self help housing could also be an organised process. In Britain, for example, there are ‘self help housing associations’ (Ward, 1976) “ A group of people legally not fewer than seven, collaborate to build a group of houses, benefiting from whatever help their status as a registered friendly society and housing association given to them at the time” (Ward, 1976). Self help may involve individuals as well as group inputs and corresponds to a system of production, financing and maintenance, in which the group carries out a significant part. Usually it involves in an incursion into functions that would normally be the responsibility of either the public or private sectors that are either unable or unwilling to provide the service (Turner, 1972; Ward, 1982; Baross And Linden, 1990)

Habraken (1975) observed that the so-called “informal sector” in developing countries operated on land that has not been fully developed. This sector has not only included the poorest people but also government clerks, nurses and other professionals. This informal sector cannot obtain facilities from the authorities, but once construction has begun it will eventually ask for services that the government be forced to provide. Governments are tremendously reluctant to recognise the existence of the informal sector, but to ignore it is both foolish and dangerous.

Turner’s many writings such as “Freedom to Build” (Turner and Fichter, 1972) and “Housing by The People” (Turner, 1976) suggested that autonomous system allows dweller control in their housing process. This is based on his personal observation during field work with squatter settlements in developing countries as well as developed ones such as the United States and United Kingdom.

2.8.1 Types Of Self Help Housing

Kamau (2002) defined two types of self help housing in his studies: First refers to specific and largely unrelated actions in which an individual or group takes partial responsibility for organising and carrying through the installation of certain job for example a sewerage system or building the house or financing the house. The second relates to a more complex level where several actions are integrated and aimed to transform local social and economic structure. For example, a group does not only build their own house but produces materials, which eventually are sold to others who need them. The second usually faces objections among vested interest group such as suppliers of traditional building materials.

Tan (1992) through Salas (1988) has ascertained the types of self help housing initiatives taking into consideration the involved process, which included level of organisation, technical and management support. The following are the characteristics in each of the self help category.

1. *Self help – organised by family members and close friends to build ‘own’ dwelling. It usually has little planning and regulations or rules. The house is built gradually over an undetermined period due to the family’s needs as well as availability of time and materials.*
2. *Self help with technical advice - organised by family members and close friends to build ‘own’ dwelling together with consultation from external agencies that has clear planning and guideline. The house is built incrementally and materials are obtained in an organised way.*

3. *Mutual aid – organised by a group that construct a dwelling for the families involved with minimal set of guidelines and usually with little long term goals. The self management is by group whereby each family designs the house itself and purchases the materials. The construction of the house depends on the availability of the materials.*
4. *Mutual aid cooperatives – organised by a group that will construct a dwelling for each family that is involved. The dwellings are then assigned to those families upon completion. This self management group has clear objective, programming and planning, usually are in ‘business like’ style. The cooperative generally hire specialised workers and contractors to get the job done. Tools, equipment and materials are required and managed by them too.*
5. *Self help groups with external aid – organised group to construct dwelling for each family. Dwellings are regularly assigned to families after completion. The group has strong external initiative with a defined objective. The size of the group is mostly large as to be able to coordinate and organise participated teams of consultants and specialists. Due to this, there might be lesser consistency in decision-making, planning and construction. There is a joint management by a small part of the group and the external agency to supervise equipment, tools and materials.*
6. *Mixed process: Staged involvement by outside agent followed by self help – overall completion is done by external agents i.e. sites and services especially the provision of infrastructure and land. There is a clear laid out plan with strong initiative for*

instance financial support and consultation. Self help with technical advice is customarily chosen for each family to build their own dwelling.

Turner and OSTI (1969) defined self help into three general types of which the method of classification is based on the self builder's finance status, extent of external assistance and level of autonomy among participants:

1. ***Independent Self Help:*** *Carried out individually without external sponsorship, supervision or financial support except as solicited direct by the self helper himself. He is not part of a program or a group but is completely on his own in designing, building and financing his house. He accumulates "sweat equity" through his own labour and "enterprise equity" by being his own contractor. These activities usually are undertaken in spare time after the regular days of work and on weekends. It can extend over long periods of time. It appears feasible to anyone who is able to obtain financing.*
2. ***Organised Self and Mutual Help:*** *It is sponsored or supervised or supported or all three by agents other than the participant. He does not initiate the effort beyond making the decision to join the program. Mutual help refers to working by a group in any or all phases of the process for its members' individual or collective benefit. Mutual help can be initiated by the group itself or by an external source. Participants enter the program, go through a pre-construction orientation and training period, then construction itself (6-14 months in the U.S.A.) and finally occupy the completed houses. At occupancy title and mortgage are transferred and they become home-owners. Participants are generally low-income levels then independent self helpers.*

3. ***Employed Self Help:*** *people participate in a program initiated and run by one or more organisations. Typically the sponsors have been government agencies. Participants are employed for cash wages in the construction of their houses. They have usually been at the lowest income levels.*

(Quoted from Ward, 1982)

Tan (1992) has also managed to classify self help housing by gauging level of contribution or type of attempt offered in the self help venture. It is known that self help housing does not necessarily mean self build. It also depends on the degree of participant's commitment.

