

**A NEW MODEL OF PUBLIC PRIVATE
PARTNERSHIPS FOR AFFORDABLE HOUSING IN
MALAYSIA**

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DECLARATION

No portion of the work referred to in the dissertation has been submitted in support of an application for another degree or qualification of this or any other university or other institution of learning.

ABBREVIATIONS

ACDP	Aboriginal Communities Development Program
AEHIF	Aboriginal Environmental Health Infrastructure Forum
AIM	Amanah Ikhtiar Malaysia
ASPEK	Association for Cooperative Housing, Indonesia
BNM	Bank Negara Malaysia (The National Bank)
BOOT	Build-Operate-Own-Transfer
BOT	Build-Operate-Transfer
BTN	The State Savings Bank
CDRC	Corporate Debt Restructuring Committee
CPF	Central Provident Fund, Singapore
DBFO	Design, Build, Finance and Operate
EPF	Employees' Provident Fund
EU	European Union
GB	Grameen Bank
GDP	Gross Domestic Products
HDA	Housing Development Account
HDA	Housing Developer Association
HDB	Housing Development Board, Singapore
HRC	Housing Research Centre
HRM	Malaysian House Price Index
LC	Low-Cost
LCM	Low-Medium Cost
MADEC	Mildura and District Educational Council
MAPEX	Malaysia Property Exposition
MBSB	Malaysia Building Society Berhad
MP	Malaysia Plan
NAPIC	Property Information Centre
NEP	New Economic Policy
NSW	New South Wales, Australia
PFI	Private Finance Initiative
PLUS	Project Lebuhraya Utara Selatan Berhad, Malaysia

PPI	Private Participation in Infrastructure
PPPs	Public Private Partnerships
PPRB	Integrated People's Housing Programme for Squatter Resettlement
PRC	Peoples' Republic of China
PURPA	Public Utility Regulatory Act
REHDA	Real Estate and Housing Developer's Association Malaysia
RM	Ringgit Malaysia (£1 ≈ RM6)
SEDCs	State Governments and State Economic Development Corporations
SLCHP	Special Low-Cost Housing Programme
SPNB	National Housing Corporation
TAFE	NSW Technical and Further Education
TAKA	1 taka ≈ £0.01
UFP	Unita tecnica Finanza di Progetto, Italy
UNCHS	United National Center for Human Settlements (habitat)
UNDP	United Nation Development Programme
USM	University of Science Malaysia

ABSTRACT

Governments all around the world have tried to address the problem of providing adequate and affordable housing to the nation over the last three decades. With no exemption, the Malaysian Government is committed to provide all Malaysians, particularly those in the low-income categories, access to adequate and affordable housing. Even with the numerous housing programmes implemented over the various five-year Malaysia Plans, there is still a shortage of affordable homes for the low-income people. The shortage of low-cost dwelling units, along with the high cost of limited land has resulted in rapid expansion of squatter settlements in urban areas.

Around the World there is a shift from public to private finance for the delivery of infrastructure projects or related services. However, it has not been implemented to the same extent in affordable housing. This investigation examines not just the measurable deviation from the Malaysia Plan targets, but more importantly, determines an explanation for the deviation and develops a new model of public private partnership for affordable housing. The aim of this research is "to develop a housing model for implementation in affordable housing schemes through the promotion of innovative partnerships between the Government and Private Developers in Malaysia".

The research methodology was a combination of literature investigation and inductive reasoning in which a theoretical proposition was tested and developed during data collection and analysis. The data collection included literature review, questionnaires, and follow up interviews with private developers in Malaysia. This research study identifies three models for partnerships between the Government and private developers for affordable housing in Malaysia. An evaluation process was undertaken to assess the appropriateness of the proposed models. The three models will provide tangible benefits in the provision of and access to affordable housing.

1.0 INTRODUCTION

1.1 The General Context

Governments all around the world have tried to address the problem of providing adequate, affordable and sustainable housing to their nations over the last three decades. The South African Government, more recently, has planned to increase housing delivery on a sustainable basis to a peak level of 350,000 new units per annum for a number of years. However, the progress is slow and the problem of large informal settlements still exists and is growing (UNCHS, 2000). This phenomenon has become evident particularly throughout Africa and major Asian cities as unprecedented numbers of rural migrants move into urban areas in search of employment. Low levels of income and limited opportunities for employment have reduced the affordability of the most basic housing, resulting in large informal 'shanty-style' settlements with little or no infrastructure such as services or amenities. Millions of families live in housing that is not only structurally unsound, but also overcrowded and the source of physical and budgetary problems (Graydon, 2002). For example, an estimated 4.6 million South Africans live in squatter camps where there are sewer and water outlets provided at one point per square kilometre (Business Day, 2002). Affordable housing in Africa and Asia is required on a massive scale and strategies need to be developed for immediate implementation.

The world has entered the urban millennium with nearly half of the world's people now city dwellers, as compared to 30 per cent of the world population in 1950 (United Nations Population Division, 2002). The proportion of urban dwellers rose to 47 per cent by 2000 and is projected to attain 60 per cent by 2030. According to UNCHS (Habitat), with increasing rate of urbanisation and a high rate of population growth the housing crisis is likely to worsen in the future. These factors have contributed to the increase in urban poverty. In Africa, the critical housing problem results from the continual and steady migration of people from the country into cities (Kilgour, 2000). Urbanisation is a major and growing trend on the African continent although some of the expansion is the

result of a natural increase of populations in cities. With 70 percent of its population living in cities and towns, Latin America and the Caribbean is the most urbanised region in the developing world, with 40 – 60 percent of all urban residents living in informal settlements. In Asia, 37 percent of its population lives in urban areas. By 2025, 51 percent of the population will be urban (Yap, 2001). If the present rate of growth continues, Asia will need to double the size of its cities or their number to accommodate its growing urban population.

It is estimated that around 35 million houses need to be constructed annually in the next two decades. This is to accommodate newly formed households and to replace inadequate units in urban areas of developing countries. Hence, about 95,000 units need to be constructed daily of which two thirds will be in the Asia and Pacific region – 16 per cent in South America and the Caribbean, 11 per cent in Sub Saharan Africa and 8 per cent in North Africa and the Middle East (Erguden, 2001).

The World Bank estimates that the world's population will grow by at least 40% to 8.5 billion, and the global labour force growing even faster, by 60%, increasing from 2.5 billion to 4 billion workers by 2025. With globalisation and greater flow of information, people's expectations have heightened. This poses greater challenges for governments, particularly in developing countries. Housing conditions that were considered adequate before may no longer be acceptable.

In most developing countries, government strategies seem to be failing because of the lack of the major injection of funds required for the provision of housing to low-income groups (Ong & Lenard, 2002a). The problems of access to affordable housing for the poor are too great for any one group to solve alone. Neither the government nor the private sector on their own is capable of managing our cities. A possible way forward is to positively promote development of new relationships between the government, the private sector, mainstream financial institutions, and the local community to bring about greater efficiencies in reducing costs, which in turn giving greater value to those who desire to own homes.

1.2 Defining the Research Problem

Housing and shelter have been considered as part of basic human needs as well as human rights. It is integral to the economy besides being a social requirement by expanding the construction industry, creating employment opportunities and contributing to capital formation. This study focuses on Malaysia. The Malaysian Government is committed in providing adequate and affordable shelter with basic amenities for its population, especially for the low-income group. The Government's commitment in housing provision proclaimed by its political leaders is reflected in the Government's annual budget and five-year development plans since 1966. The Federal Government has made low-cost housing as one of the nation's urgent social problems, which must be given top priority (Wee, 1996).

Research undertaken by the University of Science Malaysia (USM) showed that there were 557,670 squatters living in 83,527 illegal housing units in 1999. Kuala Lumpur City Hall has implemented the redevelopment of squatter camps, especially in urban areas since the second-half of the Fourth Malaysia Plan under public private partnership (Agus, 2001). Under the programme, the number of projects is expected to increase to more than 20 covering a total area of 1500 hectares. It is expected to accommodate more than 35000 low-income households. Although there may appear to be adequate housing for all people within the country, there is considerable disparity in the housing quality and unequal distribution of houses from state to state.