1. *Participants act as organisers and managers of the housing process. They organise and coordinate with others through paid or unpaid arrangements in order to carry out actual construction work. In this case, participants only contribute organisational and management skills.*
2. *Participants are actually involved in the building works of their dwellings. They not only organise but also contribute labour to complete the construction of the house.*
3. *A combination of the first and second type of self help housing where participants may be engaged in different levels of design, organisation, management, building, maintenance of the house. It may require some involvement of professional assistance through paid or unpaid engagements.*

Mathey (1997) distinguishes another classification between the two forms of self help housing. These are the autonomous solutions and assisted self-help. Autonomous solutions are also often referred to as spontaneous self-help meaning that the development was not planned officially even though it may be quite well prepared (planned) by the users themselves. Assisted self help on the other hand is characterized

by the intervention of the state with the aim of overcoming certain recurrent shortcomings in autonomous building activity. In order to reach a larger number of beneficiaries with limited budgets, non-conventional housing policies have been introduced in many developing countries in the form of site and services and slum upgrading projects.

Table 2.16: Summary of Self Help Housing Category

Authors	Details	Abrams (1964); Habraken (1975); Ward (1982)	Turner (1975); Ward (1982) Tan (1992); Keare & Paris (1993); Alexander (1985)	Mathey (1982); Ward (1982) Keare & Paris (1993)
Types of self help housing		Independent Self Help	Organised Self Help	Employed Self Help
People involved	Families	✓	✓	
	Neighbours	✓		
	Authorities			✓
	Consultants		✓	✓
Organisatio		✓	✓	✓
Method of construction	Self	✓	✓	
	Hire labour			✓
Time frame	Incremental	✓		
	Fully		✓	✓
Supply of materials	Incremental	✓	✓	
	Sponsored			✓

In developing countries, self help housing offers an alternative housing approach given their inability to provide adequate housing for a fast-growing nation. Self help is further associated with concepts such as intermediate technology as well as local scale production and organisation. Support from World Bank and Habitat has helped to organise many government to mobilise financial aid to assist self help housing projects. Table 2.16 has identified various categories of self help housing across the world from different authors. Basically there are three main categories listed – Independent Self Help, Organised Self Help and Employed Self Help. All these types of self helps have different aspects of involvements from the people who participate, skills, methods, time

frame and supply/management of materials. It is crucial to distinguish and verify in which category or in which combination of categories that is acceptable for Malaysian context to have a successful self help housing.

2.8.2 the components involved in self help housing

Self-help housing is a process of constructing house by personal effort. The term “organised” at the beginning of self-help housing means a structured involvement between a facilitating organisation and the households that have chosen this housing delivery system. The facilitating organisation also bears a responsibility to authorities and financial agencies. It comprises the making of collective decision to formulate certain objectives and involved actors to carry out the actions through partnership. (Rodriguez and Astrand, 1996).

Objectives of self help housing are similar in most practising countries when compared. Those are:

1. To provide financial and technical resources for low-income families whose basic needs have not been met.
2. To create a Revolving and Self-supported Fund in ensuring the continuity of the activities of self help housing.
3. To develop an inter-disciplinary, transferable and flexible methodology of self help housing process enabling an integral approach to social, financial, legal and constructive services in the community.

There are a few main features that can be associated with self help housing development based on FUPROVI (Fundacion Promotora de Vivienda – an NGO-based in Costa Rica and had a 14 years of experience in self help housing projects)

experiences as well as AVE's Programs (Association of Economic Housing – a non profit civil association in Cordoba, Argentina has teamed up with CONICET – National Council of Scientific & Technical Research, a base dedicated for research on technological development and training centre in housing):

1. Provision of small credits to dwellers in urban centres and small nearby towns.
2. Improving or building housing/facilities in the low-income community mainly divided into two types – a.) housing beginning – a core unit with basic accommodations; b.) housing improvement – up-grading or incremental accommodations/spaces (this is to meet the future demand of family needs).
3. Identify credit volume as not to exceed the eligibility of monthly repayment sum.
4. Short repayment terms i.e. 6 – 40 months
5. Options of letting the families decide what to build and may choose materials to use in the construction having in mind that all labour work will be their own effort.
6. An inter-disciplinary approach in financial, social, technical and economic aspects during the process of self help housing.

2.8.3 Main Stages In Self Help Housing

Most manuals that have been presented in the Self Help Housing Seminar (2003 in San Jose, Costa Rica) had a lot in common (Burgan, 2003), (Opondo, 2003), (Situmbeko & Kalimamukwento, 2003), (Wako, 2003), (Phusanam, 2003) conceived not to set out as a policy statement but rather possible recommendations or guidelines carry out tasks required in self help housing. Identifying roles of actors involved at different levels is an essential step so that all are clear on their responsibilities once the project begins. The usage of actors' names/organisations also differs from country to country, but overall, they play the same role and share a common goal when it comes to involvement in self help housing projects.

Based on the experience of different countries, not all Non-Governmental Organisations have the capacity on facilitating the housing development projects. In such cases, a team dedicated to run the project should be formed prior to establishing contacts with actors and stakeholders. There is no specific formula in structuring the team, but the most common organisation structure consists of a leader assisted by a few professionals such as architects, engineers, finance and administrative specialists and sociologists. Makina Village in Kibera, Kenya opted to include Kibera City Council and Kenya Government to be part of the team who are in charge of funding the project and providing infrastructure. In the case of an self help housing project in Banda Village, near Kampa, Uganda, the Rotary Club of Kyambogo and the University of Kyambogo were involved to facilitate the project. Their professionals who joined the rotary club and students of the university, as part of curriculum, assisted in the process of self help housing. However, there are cases where the strongly-tied communities took the lead to solve their housing problems on their own with the support from the local authorities such as Non Nong Wat Community in Khon Kaen Municipality, Thailand.

After making some comparisons among the papers presented during the Organised Self Help Housing-Planning and Management Seminar on 20th January – 12th February 2003 in San Jose, Costa Rica, there are several stages that a person or an organisation needed to contend with when initiating an self help housing programme.

1. Stage One: Initial Contact

At this stage, the main objective is for the facilitating organisation to know more about the target group, in other words “getting to know each other” especially the

background of families involved and making sure they understand the concept of self-help housing. In this participatory planning stage it is essential:

1. To know the people or actors who will be involved in the project, whereby each actor will have a defined role and general history of each involved family will be recorded.
2. To know the available resources the families possess such as savings obtaining credits, donations, funds and subsidies.
3. To come to an agreement on the schedule of administrative matters, construction details, budget, land, possible partnerships and legal matters.

The expected outcome for the families is to gain full understanding of the whole process of self help housing project, which may not occur in their first meeting. In this case, personal contact between community leader and organisations in providing advice must be well founded.

2. Stage Two: Preliminary Study

a. Socio-economic survey:

In a situation where there are no subsidies for low-income families, it is crucial to conduct a socio-economic survey to ascertain affordability levels. Information include income levels, attitudes of people towards self help housing, work loan repayment practices and housing needs is pre-conditioned as this would help the working committee to choose appropriate methodology to approach the project.

b. Site inspection:

Preliminary site inspection is necessary as it helps to ensure that any actions proposed are in accordance to the needs of the future residents. There is a danger that a

site inspection team may raise expectations on the part of the community members either too early or in the wrong way. Therefore, it should have an open-ended format and not follow a rigid pattern. Appraisal of preliminary study is required to further develop planning for the project as well as to ensure that broader community participation can be identified. At the end of this process, there should be a starting number of families who decided to be involved in the project.

3. Stage Three: Feasibility Study

This process aims to go further with more details as it will be useful for the facilitating organisations to decide whether to develop an self help housing project in the given situations. Families should be aware of the scope of the project with regard to the following:

1. **Legal matters** – families should be secured with land tenure. Negotiation between landlord and community should be set up. Facilitating organisation can function as the coordinator or financial guarantor to gain confidence of the landlord on these families' abilities to pay for rent.
2. **Financial concern** – estimation of the cost of construction, source of loan, funds or subsidies from other organisations, monthly repayment and mode of payment are established for eligibility and capability requirements.
3. **Environmental issues** – the community shares expectations from the project in terms of improvements in quality of life: better infrastructure and house designs.
4. **Technical matters** – construction materials should be identified and listed at the same time of construction method opted.
5. **Social implications** – the involvement of members of the community in the process has to demonstrate willingness in the participation to ensure the self help housing project runs smoothly.

At the end of the process, the families should understand the design of the project and level of the finished house, the contribution of working time, resources used and repayment plan after construction.