In the past, the Government of Malaysia has relied on the private sector as the catalyst of economic growth. Now the social responsibility in providing the housing for masses needs to be shared between the Government and the private sector. Even with the various low-cost housing programmes, there is still an acute shortage of affordable homes for the low-income people. The demand for houses is expected to increase due to the expanding population, the growing number of new households and increased population (Ministry of Housing and Local Government, 1999). A total of 615,000 units of housing are to be completed during the Eighth Malaysia Plan (2001 – 2005). About 37.7% is

to meet the demand for low-cost housing and 21.3% for low medium-cost housing. If plans become reality, there would be at least an excess of 230,000 low-cost houses built in the country by 2005, on top of the volume required of the public and private sectors under the Eighth Malaysia Plan. The total output may seem substantial, but based on current and future demand, it cannot be ascertained whether the number is sufficient to meet the nation's needs (Buang, 2000). However, in practice, much evidence points to the conclusion that housing programmes in Malaysia have favoured to the middle and high income groups at the expense of the performance of the low-cost housing programme (Agus, 2002). The Housing Research Centre under the University of Putra Malaysia identified that 90 percent of the houses required in the country are below RM80,000.

There is a widening gap between policy formulation and implementation. The current status of housing delivery to low-income groups is far from satisfactory (Erguden, 2001). For the poor and lower-middle income group, the greatest stumbling block to owning their own home is the lack of and accessible to affordable housing. This is a major urban phenomenon while in the rural areas, the poor are landless and squat in Government reserve land. For those who are fortunate enough to own an affordable houses, they often end up with poor quality and badly designed houses that are insufficient for large families. This creates a high density living environment that is more like urban slums and concrete jungle devoid of any green and open spaces.

Around the world, there is a shift from public to private finance for the delivery of public infrastructure projects and related services (Shaughnessy, 1995). With the realisation of the importance of private participation and the growing awareness of difficulties and limitation of public funding have led many governments to adopt public private partnerships (PPPs) and private finance to fund public infrastructure projects (Ong & Lenard, 2001). Increasingly, the concept of PPPs covers a wide range of activities including funding in construction, privatisation and concession of large scale, capital-intensive infrastructure projects through Build-Operate-Transfer (BOT). It is believed that PPP's could bring together the government and private sector's expertise to

deliver better public services beyond reduction in financial burden (Merna & Owen, 1998; Keong & Alum, 1997).

The role of government is changing from 'direct provider' to 'enabler' of housing via a more appropriate regulatory and financial environment (Smith, A, 1999). This does not imply a reduction in government responsibility in the provision of affordable housing to the low-income group. It encourages an integrated approach to the use of financial institutions, human and physical resources in public, private and so called the "third" sectors – the community so that full advantage can be taken of the strengths and capabilities of each of them (Ong & Lenard, 2002a). This changing landscape will need to be understood by all players involved in the construction industry to effectively implement the approach in the new era of privately financed infrastructure and public private partnerships (Allen, S. et al 2002).

There has been much discussion about public-private partnership in delivering publicly infrastructure projects or related services, especially after the adoption of the model in the United Kingdom. (Walker & Smith, 1995; Merna & Njiru, 1998; Merna & Smith, 1996; Levy, 1996). However, the housing industry has not adopted this approach to the same extent. In addition to it, provision of housing does not lie solely in the number of humanitarian programmes initiated by institutions such as the World Bank, non-governmental organizations or even governments. It is now recognised that it lies with the marginalised communities themselves (Lenard & Powell, 2001). Therefore, sustainable and affordable housing policy development needs to be based on a sound philosophy underpinned by community, cultural and environmental values.

1.3 Preliminary Methodology for Phase I Investigations

This research is divided into Phase I and Phase II investigations, in which the research aim is expressed as:

“To develop a housing model for implementation in affordable housing schemes through the promotion of innovative partnerships between the Government and Private Developers in Malaysia”.

Taking all the issues and problems outlined above into consideration, this study was focused on the promotion and management of partnerships between the Government and private housing developers in the provision of affordable housing in Malaysia. This required a comprehensive examination of the housing market and national policies being implemented in Malaysia against which innovative housing solution and recommendations can be developed for the implementation of affordable housing. An extended literature review was undertaken during the Phase I investigations, which aimed to achieve the objectives set out below:

- a) Define “affordable housing” in the context of “low-cost housing” in Malaysia.
- b) Examine the national housing policies, guidelines and standards currently enforced by responsible authorities at national, state and local government levels in Malaysia.
- c) Examine the housing programmes implemented by the Government and how have they performed throughout the various five-year Malaysia Plans.
- d) Investigate the current state of the low-cost housing sector in order to identify the major issues and problems associated with the low-cost housing development.

- e) Explore through literature and detailed case studies, both in developing and developed countries, the application of private finance and public-private partnership in the funding of infrastructure projects.

To this end, the literature review is divided into two main areas: (a) housing market and policies in Malaysia with special emphasis of low-cost housing; (b) private finance and public private partnership for infrastructure projects or related services to determine if the process is applicable in the implementation of affordable housing.

1.4 Research Overview

The thesis outline is presented in Figure 1.1 and the specific chapter descriptions are as follows:

Chapter 1 provides a general understanding to the reader of why this research was undertaken and the context in which it can be applied. This chapter also contains examination of the global housing condition and defines the research problems and questions that need to be addressed. This chapter also set out the preliminary methodology for Phase I investigations in which findings will be gathered from literature review.

Chapter 2 begins with defining “affordable housing” in the context of low-cost housing in Malaysia. It provides a general view of the history of housing development and the concept of national housing policies in Malaysia. This is followed by identification of the current issues and problems faced by the housing industry in the development of low-cost housing. The role of the Malaysia Employees’ Provident Fund (EPF) is being analysed, which can play a significant role in the provision of finance in housing. The first four objectives of the Phase I investigations will be dealt with in this chapter.

Chapter 3 aims to provide a general understanding of the concept and importance of public private partnership in funding infrastructure projects, followed by reviewing the development of project finance around the world.

Build-Operate-Own-Transfer (BOOT) concession contract is selected to illustrate how private finance is used to finance infrastructure projects. Four case studies are explored to illustrate the key factors for successful projects procured by privately financed concession contracts with a view to assessing the suitability of such financing solutions in the provision of affordable housing. In addition, international case studies of affordable housing are also presented to generate discussion and examination of the provision of “community-based affordable housing”. Objective five of the Phase I investigations will be dealt in this chapter.

Chapter 4 draws on the rationale and findings from Phase I investigations and presents the subsequent methodology for data collection and analysis in Phase II investigations. A research proposition is drawn up for the study, and validity of the methodologies chosen is discussed.

Chapter 5 presents the results of the Phase II investigations. It covers a comprehensive discussion that attempts to develop the public private partnership models for affordable housing in Malaysia.

Chapter 6 discusses and presents the new public private partnership models for implementation in affordable housing schemes in Malaysia.

Chapter 7 will summarise the findings of this research and presents the conclusions to the whole study with respect to the research proposition. A discussion of the limitations of the study and recommendations for further research are also presented.

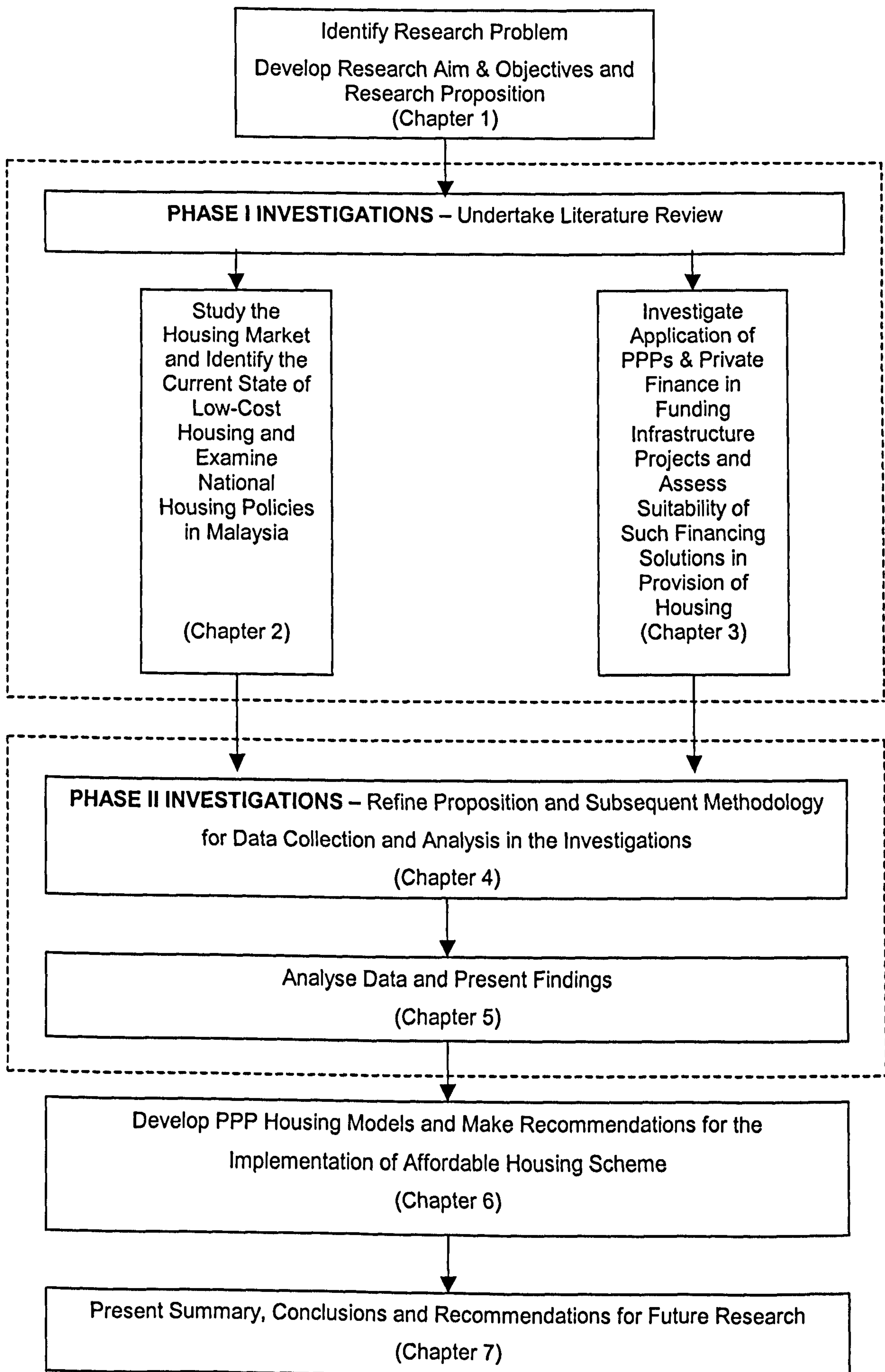


Figure 1.1. Thesis Outline

2.0 HOUSING MARKET AND POLICIES IN MALAYSIA

2.1 Introduction

Dynamic economic developments in the last two decades have led to rapid urbanisation due to high rates of rural to urban migration. East Asia has several of the world's mega-cities, with populations exceeding 10 million. Housing has become one of the single most important issues in these large sprawling cities and solutions thus far are not keeping pace with the growth in the need for housing.

The shortage of low-cost dwelling units, along with the high cost of limited land has resulted in rapid expansion of squatter settlements in urban areas. Like many other countries, the key objective of the Malaysian Housing Policy is to provide all Malaysians, particularly those in the low-income categories, accessibility to adequate and affordable housing. The Government emphasises its role as an enabler and facilitator and provides institutional support for the delivery of houses to low-income groups.

This chapter addresses the first three objectives of the research. The aim of this chapter is to define "affordable housing" in the context of "low-cost housing" in Malaysia. It gives a brief review on the housing stock, type, and homeownership, followed by discussing the implications of population profile, income distribution, and Gross Domestic Product on the housing sector towards Vision 2020. It also reviews the situation of the housing market and policies in Malaysia since its independence, with special emphasis on low-cost housing development. In order to identify the issues and problems faced by the housing industry in the provision of low-cost houses, targets and achievements of various Malaysia Five-Year Plans will be examined. It does not attempt to address every likely housing issue but focus on the key policies that deserve attention. The role and participation of main players involved in housing industry are examined so that appropriate actions can be taken and Government policies evaluated to achieve affordable housing development. Towards the end

of the chapter, the role of the Malaysia Employees' Provident Fund (EPF) is analysed, as it can play a significant role in the provision of finance in housing.

2.2 Defining Affordable Housing

The provision of adequate and affordable shelter is not just a matter of the quality of the structure in which people live. The Habitat Agenda defines it as:

Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate space; physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation; adequate basic infrastructure, such as water-supply, sanitation and waste-management facilities; suitable environmental quality and health-related factors; and adequate and accessible location with regard to work and basic facilities: all of which should be available at an affordable cost.

In other words, affordable housing also means that all costs associated with housing such as personal or household financial costs should be at a level sufficient to ensure that the attainment and satisfaction of other basic needs are not threatened or compromised. Housing subsidies should be available for those unable to obtain affordable housing, and tenants should be protected from unreasonable high rent (The United Nations Committee on Economic, Social and Cultural Rights, 1991).

In United States of America, the level of income of a family and the housing price often determines affordable housing. As in the "Title II of the Cranston-Gonzalez National Affordable Housing Act" of United States, "affordable housing" is defined as that renting for no more than 30 percent of income for a family making no more than 65 percent of the area median income for rental units. For homeownership units, it defines "affordable" as a house selling for no more than 95 percent of the area median purchase price (U.S. Department of Housing and Urban Development, 2002).

A joint research project at the University of Sheffield and the University of Cambridge states that:

There are considerable differences between local authorities about what is regarded as affordable housing. Some only want rented housing (and sometimes shared ownership) delivered by a registered social landlord and their policies are applied accordingly. Others are happy to include housing for sale at discounted market values or even low cost market housing. In general, northern local authorities are more likely to accept low cost market housing as a suitable way to meet local affordable housing needs. Commuted payments are accepted across a range of authorities, notably in areas where there is an overall shortage of land for housing.

In United Kingdom, Government policy has regarded the need for affordable housing as a material planning consideration that should be taken into account in the Local Plans for residential development. Provided local planning authorities have policies in their adopted statutory development plans that assess the need for new affordable housing in their districts, they may require private developers to contribute to meeting this need. Affordable housing may include homeownership, rental housing, special needs housing, and housing for the homeless.

The Director of Housing Research Centre in Malaysia defined affordable housing as “housing involves providing appropriate housing for different income groups in the country; at the correct cost of ownership as well as at a certain respectable level of housing quality, especially for the low income group”. He further commented, “Affordable housing should not be limited in house prices and building quality or finishing per se. It covers the entire gamut of the acquiring process; cost; use and maintenance of the housing units in communal neighbourhoods” (Abang Abdullah, 2002).

The author defines “affordable housing” as low-cost housing made available to and affordable by very-low, low and medium income persons and households who cannot either rent or purchase housing appropriate to their needs in the

free housing market. An element of subsidy is often evident to make such housing accessible to the targeted groups and its affordability must not be achieved by compromising appropriate design and construction standards.

The general definitions of affordable housing do not necessarily mean low-cost housing. However, in this research these two terms are used interchangeably. In the case of Malaysia, one of the objectives set in the five-years development plans is to provide all Malaysians with accessible, adequate and affordable housing, especially to the lower income groups. "Accessible" implies that there must be adequate supply of houses for purchaser to choose from and to buy. "Affordable" means that the prices of such houses must be within the range for which the prospective purchaser can readily obtain the necessary end financing to facilitate his purchase. According to the Ministry of Housing and Local Government guidelines in the 1980's, low-cost housing is defined at a ceiling price of RM25,000 per unit or less, which can only be sold to households with monthly income of between RM500 and RM750. The types of houses delivered under this programme may include flats, terraced or even detached houses. Each low-cost house must have a minimum built-up area of 550 – 600 square feet comprising two bedrooms, a living room, a kitchen and a bathroom-cum-toilet. A new design with a floor area of 60 square metres (or 650 square feet) incorporating three bedrooms was introduced in 1998 to improve the quality of low-cost houses. However, the minimum design standard and maximum selling price for low-cost housing varies from state to state.

It is also important to note that the Eighth Malaysia Plan (2001 – 2005) has initiated a major policy shift. The Government has now committed to constructing 61.5% of the planned target on low-cost housing to the lower income groups. Unlike in the previous plan, the entire burden of building low-cost houses was shifted to the private sector. Special emphasis will be given to low-medium cost houses during the plan period. These major shifts should be absorbed and understood by all players concerned in the housing development process, especially local and state authorities as well as private housing developers (Anon, 2001b).