4. Stage Four: Design and Planning of Project

The objective in this process is to develop appropriate, affordable housing design with a conducive environment for the community. Factors such as legality, which involved submissions or applications to local authorities, should be handled by the facilitating organisation. Financial planning that involves construction cost, cash flow, income sources, modes of payment and grace period would also be part of this stage. Professional consultants involved would have to advise appropriate site plan according to climate, topography and surrounding environment with local context. As the technical team works in the planning of the infrastructure, selection of building technology and choice of materials, the families need to go through training of construction skills/labour. It necessary for the community to know good suppliers, the efficient way to purchase and store materials as this project is run by themselves.

This stage concludes the final decision of pre-construction made by the community. The facilitating organisation would have shown consequences of different solution of the housing planning and design.

5. Stage Five: Implementation

The intention in this phase is to ensure that the construction quality, schedule, usage of materials are achieved according to what has been planned in earlier stages. Before the construction of the project begins, all legal documents such as land, financial

resources, building permit, related official approval, materials supply and schedule should be done accordingly. There are 4 major areas that are involved in this stage:

1. Social aspect – due to long period of construction time, the community should set up motivation activities to help create a sense of success and achievement among the community members.
2. Construction aspect – quality control checklist, monitoring plans and schedules for community participation and work progress should be done by the community members
3. Administration aspect – organising warehouse, distribution of materials, providing tools to be used and control of expenses should only be done by a representative of the community together with a consultant team. This section needs proper management. In a case study for upgrading Banda area³ near Kampala, Uganda, a site supervisor was appointed by the university involved to be in-charged of overall administration.
4. Financial activities – cash flow control and monitoring of the budget against expenses and the progress of work would have to be carried in detail.

Participation of the community is not only in the construction process but also through other responsibilities such as food/drink preparation, taking care of their children and other wellbeing for those community members who are working.

6. Stage Six: Transition and Evaluation

Evaluations of the project will be carried out to ensure accountability to the community. There will be an assessment and review of the strengths and weaknesses experienced throughout the project and whether that project was executed in accordance with the set aims and goals as well as within the budget. In addition, the possibility of

having a similar project in other part of the country could be reviewed. A set of questionnaires will be developed addressing among other things such as:

1. if cultural heritage values have been addressed
2. the capacity of building the community has been achieved
3. has the overall government plan on housing implemented
4. has the overall economic development of the community improved
5. whether gender, disability and other related matters have been addressed

7. Stage Seven: Discussion

The community are expected to maintain their houses and related properties together with the physical environment. Follow-ups on the findings and recommendations arising out of the above evaluations will be made by the facilitating organisations to ensure that social and economic developments are realised. This includes repayment of the loans and formalising of ownership of land would have to have a follow-up too. Most importantly is to achieve strong democratic community, which can survive and sustain on its own to develop better quality of life.

From the above points, it is clear that self help housing principles can be outlined into one strategy that has a complete package of providing organisation structure and administration, finance support, planning and technical and construction assistance.

There are many aspects in which a house can be built at a reduced cost. For this particular study, the technical aspect of self help housing is being experimented to identify in which particular method would contribute to cost reduction exercise. In the next section the term “self build” will be used instead of self help since the study looks into how self build technology could assist in encouraging people to participate in self

help housing. Figure 2.2 has demonstrated the placing of “self build” in relation to the whole outline of self help housing.

2.9 Technology Of Self Build Houses

A number of studies have been made on identifying new low cost materials, new technologies as well as new housing designs to be used in supplying low cost houses. However, the substance of the issue in self build housing is to start out independency of acquiring a house on their own, away from the aid of government or private sector. This would lead to freedom to dwellers on major decisions on their house designs, construction and financial management.

One of the problems seen as a threat with tradition is that by its very nature it discourages innovation. Midon et. al. (1996) has actually re-specified a timber traditional house to suit a modularised dimensioning transforming it into a general guideline/manual illustrating the installation of house components. As it mentioned that it could be mass-produced or individually acquired, unfortunately the dissemination of knowledge has not reach those in particular who are interested to build themselves. This has led to an eclectic usage of materials when ventured into self build housing in the rural area.