2.3 Malaysia As A Country

Malaysia is on its way to becoming the fifth so-called "tiger" or newly industrialised economy of East Asia, along with Taiwan, Korea, Hong Kong, and Singapore (World Technology Evaluation Center, 1997). It is located at the heart of Southeast Asia, which has a total land area of 329,8000 square kilometres consisting of a peninsular area with 11 states (East Malaysia) and a Federal Territory of Labuan, Sabah and Sarawak (West Malaysia) on the island of Borneo (see Figure 2.1). The two regions are separated by about 540 kilometres of the South China Sea. Malaysia is a multilingual culture and it has a population of 24.3 million people (Department of Statistics, 2002). The major languages are Bahasa Malaysia (the national language) and English (the official business language), with Chinese, Tamil, and Hindi also spoken by many of its residents. Malaysia is one of the very few countries in the world to have a long-term vision or plan, spreading over about 30 years - i.e. 1992 to 2020. This plan is called Vision 2020, i.e. by the year 2020 Malaysia aims to become a developed and industrialised country in all dimensions, that is, economically, politically, socially, spiritually, psychologically and culturally.

Figure 2.1. States of Malaysia



2.3.1 Housing Stock

The housing industry in Malaysia has been very active, at least in terms of quantity. According to the housing census of 1991, published by the Department of Statistics Malaysia, there were 4,060,900 housing units in the country catering for 18.379 million people or 3.538 million households. There were also 647,460 housing units were built during period 1991 – 1995, as shown in Seventh Malaysia Plan (1996 – 2000). In the report produced by the Valuation and Property Services Department, which provides the most conservative figures on housing accounting only for dwelling units in housing estates, an additional 78,694 houses were built in 1996. All these figures show a total of 4,787,000 housing units were built for a population of about 20 million people as in 1996. However, the problem is more of accessibility and affordability (Goh, B.L. 1997).

2.3.2 Housing Type

The housing units in Malaysia are categorised into five main groups, namely houses, apartments or flats, shophouses, rooms and others. Each group may be further subdivided into detached houses, semi-detached houses, terrace houses and so on. Most of the dwelling units in Malaysia are in the form of houses, and flats and apartments are becoming popular in major urban areas.

In general, the current house pricing in Malaysia can be classified into the following four categories:

- Low-cost houses priced ranging RM25,000 – RM42,000 per unit;
- Low medium-cost houses priced ranging RM42,001 – RM70,000 per unit;
- Medium cost houses priced ranging RM70,001 – RM100,000 per unit;
- High medium-cost houses priced ranging RM100,001 – RM140,000 per unit;
- High-cost houses priced at above RM140,001 per unit.

The housing price largely depends on location and the housing type. Generally, the cheapest houses are located in Kelantan while the most expensive houses are in Kuala Lumpur. For example, in Kuala Lumpur, a single-storey terraced house with an area of 900 square feet would normally cost an enormous RM180,000. On the other hand, a RM100,000 dwelling unit in Kelantan can take a form of double-storey terraced house of 1200 square feet. According to the Malaysian House Price Index (1999), the average price of single storey terraced houses was RM94,632, double storey terraced houses (RM171,802), single storey semi-detached (RM125,928), double storey semi-detached (RM315,097), single storey detached (RM189,155), double storey detached (RM610,629), condominiums (RM178,239) and flats (RM91,167).

2.3.3 Homeownerships

Most housing units in Malaysia are owner-occupied. Out of a total of 3.4 million occupied housing units in 1991, 67 percent or 2.3 million houses were occupied by the owners themselves, according to the General Report of the Housing Census (1995). Conversely, approximately 1.6 million or 32 percent of the total units were occupied by those who did not directly own the property. This data on owner occupation was based on total households or families and not total number of housing units. Table 2.1 shows the ownership status of occupied housing units in 1991.

Table 2.1. Ownership status of occupied housing units in 1991 (in thousands)

Housing Type	Owner-occupied	Individual owners	Institutional owners	Unknown ownership
House	2,166.5	497.0	336.4	42.7
Apartment, shophouse	120.4	91.6	105.0	5.2
Others	18.0	15.3	22.6	1.4
Total	2,049.9	604.0	464.0	49.3

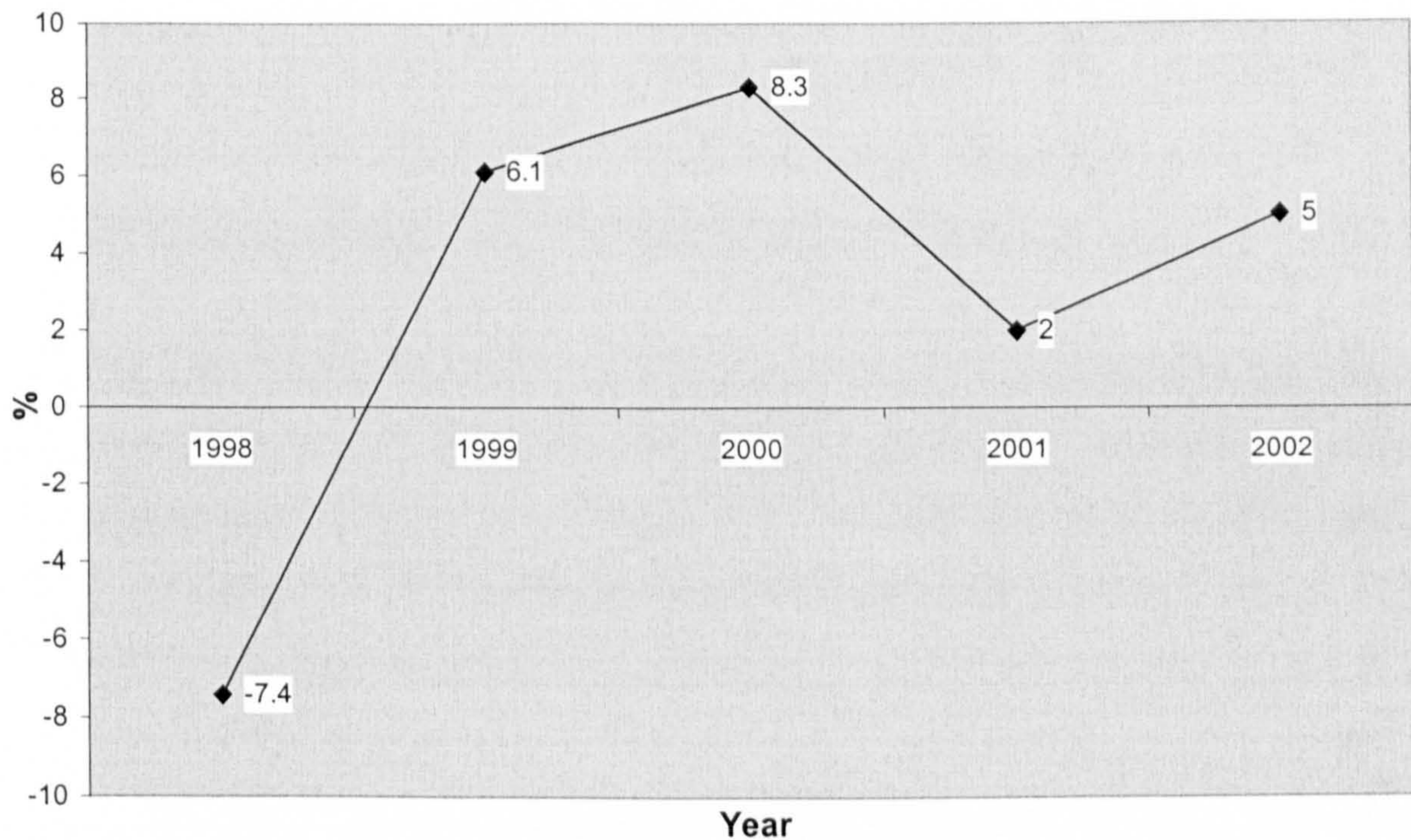
Source: General Report of the Housing Census, 1995, Department of Statistics, Malaysia.

2.3.4 Gross Domestic Products (GDP)

The Malaysia economic growth has accelerated since it gained independence in 1957. Prior to the onset of the Asian financial crisis that began in mid-1997, the nation has consistently experienced an average growth of 9% in GDP during the period 1987 to 1996 while inflation was contained at a low level of 3.5% (The 2001 Budget Speech). All the economic statistics indicate that the Malaysian economy has not only recovered but the recovery is better than that of other countries that were also affected by the crisis. After the GDP contracted by 7.4% in 1998, a growth of 6.1% was achieved in 1999 and 8.3% in 2000. Given the weaker economic performance of the United States of America and the discouraging recovery of Japan, world growth has subsequently been revised downwards to 2.6% with the GDP growth for the major industrialised

countries decelerating to 1.3%. The unfavourable external environment, precipitated by the slowdown in the US economy, has adversely affected Malaysian growth in real GDP in 2001. The recent statistics show a GDP growth of 2% in 2001, which can be seen in Figure 2.2.