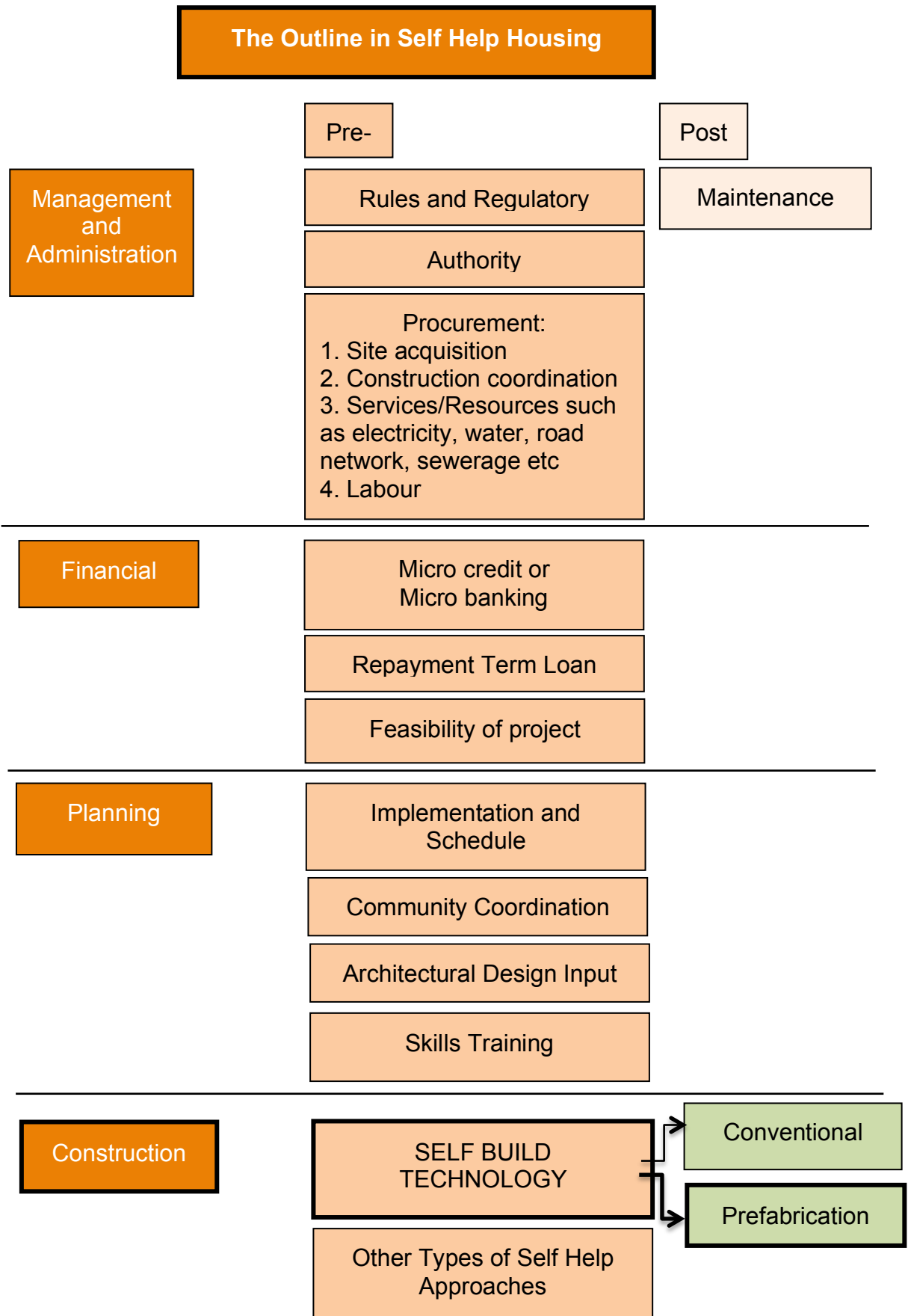


Figure 2.2: The branch of study involved in Self Help Housing

The need to evolve from one system to another is a necessity in any construction industry. This is to suit not only the availability and accessibility of local materials but also the social acceptance of the construction methods. One of the many examples is a participatory project led by a European architect, Anna Heringer from University of Linz, Austria, built a two-story house with the local community in a rural area of Rudropur, Bangladesh. The project used conventional methods combined with improved modern knowledge of construction using local materials such as mud and bamboo. Nearly all the works were completed by hands without the aid of any technical machinery. Cows were used only for the mixing of the earth, water and rice straw mixture. Refer Figure 2.3.



Figure 2.3: Local earthen construction practice was improved to protect against rain and rising damp. The external walls are left while internal walls are plastered with clay plaster with light-coloured white mud.

In the case of Walter Segal legacy, its successor of self build concept has continually adapted his approach to meet their own needs and to change assessment of environmentally-friendly materials and standards of construction. This can be seen in one of their self build projects for a community centre in Nottingham, whereby the spirit of self help is still active but instead the construction technique advanced from the original Segal's method, creating its own approach.