Figure 2.2. Gross Domestic Product (GDP) 1998 – 2002



Source: Economic Report 2001/2002, Ministry of Finance Malaysia

The construction sector contribution to the GDP over the past five years has been on an average of 3.8%, worth RM7.5 billion annually. The construction industry including housing contributed about 3.4% of GDP for the year 2000 (National Housing Department, 2001).

For the Malaysian economy, GDP is forecast to grow by 4–5% in year 2002, supported by its domestic demand as well as the adoption of monetary and fiscal measures. The recovery in private sector investment and fiscal expansion will contribute to growth in the construction sector by 4.3% in 2002. If the predicted and anticipated economic recovery in the second half of 2002 materialises, the property market will experience some improvements, in particular during the last quarter of 2002.

2.3.5 Population Growth and Urbanisation

A lack of recent data makes it difficult to establish the full dimensions of the housing situation in Malaysia. The following section is based on the data from the Population and Housing Census 2000, published by the Department of Statistics Malaysia. The Population and Housing Census 2000 is the fourth nation-wide census conducted by the Department since the formation of Malaysia. The previous Censuses were being conducted in the years 1970, 1980 and 1991.

Housing provision normally lags behind the rapid growth of urban population. If houses are available, they are beyond the affordability of most low-income population in rapidly growing urban centres. According to the Population and Housing Census 2000, the total population of Malaysia was 23.27 million compared to 18.38 million in 1991 thus giving an average annual population growth rate of 2.6% over the 1991-2000 period. This rate was similar to that of the 1980-1991 period, which also recorded an average annual growth rate of 2.6%. State-wise, Selangor experienced the highest growth rate of 6.1% followed by Sabah (4.0%), Wilayah Persekutuan Labuan (3.6%) and Johor (2.6%). In terms of population distribution by state, Selangor was the most populous state (4.19 million) followed by Johor (2.74 million) and Sabah (2.60 million). With respect to urbanisation, it was observed that the proportion of urban population had increased to 62.0% in Census 2000 from 50.7% in 1991.

The Malay, are the largest ethnic group, accounting over half the Malaysia's population. With the oldest indigenous peoples they are also known as "sons" or "princes of the soil" – the Bumiputera. Of the total Malaysian citizens, Bumiputera comprised 65.1%, Chinese 26.0% and Indians 7.7%, the ethnic composition being 60.6%, 28.1% and 7.9% respectively in 1991. The total population is 24.6 million people as at December 2002 (Department of Statistics, 2002).

Table 2.2. Population Growth and Rate of Urbanisation

Year	Total Population	Urban Population	Rate of Urbanisation (%)
1911	2339000	250200	10.7
1921	2906600	406900	14.0
1931	3787700	570500	15.1
1947	4908000	929900	18.9
1957	6267900	1666900	26.6
1970	8819900	2503400	28.4
1980	10944800	4073100	37.2
1991	17600000	8900000	50.6
2000*	23274690	14430300	62.0
2020*	40600000	26000000	64.0

Rate of urbanisation = $P_u/P_t \times 100$
where P_u = Population in urban area
 P_t = Total Population

Source: Department of Statistics, Malaysia

* Projections

Malaysia is one of the most rapidly growing economies in the world with medium level rate of urbanisation (53%) and high urban growth (3.88%). The socio-political issues mainly cause the urbanisation process in Malaysia. It therefore cannot be explained solely by the Western industrial-based model of urbanisation (Ghani, 2000). The early growth of towns such as Penang, Malacca, and mining towns of Ipoh and Kuala Lumpur was not the result of industrialisation as experienced in western countries, but rather was due to the growth of the country's economy based on the extraction of tin and rubber plantations during the colonial period. The impact of the urban growth and urbanisation has resulted in the rapid growth of larger urban centres and the increase in the regional inequality. As a result, the spatial distribution of the population of the country has not changed very much from the pattern that existed during the colonial period.

The percentage of urban population has increased from 27% or 2.8 million of the total population in 1970 to 51% or 8.9 million in 1991, which has a total number of urban centres of 129. Ministry of Housing and Local Government (1999) stated that there will be an increase in urban population in the next century. In year 2000, the urban population is recorded as 62% of the total

population (Population and Housing Census, 2000) and this is estimated to increase to 64% by the year 2020 as seen in Table 2.2.

The census 2000 report revealed a slight decline in the population growth rate for the whole of Malaysia from 2.64% per annum for the period 1980 – 1991 to 2.60% for the 1991 – 2000 period. Most major states in Malaysia have recorded a high population growth, as shown in Table 2.3. Although most states have been growing, the rate of population growth for each state differs. Obviously, the bigger areas have been growing faster than the smaller areas. Selangor had the highest population of 3.94 million people compared with 2.29 million people in 1991. It also faced the most rapid population increase of 6.02% per annum for the period 1991 – 2000 due to the development and the vast advancement of industries as well as the increase in housing areas and immigrants from other states. For the state of Sabah, the increase in population growth (3.83% per annum) was mainly due to the immigration of foreigners from neighbouring countries, which has now been regulated.

Table 2.3. Population and Growth Rate by State, 1980, 1991, and 2000

State	Population			Average Annual Growth Rate (%)	
	1980	1991	2000	1980 – 1991	1991 – 2000
Johor	1,580,423	2,069,740	2,565,701	2.45	2.39
Kedah	1,077,815	1,302,241	1,572,107	1.72	2.09
Kelantan	859,270	1,181,315	1,289,199	2.89	0.97
Melaka	446,769	506,321	602,867	1.14	1.94
Negeri Sembilan	551,442	692,897	830,080	2.08	2.01
Pahang	768,801	1,045,003	1,231,176	2.79	1.82
Perak	1,743,655	1,877,471	2,030,382	0.67	0.87
Perlis	144,782	183,824	198,335	2.17	0.84
Pulau Pinang	900,772	1,064,166	1,225,501	1.52	1.57
Sabah	929,299	1,734,685	2,449,389	5.67	3.83
Sarawak	1,235,553	1,642,771	2,012,616	2.59	2.26
Selangor	1,426,250	2,297,159	3,947,527	4.33	6.02
Terengganu	525,255	766,244	879,691	3.43	1.53
W.P. Kuala Lumpur	916,610	1,145,342	1,297,526	2.00	1.39
W.P. Labuan	26,413	54,241	70,517	6.54	2.92
MALAYSIA	13,136,109	17,563,420	22,202,614	2.64	2.60

Source: Population and Housing Census 2000

2.3.6 Age Structure

The proportion of the population of Malaysia below 15 years of age was 33.1% compared to 37.2% in 1991. Conversely, the proportion of population 65 years and over for Malaysia was recorded at 4.0% compared to 3.7% in 1991. Consequently, the median age for Malaysia as a whole increased from 21.6 years in 1991 to 23.9 years in 2000 indicating that Malaysia continues to have a young population age structure. All these different age parameters point clearly towards a continuation of the trend towards an ageing population in Malaysia.

The dependency ratio, which is the ratio of dependants to every 100 persons of working age, decreased from 62.7% in 1995 to 59.1% in 2000. The drop in the dependency ratio was due to the increase in the proportion of the working age population of 15-64 years and the reduction of the population below 15 years as well as slower growth of the population aged 65 years and above. The working age population was growing at a faster rate than that of the population below 15 years and the total population as a whole.

Table 2.4. Age structure in Malaysia

	1991	1995	2000	2005
Age Structure (%):				
0 – 14	37.2	35.0	33.1	31.3
15 – 64	59.1	61.5	62.9	64.4
65 and above	3.7	3.5	4.0	4.3
Total Population (million)	18.6	20.7	23.3	26.0*
Average Annual Growth Rate (%)	2.6	2.4	2.3	-
Dependency Ratio (%)	69.0	62.7	59.1	55.3
Median Age (years)	21.6	22.8	23.9	25.3

* Projection

Source: Eighth Malaysia Plan, 2001 – 2005

2.3.7 Income Distribution and Income Inequality

With the expected high economic growth during the Eighth Malaysia Plan period, the middle-income group is expected to increase in size and share of income. As part of a major long-term income distribution objective, the nation will create a bigger and more prosperous middle-income group in addition to increasing income of the lower income group (Eighth Malaysia Plan, 2001). Table 2.5 shows the average monthly gross household income and income share by income groups in both rural and urban areas. The average monthly household income for Malaysian doubled to RM2,472 in 1999 as compared to RM1,169 in 1990. The average income of the bottom 40% of the households grew at 11.7% per annum, lower than the rate registered by the top 20% and middle 40% of households' income categories. The top 20 per cent of the households experienced a marginal increase in income share to 50.5 per cent in 1999 compared with the decrease to 14.0 per cent for the bottom 40 per cent.

The data that is publicly available on income inequality is rather inadequate. The Gini coefficient, a summary measure of income inequality, based on monthly gross household income distribution increased marginally from 0.4421 in 1990 to 0.4432 in 1999, indicating a marginal widening of income inequality (Third Outline Perspective Plan, 2001).

With regards to future price trends, Chua (1997) stated that the increase in income level has been able to keep pace with the increase in housing price based on the experiences of the last three decades. He also said "it is the affordable levels that dictate the residential house price level". However, the optimistic outlook in terms of decline in poverty and increase in monthly household income must not overshadow the problems inherent in uncontrolled urbanisation and over urbanisation. The majority of urban population in Malaysia is still facing housing problems, particularly for the low-income group (Buang, 2002c).

Table 2.5. Mean Monthly Gross Household Income and Income Share by Income Group – 1990 and 1999.

Year	1990	1999
Mean Income (RM)		
Malaysia	1169	2472
Top 20%	2925	6268
Middle 40%	1037	2204
Bottom 40%	424	865
Urban	1606	3103
Top 20%	3981	7580
Middle 40%	1255	2844
Bottom 40%	558	1155
Rural	957	1718
Top 20%	2277	4124
Middle 40%	787	1577
Bottom 40%	369	670
Income Share (%)		
Top 20%	50.0	50.5
Middle 40%	35.5	35.5
Bottom 40%	14.5	14.0
Gini Coefficient	0.4421	0.4432

Source: Third Outline Perspective Plan, Malaysia.

2.3.8 House Price Index

The Malaysian House Price Index (IHRM) dropped by 9.4 percent from 216.8 to 196.4 in 1998 due to the Asian Financial Crisis that began in mid 1997. However, the IHRM only dropped by 2.3 percent in 1999, followed by an increase of 4.7 percent in 2000, showing clearly that the residential property market in Malaysia has recovered from the economic downturn.

In terms of house type, all the residential properties continued to show an increase in the price indices during 1999 –2001. Price levels of the four house types have continued to increase, with terraced and detached houses showing the best recovery. The Property Market Report (2002) revealed that residential properties priced at RM100,000 and below continued to be the most in demand, constituting 58.0% of the total transactions of residential properties.

The house price to income ratio is generally regarded as the best measure of pressure on housing markets. Variations in the house price-to-income ratio may be due either to changes in house prices or in incomes. When the mean income is linked to the house price indices in Table 2.6. It indicates the affordability of houses to Malaysian. From the table, the price of houses has increased at a slower rate than the earned income for all level of communities. This implies that housing should be more affordable than in previous years.

Table 2.6. National House Price Indices, 1990 – 2001

Year	Terraced		Semi-detached		Detached		High-rise unit		Overall	
	Index	% Change	Index	% Change	Index	% Change	Index	% Change	Index	% Change
1990	100.0	5.3	100.0	4.0	100.0	1.3	100.0	8.0	100	4.1
1991	113.5	13.5	110.0	10.0	114.3	14.3	107.2	7.2	125.5	25.5
1992	123.5	8.8	118.2	7.5	125.8	10.1	107.3	0.1	140.7	12.2
1993	128.9	4.4	122.1	3.3	135.2	7.5	105.8	-1.4	147.5	4.9
1994	140.1	8.7	130.0	6.5	148.7	10.0	112.2	6.1	159.3	8.0
1995	158.4	13.1	142.7	9.8	172.0	15.7	116.9	4.2	188.5	18.4
1996	174.5	10.2	154.2	8.1	196.2	14.1	115.7	-1.0	212.8	12.9
1997	192.0	10.0	158.6	2.9	204.6	4.3	110.2	-4.8	216.8	1.9
1998	182.7	-4.8	145.7	-8.1	176.7	-13.6	103.4	-6.2	196.4	-9.4
1999	176.4	-3.5	139.30	-4.4	164.9	-6.7	99.6	-3.7	191.8	-2.3
2000	196.1	11.2	154.1	10.6	181.0	9.8	110.2	10.6	200.8	4.7
2001	196.7	0.3	156.6	1.6	180.0	-0.6	106.5	-3.4	199.7	-0.6

Source: National Property Information Centre, Ministry of Finance.

2.3.9 Household Size and Expenditure

In terms of household size, the Census 2000 report showed a decline with an average of 4.52 persons compared to 4.92 in 1991. Sabah had an average household size of 5.13 while it is 5.02 in Kelantan and Terengganu mainly due to high birth rate in those states. Smaller households were found in the Kuala Lumpur Federal Territory (4.18), Selangor (4.25) and Penang and Perak at 4.30.

The Household Expenditure Survey 1998/1999, which was also conducted by the Department of Statistics Malaysia showed an increasing trend on consumption expenditure by households in Malaysia. For example, in 1973 the average monthly consumption expenditure was RM412, increased to RM1,161 in 1993/94 and RM1,631 in 1998/99.

In the years 1998/99, on average, households living in urban areas spent 1.5 times higher than households living in rural areas. The average monthly consumption expenditure was RM1,943 per month in the urban areas and RM1,270 per month in the rural areas.

2.4 National Housing Policies

Housing is a basic need for the population. In Malaysia, the provision of affordable and adequate housing, particularly for low-income groups has been considered as an important social agenda, not only reflected in the announcement made by its political leaders, but also in the Government's annual budget and development plans since 1966. The housing industry in Malaysia is regulated at three levels – Federal, State and Local Authorities, which have different roles as described below:

Federal Government (i.e. The Ministry of Housing and Local Government) regulates on matters such as:

- Formulate housing policies and strategies

- Develop housing targets and goals
- Control and define licensing of developers
- Protect the environment
- Control of foreign investment
- Guide the finance institutions on bridging and end financing facilities

Departments under the Ministry are Department of Town and Country Planning, Department of Local Government, Department of National Housing, Department of Sewerage Services, Fire and Rescue Department and National Landscape Department.

State Government has sole jurisdiction over land matters covering:

- Issuance of titles
- Conversion of land
- Amalgamation and subdivision
- Imposition of conditions for quotes on low-cost housing, indigenous quota, foreign ownership of property, etc

Local Government administers all aspects of:

- Building plan approval
- Issuance of Certificate of Fitness for Occupation
- Provides maintenance service of infrastructure such as roads, street lighting, waste disposal etc.

The principal legislation governing housing developers is the Housing Developers (Control and Licensing) Act 1966, which has been renamed to the Housing Development (Control and Licensing) Act 1966 with the main objective to protect the interests of purchasers. The Act however applies only to Peninsular Malaysia. It had not, since its inception, been made applicable to Sabah and Sarawak, and the status quo remains until today (Buang, 2001a). Apart from the principal Act, the housing legislation in Peninsular Malaysia is contained in two other important regulations, namely the Housing Developers

(Control and Licensing) Regulations 1989, and the Housing Developers (Housing Development Account) Regulations 1991.

Land matters in peninsular Malaysia are administered under the National Land Code (NLC), while Sabah and Sarawak use their own land ordinances. Besides the National Land Code (NLC) that administers all land matters in Peninsular Malaysia, there is a specific law governing Malay holdings known as the Malay Reservation Enactment (one uniform legislation covering Perak, Pahang, Selangor and Negeri Sembilan and five separate legislations covering the remaining five states of Johor, Terengganu, Kelantan, Kedah and Perlis).

2.5 Review of the Housing Performance Over The Past Three Decades

Since its infancy about 35 years ago, the property development industry in Malaysia has progressed and developed into a modern and advanced sector of the economy. Over the last three decades, the scope of development projects undertaken by developers has increased from encompassing traditional housing projects to condominiums, townships, towering commercial complexes, shopping malls, state-of-the-art golf courses, hospitals, theme parks as well as industrial estates.

In 1957, the Malaysian Government established its First Five-Year Plan and implemented a development system to expand and extend the road network to promote trade and development. However, housing programmes were only formalised and structured during the First Malaysia Plan (1966 – 1970), which was implemented in 1966 with the initial objective being to provide housing as a component of social services to provide low-cost housing to meet the needs of the poor. Private developers, on the other hand, began to purchase and develop properties with active participation by state governments through their development corporations. They were mainly involved in development projects consisting of a mix of terrace housing, semi-detached units, bungalows and shop houses.