The referred building is Chase Community Centre located in a desolate local shopping neighbourhood in St. Annes area of Nottingham, with a floor area of 600 sq. metres built by 26 unemployed people over a period of 18 months. Even though some of the work such as electrical, plumbing, plastering and installation of roof membrane were subcontracted, the major part of building the centre was done by the local people under the guidance of Technical Aid to Nottingham Communities (TANC). This self build community project has helped to improve the quality of life in the area by providing a venue, which the locals can be proud of. Refer figure 2.4.



Figure 2.4: Community Centre at St. Annes, Nottingham.



Figure 2.5: Community Centre at St. Annes, Nottingham departed from Segal's approach. Construction at the balcony using bolts and nuts.

In spite of everything, it used timber as the primary structure of the building, with modular coordinated dimensions. The most prominent feature in this centre is the usage of glulam timber trusses used to raise the curved roof, which is covered by grass on top.

However, similarities of Segal's construction still exist in most of the major sections of the building such as usage of timber in standard cladding materials in market sizes and no foundations other than paving slabs. The high quality training and work accomplished by the trainees' showed that it was possible to build anything when group effort is involved.

Other alternative to timber is to create a low-cost material using locally produced panels. A prototype using loofah-recyclable plastic panels (Poh, 2009) has proved to be a success in the quest of Elsa Zaldivar to provide cheaper local materials for a low income group in Paraguay. The panels are produced locally, hence reducing the transportation cost and labour for those around the villages. This programme started in 1992, in Caaguazu under a rural community programme where vegetables are harvested including loofah. The loofahs that are being used to be mixed-up with the recyclable plastics are of inferior in quality. After several trials, the panels now are suitable to be used as house walls and roofs. Besides the low-cost production process, the panels are designed for no wastage, that is, those that are worn out can be recycled into new panels. Refer figure 2.6.



Figure 2.6: The finished interior of loofah-recyclable plastic panels and testing colours on the panel.

There is also a technology that was demonstrated through housing projects in Thailand, Vietnam, Cambodia, Malaysia, Indonesia, Philippines, Laos, Myanmar, Sri Lanka, Papua New Guinea, Nepal and Fiji, is the Self-Contained Housing Delivery System (SCHD) which consistently undercuts conventional construction systems by 30 to 50 % producing affordable housing for middle and low income groups.

Habitat Centre of AIT (1996), Bangkok has developed SCHD System using compatible building components by creating a complete modular interlocking building system especially well suited for construction by unskilled labour. It eliminates the need for heavy construction equipment since all the components have been designed to be lightweight, requiring no more than four persons to manually put each component in place, thus reducing the requirement for capital investment. The construction is an open system where any of the components may be substituted by locally available materials.

This research did not include establishing self-help groups or organisations. It is another area, which is as important as the planning and building process of the method, and usually involves issues such as administration, management, funding, services on site, etc. WSSBT (1995) (Walter Segal Self Build Trust) prepared a report showing on how Local Authorities can work with self build groups bringing wider social and environmental benefits to both groups in terms of legal matters, access to land, infrastructures plus building codes and regulations.

Eventually, the system may have socio-economic implications in a way that leads to an alternative approach to mass housing development. The practicality of the method might depend heavily on current economic and administrative frameworks of the country concerned.

GRET (1996) (Groupe de Recherche et d'Echanges Technologiques) that the 2 key elements for the success of their housing project in the Municipality of Caucaia in the Metropolitan Region of Fortaleza, Brazil are:

1. Partnerships – in this case, the partnership amongst the social services of the local authority, the community, facilitates organisation which called themselves GRET and the Federal University of Ceara, which tested innovative technologies to be used in the construction.
2. The holistic approach, which addressed not only housing and basic infrastructure but included problems of employment education and training, social facilities and services through a broad-based participatory approach to planning, decision-making and resource management

Nevertheless, the concept proposed could offer a new alternative for Malaysia housing development. Further detail study is intended to adopt the Segal concept to suit the Malaysian context. Eventually the acceptance and awareness of the public is considered to be the fundamental of this 'self build' approach. As Jaafar (1996) pointed out, self build housing concept in Malaysia is not a common practice, even for the construction of traditional houses. A number of factors that contributed to the flagging level of this concept must be dealt with appropriate steps in order to promote the idea. *(Further discussion in Chapter 5 regarding Segal Method and similarities in Malay traditional houses)*

Prefabrication as such is not a contemporary concept. Referring to the oldest known examples, such as woven-palm leave sheets, standardised modular floor layouts and

wall panel elements stand out as proof of the validity of the concept. However, until now hardly any attention has been paid to the use and capacity of prefabricated systems in the informal construction sector.

So far, the role of building technology has always been of a minor importance for the issue of self help versus agencies provided public housing. However, in the hands of local communities building technology can offer a very powerful tool. It can provide a better control over low-income people's own construction process (Stallen et. al. 1994).