The Second Malaysia Plan (1971 – 1975) was drawn up within the context of the New Economic Policy (NEP). Housing policies took on the additional dimensions of the two main objectives of the NEP on the eradication of poverty and restructuring of society through promoting integration of the various ethnic communities in Malaysia. Over the years, the role of private sector developers became more significant and resulted in the formation of a Consultative Committee on Housing and Construction between the public and private sectors in assisting the Government in the formulation of appropriate plans to deal with housing problems, with emphasis on helping the lower income groups. During the Third Malaysia Plan (1976 – 1980), there was rapid economic and social development, leading to a great expansion of private sector. A total of 484,190 units were constructed with the public sector accounting for 121,510 units while the private sector was responsible for the remaining 362,680 units. However most of the houses built were medium and high costs units.

13 pioneer members to represent the private sector in property development in the country formed the Housing Developer Association (HDA) in 1970. It was approached by the Government to help with public housing programmes. Its members responded positively to the challenge by setting up HDA Perumahan Berhad in 1975 and successfully completed its pilot project of 696 units of low-cost houses in Cheras, Kuala Lumpur in 1977.

As the growth of the population increased, housing programmes in urban areas were further accelerated with particular emphasis given to low-cost housing in subsequent Malaysia Plans. During the Fourth Malaysia Plan (1981 – 1985), the Government concentrated on low cost housing projects, (i.e. the Public Low-Cost Housing Programme) particularly in urban areas. As urban land was getting increasingly expensive, the Government started to implement subdivided low-cost housing. Private sector developers are required to provide 30% of their residential development as low cost housing with a ceiling price of RM25,000. Apart from the Public Low-Cost Housing Programme, the Government also implemented the sites and services scheme for the poor. Priority is given to households with monthly income less than RM500, which are unable to own houses under the Public Low-Cost Housing Programme.

With the collapse of commodity prices in 1983-1984, the economic slowdown that followed in the mid-1980's caused a significant impact on the housing industry. During this period, the Government introduced the Special Low-Cost Housing Programme (SLCHP) under the Fifth Malaysia Plan (1986-1990). This is part of the Government plans in its continuing effort to boost the economy during the recession period as well as to alleviate housing problem of the lower income groups. The principal objective of the programme was to guide and to co-operate with the housing industry in order to implement its target of building a total of 80,000 units of low-cost houses a year. This strategy was based on the rationale that if 80,000 units could be built a year, the industry will contribute 2% to GNP. The slow progress of the housing programmes caused many projects to be delayed or abandoned (See Table 4).

In 1990, the Government established the Abandoned Housing Projects Fund under the administration and supervision of Bank Negara Malaysia to assist worthy housing developers to complete their development projects and at the same time to help buyers in securing their houses. A Coordination Committee in each state was set up to coordinate and facilitate the rehabilitation of abandoned projects. Low Cost Housing Fund was developed with an allocation of RM500 million in 1993 and the Hard Core Poor Housing Programme was launched with an allocation of RM600 million for construction of low-cost units for rental purposes in 1994. There was also an increase in the end financing for buyers of various housing categories.

The Government intensified efforts to boost the failing economy through promoting of capital-intensive and export-oriented industries as well as the relaxation of regulations for foreign purchasers. Also, financial institutions offered attractive housing financial package such as special housing loan schemes to civil servants. The relaxation of the Government policies concerning the ownership of housing properties and agricultural lands by foreign investors also provides the much-needed boost to the industry.

The industry started to gain momentum again as the economy began to bounce back in the early 90's, a period which also saw a growing maturity in terms of

new building concepts, quality and a wider range of products coming on stream. During this particular period of the Sixth Malaysia Plan (1991-1995), private developers were successful in completing 212,003 units of low cost houses.

The overall performance of the housing development was impressive during the Seventh Malaysia Plan (1996 – 2000) period. Both public and private sectors completed a total of 859,480 units of houses, which has achieved 107.4% of the target. In the low-cost housing category, a total of 190,597 units were constructed or 95.3% of the target. Of this 129,598 units were constructed by the private sector while the remaining by the public sector including State Governments and State Economic Development Corporations (SEDCs). In the low-medium cost housing category, a total of 72,582 units or 20.7% of the target set was achieved. The low performance was due to cautious investment decisions by private housing developers. For medium and high-cost houses, construction by both the private and public sectors exceeded the target. For the medium-cost category, a total of 227,956 units (175.4%) were completed, while in the high-cost category, 351,116 units (413.1%) were built exceeding the targeted 85,000 units.

Once again the housing market was affected by the Asian financial crisis that hit the region in 1997. The value of overhang properties including the residential sector, industrial sector and unsold shop lots amounted to RM9.84billion as at December 2000, increased up by 11.62% compared to the previous half year (Research and Development Division, National Housing Department, 2001). To help reduce the property overhang, the Government and the Real Estate and Housing Developer's Association Malaysia (REHDA), formerly known as HDA, launched the Home Ownership Campaigns I & II. Incentives offered during the campaigns included exemption of stamp duties as well as a minimum price discount of 5.0 per cent for properties costing RM100, 000 or less, and 10 per cent for properties costing above RM100, 000. Financial institutions also offered incentives such as a higher margin of finance up to 95 per cent, waiver of processing fees and increased loan tenure up to 30 years. Legal fees were also lowered for sales and purchase as well as loan agreements. The success of

these two campaigns helped reduce the oversupply and revived the property sector.

A Housing Research Centre (HRC) was established at the Faculty of Engineering, University Putra Malaysia (UPM) in 1996. The main objective of the Centre is to develop indigenously affordable quality housing for local and global markets. It acts as a single point reference on all housing aspects and any related issues for researchers, developers, contractors and Government agencies.

Table 2.7. Public And Private Sector Housing Performance During Various Plans

	2MP (1971 – 1975)		3MP (1976 – 1980)		4MP (1981 – 1985)		5MP (1986 – 1990)		6MP (1991 – 1995)		7MP (1996 – 2000)	
	Targeted	Achieved	Targeted	Achieved	Targeted	Achieved	Targeted	Achieved	Targeted	Achieved	Targeted	Achieved
PUBLIC SECTOR												
Public low – cost housing	-	13,244	62,200	26,250	176,500	72,302	45,800	26,172	40,000	15,376	64,000	62,812
Housing by Land Scheme	-	41,965	60,000	36,770	110,010	36,112	57,500	32,056	56,100	8,075	9,300	7,188
Institutional Quarters & Staff Accommodation	-	24,240	41,300	20,560	58,500	23,258	27,000	11,284	32,600	18,776	102,700	12,015
SEDC's projects & other state projects/medium & high cost housing	-	6,627	57,300	37,930	53,560	58,373	18,700	27,614	45,300	42,315	54,000	39,609
Sub-total	-	86,076	220,800	121,510	398,570	190,045	149,000	97,126	174,000	84,542	230,000	121,624
PRIVATE SECTOR												
Private Developers	-	64,862	100,00	199,490	-	-	-	-	-	-	-	-
- Low-cost	-	-	-	-	90,000	22,794	370,400	88,877	215,700	212,003	137,000	127,514
- Medium & high cost	-	-	-	-	259,470	79,005	169,600	107,442	170,700	339,610	418,000	596,639
Co-operative Societies	-	-	12,000	4,1200	25,260	5,474	12,500	7,483	12,600	11,305	15,000	13,703
Individuals & Groups	-	108,872	150,000	159,070	150,000	94,660	-	-	-	-	-	-
Sub-total	-	173,734	162,000	362,680	524,730	201,933	552,500	203,802	399,000	562,918	570,000	737,856
TOTAL	-	259,810	382,800	484,190	923,300	391,978	701,500	300,928	573,000	647,460	800,000	859,480

Source: Research and Development Division, National Housing Department, Malaysia, April 2001

Table 2.8. Factors Affecting the Housing Performance of Public and Private Sector During Various Plans

	Public Sector		Private Sector		Factors
	Undersupply by (units)	Oversupply by (units)	Undersupply by (units)	Oversupply by (units)	
3MP (1976 – 1980)	99,290	-	-	200,680	<ul style="list-style-type: none"> - Rapid economic & social development - Expansion of private sector, but mostly in medium & high cost housing
4MP (1981 – 1985)	208,525	-	322,797	-	<ul style="list-style-type: none"> - Cutback in allocation for housing - Administrative delays, i.e. problems in identifying suitable projects sites & preparation of tender documents - Postponement of land development projects for land schemes housing programmes - Demand factors, i.e. slower income growth, difficulty in obtaining housing loans, high interest rates, high house prices - Supply factors, i.e. private developers stopped/postponed their housing projects in response to the sluggish demand. - Inadequate housing land, delays in obtaining approvals for land conversion, difficulty in obtaining bridging finance for housing development
5MP (1986 – 1990)	51,874	-	348,698	-	<ul style="list-style-type: none"> - Slow progress in implementation of various housing programme including the Special Low-Cost Housing Programme was due to unsuitability of site or locations, financial & management problems of developers, misuse of funds collected from house buyers, incompetent contractors and delays in obtaining various plan approvals.
6MP (1991 – 1995)	89,458	-	-	163,918	
7MP (1996 – 2000)	108,376	-	-	167,856	<ul style="list-style-type: none"> - Overall performance was impressive but was again affected by the Asian financial crisis that began in July 1997.