Based from 7 cases of prefab system used in self help housing construction Stallen et. al, 1994, concluded the following:

1. **Costs:** The argument of cost saving leads to tendency of usage in traditional or conventional if using prefab leads to marginal cost savings. In some cases [China, India (zip block) and Nicaragua), the price paid for prefab materials is less than traditional local building materials due to scarcity of the latter or accelerated construction time. Generally, in Latin America prefab is affordable. When observed Asian cases, it was impossible to take operation and maintenance cost into account for total analysis. Gough (1996) accounted that building materials contributed 60 – 65 percent of non-land cost of housing in general, and 86 percent of the cost in the case of self help housing. That is considered to be a great saving for those who cannot afford conventional houses.
2. **Level of skills:** Prefab building process widens access to employment because the level of skills required is lower than in traditional building. Almost in all cases the potential input of unskilled labourers in prefab building was found to be greater than in conventional building.

3. **Participation of Women:** Participation of women is limited because of their lower physical strength and traditional negative societal attitude towards their participation in the building process. Therefore, a less competitive, a less male-dominated environment and maintaining weight of produced elements less than 20kg. Case studies showed that the weight of the prefab elements seemed to be the major disadvantage among the women.
4. **Labour intensity:** The assembly of the prefabricated elements is considerably less labour-intensive. Case studies in India (using funicular shells) and China (hollow core panels & prefab elements) required less input per square meter compared to conventional construction of a single storey house.
5. **Labour burden:** This matter is determined on self-help builders themselves by the assembly time of prefab elements and the social obligations, which resulted from participation of unpaid helpers.
6. **Assembly versus Production:** Assembly phase is the key process for the self help users. The assembly of prefab elements requires less skills and technical support, whereby these elements are produced either by private sectors or non-profit organisations. Case study in Colombia (Servivienda) had mobile factories disseminating prefab panels using local materials.
7. **Economic potentials:** Economic potentials of prefab lie in the development of using local resources like labour and materials, consequently promoting prefab to develop itself further to a wider implementation. Case studies such as China, India

and Colombia have promoted the local know-how aspects in technology and materials with limited scale. The involvement of bamboo in Colombia requires a balance act ecological maintenance whereby replanting of bamboo trees are carried out. Nevertheless cases in Nicaragua and Colombia (Servivienda) rely heavily on external inputs as well as obtaining spare parts for the prefab systems from abroad.

8. **Relationship between prefab and community development:** In Asian cases, most frequent form of self help is among the family members. Due to this approach, there is no indication that the use of prefab facilitates community development or stimulates large organisations. Contradictory to Latin American cases, whereby there is more communal approach to construction but whether prefab stimulated the development is difficult to determine.

9. **Open versus closed prefab systems:** Open systems are easily affected by bad quality of other prefab elements or the use of badly fitting non-prefab elements. Closed systems have the disadvantage of their low adaptability to evolutionary changes at later stages. In cases quoted by Stallen et. al. (1994), either prefab elements are limited on grand scale dissemination (some parts have to be obtained from the factory that produced it or they are incompatible to other materials and components).

Stallen et. al. (1994) also identified the conditions, which facilitate the use of prefab systems for self help, and mutual aid housing:

1. **Accessibility of prefab materials:** Decentralisation of supply markets for raw & finished building materials. Cases in China, Colombia & Mexico show

decentralisation of the market via local prefab plants has increased accessibility of building materials.

2. **Technical assistance:** The popularity of prefab is enhanced if self-help builders and the local contractors are provided with technical assistance in the production and assembly of prefab elements. The supportive network of in-field technical assistance and training directed at self-help builders stimulate adoption of prefab.
3. **Role of the promoter:** Promoter can be a government institution, an NGO or an individual to introduce and disseminate prefab technology to user groups. There was not a single case in which a social group spontaneously was able to choose a prefab system without the guidance of a promoter.
4. **Introduction of prefab and its innovative:** This again stresses on the crucial role of a promoter and its intensiveness in introducing prefab systems. Case studies in China where the many people work in small prefab plants have brought wider awareness of the technology. In the Servivienda case in Colombia innovations, there was the use of mobile prefab units.
5. **Existing indigenous prefab and its influence on new prefab:** It is known that prefabrication is found in most cultures. Therefore no genuine prefab culture exists. Instead, a more appropriate word is 'standardised modularism', in which the user and builder deduce their experiences to recognise and facilitate present day prefabrication.

6. **The organisational capacity of the prefab delivery system:** It is crucial for the sale of the application of prefabrication. It matters at which level prefabrication delivery is organised, as it has direct consequences for the scale it has been implemented.

As a result, Stallen et. al. (1994) reviewed the advantages of using prefabricated systems for low-income households in self help housing activities as follows:

1. Cost – referring to the case studies, usage of prefabrication as compared to conventional building construction showed a significant cost savings.
2. Employment opportunities – increase in employment opportunities in unskilled or semi-skilled labour.
3. Level of skills – as the prefabrication technologies extends access to employment since the level of skills required is lower than in traditional building construction.
4. Participation of women – a mixed impact since it depends on how the prefabricated systems are designed. A straightforward prefabricated design has a better chance for women to find employment in this sector seeing as it requires lower level of skills than in traditional building construction.
5. Utilisation of local resources – one of the most important benefits of exploiting light and small scale prefabrication systems for self help housing as compared to heavy and large scale systems, lies in its potential to develop and use local resources. This increases the degree of self-sufficiency in self help housing using prefabricated systems.
6. Accessibility of prefabricated materials – decentralisation of the supply for raw and finished building materials is a precondition for broader application of prefabrication in low-cost housing.

7. Technical assistance – the popularity of prefabricated systems would improve further among the self help house builders and contractors when technical assistance is provided in the production and assembly stages.
8. Role of the promoter – the promoter plays a crucial responsibility through introduction and dissemination of prefabricated technology.
9. Organisational Capacity – NGOs and government act together to ensure dissemination of knowledge on prefabricated techniques is being executed.

The degree of modularity in prefabrication and its concurrent usage can be seen as an advantage to expedite assembly process for those that need houses. Some would say it looks temporary since the structure are detachable and exchangeable when there is the need to do so, but there are more permanent solutions and quiet sturdy in the form of panelised designs (Architecture for Humanity, 2006). The idea of prefabrication is to be able to mass produced and simplify to the point where nearly any able bodied human can aid in construction.

2.10 Chapter Summary

Self help housing is not an innovation of the 1950s or 1960s. People throughout history have practised it. It is only in recent times that people have not built or participated in building their own homes. By far, the role of modern technologies is always secondary to be considered in self help housing process, limiting this approach to accept the conventional construction when supply houses for the poor. On the contrary, when local communities manage appropriate technologies, it added self-control in their participation of housing construction. What needed to be gauged is to find a technology that is cost effective, suitable for the local community either socially or culturally and can be encouraged technically to be appropriately used in the

development of self help housing. Therefore, role players either in public or private sectors would need to deal with the distribution of such knowledge informing such alternative to own a house is possible to do in an organised approach.

In the Eighth (2001-2005) and Ninth (2006-2010) Malaysia Plan the government of Malaysia emphasised programs on community participation from the Local Agenda 21 (Malaysia 2001; Malaysia 2006). Self help housing has been seen as a community project that encouraged people to empower and raise their consciousness as well as maintain social control and promotes democracy. This gives the people confidence and determination as it would show them opportunities through self help housing.

It would be something to look for if self help housing is structured and organised in such a manner that a group, or family members, or local community could participate in building their own houses through the advantages of using prefabricated components. The awareness of public on this matter is still at a low level. Therefore by having a self help method in prefabricated housing industry could reduce this gap.

Further more, availability of new materials categorised as prefabricated or IBS technology would be useless if there is no accessibility for the end-user to benefit it. Most of these prefabricated components are still going through research and applying for patent rights from SIRIM⁷, hence making it not possible for any mass production yet. The size and weight of these prefabricated elements is one of the key factors that warrant accessibility. Knowing very well that self help housing attempts to reduce cost through labour intensity and usage of heavy machineries, intervention in production or

⁷ SIRIM – Standard & Industrial Research Institute of Malaysia where any products (in this case – prefabricated components) created and applying for originality certification (patent) to be produced and marketed to the public.

distribution of building materials must take into account the nature of self help construction itself.

The technical straightforwardness of the method could transfer the control of building construction from commercial developers into the hands of prospective owner/occupiers themselves. This alternative approach to housing construction is different from the fabricated system in two ways. Firstly, it utilises basic raw materials in their uncut market sizes. Involvement of advanced intermediate manufacturing is not required, due to the simplicity of the construction method. Secondly, the method allows for labour with limited skills to construct the house.

Then again, fabricated system requires the skills of a trained specialist, which increases the cost of construction. These significant two factors allow the possibility of affordable quality housing in self-build schemes. To apply the method in different contexts, good understanding of regional dynamics should be attained through research and study. For example, material suitability and availability may differ from one country to another. Climatic requirement might also be an important parameter in the development of the system. The acceptance level of this method plays a vital part in the implementation.