Table 2.7 shows the targets and achievements of the various Malaysia's five-year plans. The performance of both the public and private sectors in housing delivery was below the estimated targets except for the 3rd, 6th and 7th Malaysia Plans where the private sector performed excellently, surpassing the targets set. However, the public sector has never achieved its target in all the various plans.

After the rapid expansion experienced during the Third Malaysia Plan, the economy took a downturn, which led to poor performance of both public and private sectors during Fourth and Fifth Malaysia Plans (Ministry of Housing and Local Government, 2002). The shortfall of housing units during the various plans was attributed to several factors as stated in Table 2.8.

Overall, the housing system in Malaysia has not always been implemented effectively and efficiently, at least, in numerical terms, the performance of housing in the various five-year plans has far from being satisfactory (See Table 2.8). Both the public and private sectors have been blamed for the result. According to Sen (1987), the Housing Developers Association (HDA), which is the main representative of the private sector, argued that the problems actually lie in the public sector. From the Government's point of view, the shortfall in the construction of housing units was largely due to cutbacks in allocation of housing and administrative delays (Malaysia, 1976; 1881; 1984).

If the same housing policies are to be implemented in the subsequent Malaysia Plans, the fundamental issue of whether the targets planned can be achieved requires further consideration. Urgent measures must be taken in order to improve the housing situation, especially the targets set for the public sector in the Eighth Malaysia Plan are considerably more demanding – 312,000 units compared to 230,000 in the previous plan (see Table 2.13).

2.6 The Asian Financial Crisis

Prior to the Asian financial crisis of 1997, Malaysia has consistently experienced an average growth of 9% in GDP during the period 1987 to 1996 while the inflation was contained at a low level of 3.5% (The 2001 Budget Speech). Unemployment rate was at 2.5 percent in 1996. National saving rate at 38.5 percent in 1996 was one of the highest in the world.

The housing market experienced a downtrend under the mid-term review of Seventh Malaysia Plan as reflected by falling prices for all categories of houses in all states except Kelantan and Malacca that recorded a marginal price increase of 5.2 percent and 0.1 percent respectively (Malaysia, 1999). Total transactions in the first half of 2000 were down by 7.4% compared to the end of 1999. The corresponding value of transactions was also down by 5.4%. The most active state was Selangor with 17,406 transactions and Terengganu achieved the highest percentage of increase of 30.8% (Chua, 2002a). According to the Property Market Report prepared by the Valuation and Property Services Department of Ministry of Finance, the residential properties are expected to enjoy sustained demand under low cost of funds and high mortgage liquidity regime, provided that household disposable incomes continue to improve. Table 2.9 below shows the number and value of residential properties transacted by state.

By housing category, there were decreases in prices of 10.2 percent for detached houses, and 6.7 percent for semi-detached, while terraced houses priced at RM150,000 and below, experienced a drop of 5.1 percent. In addition, there were reductions in the applications for new and renewal permit for advertisement and sales by private developers (Agus, 2002). The most popular price range by far was that in the region of RM100,000 to RM150,000.

The slower construction activity in the residential sector was also reflected in the decrease in the number of new developer licences and advertising permits issued for construction of new houses by the Ministry of Housing and Local Government. For new developer licences, the number of applications dropped

from 936 in 1997 to 652 in 1998 as seen in Table 2.10. The application of new advertising permits has also decreased from 90 permits in December 1997 to 40 in July 1998. However, according to Agus (2002), the relaxation of lending guidelines introduced by Bank Negara Malaysia (BNM) in September 1998 to allow house buyers to purchase house costing RM250,000 and below 'has increased the 'demand for various categories of houses. The number of applications for housing developer licence has shown an increasing trend for the past few years with recent statistic of 1,095 applications in 2001.

The total property overhang numbers as at the end of June 2001 showed that RM26.6 billion worth of property remained unsold in the country (Napic, 2001; Abdullah, 2002). The Property Information Centre (Napic) Property Overhang Report showed that there were 35,203 residential properties with a value of RM4.86 billion remaining unsold in the market. The number and value of overhang residential property showed a declined of 23 percent and 22.3 percent respectively as at June 2001 (Property Times, 2001a). The report also stated that there was an oversupply of housing stock ranging between RM50,001 and RM100,000, which contributed 32 percent of the total property overhang in the country. However, recent report called The Malaysian House Price Index launched by the Valuation and Property Services Department of the Ministry of Finance showed that a positive growth was recorded in the indices for terrace, semi-detached and detached houses during the review period, and residential sector is expected to remain stable, with house index continuing to consolidate in the near future (Property Times, 2002).

According to the Ministry of Finance, the construction sector is envisaged to record a higher growth of 4.5 percent compared with 3.8 percent in 2002. Housing development is also expected to contribute significantly to growth in the sector in view of the increasing demand, especially for low and medium-cost houses, reported in the Economic Report 2002/2003.

Table 2.9. The Number and Value of Residential Properties Transacted by State

State	Residential					
	Jan – Jun 1999		Jul – Dec 1999		Jan – Jun 2000	
	Number	Value (RM Million)	Number	Value (RM Million)	Number	Value (RM Million)
Johor	9,799	1,234.45	14,195	1,550.89	10,844	1,456.32
Kedah	10,482	486.80	8,061	488.58	6,446	469.57
Kelantan	866	46.22	846	49.29	748	46.55
Kuala Lumpur	4,551	1,100.37	6,289	1,500.83	5,606	1,437.41
Melaka	2,652	235.69	3,113	338.63	3,226	580.11
Negeri Sembilan	6,126	472.06	6,034	551.70	6,166	580.11
Pahang	3,433	259.07	3,739	289.90	3,477	328.60
Perak	9,341	623.19	10,436	706.32	12,333	707.21
Perlis	381	24.75	482	32.99	438	31.88
Pulau Pinang	4,442	657.20	5,878	877.19	5,753	853.96
Sabah	1,904	241.41	2,141	265.30	2,038	252.02
Selangor	16,121	2,786.21	20,414	3,495.70	17,406	3,125.27
Terengganu	2,447	99.75	2,907	125.05	3,802	152.93
Malaysia	72,545	8,267.16	84,537	10,272.35	78,283	9,714.51

Source: The Property Market Report Jan – June 2000, Valuation and Property Services Department, Ministry of Finance, Malaysia.

Table 2.10. Number of Housing Developer Licences Issued, 1990 – 2001

Year	Number of Housing Developer Licences issued	
	New	Renewed
1990	564	470
1991	661	435
1992	492	379
1993	487	332
1994	618	404
1995	784	425
1996	760	357
1997	936	373
1998	652	378
1999	728	270
2000	997	416
2001	1,095	413
Total	8,774	4,652

Source: Ministry of Housing and Local Government

2.7 Housing Programmes Implemented in Malaysia

Over the years, housing programmes have been focusing on the eradication of poverty and restructuring of society via the integration of the various ethnic communities in the country. Various measures were implemented including the extension of the Low-cost Housing Revolving Fund and establishment of National Housing Corporation in 1997, the introduction of a new pricing scheme, as well as the Integrated Housing Programme with the objective of resettling squatters in urban areas. The main programmes implemented are described as follows:

2.7.1 Low-cost Housing Revolving Fund

The National Bank (BNM) established the Low-Cost Housing Revolving Fund with a capital of RM1 billion. Construction activities were concentrated in states such as Johor, Pulau Pinang, Selangor and Sabah. Since the Fund's inception and as of December 1998, a total of 38,118 low-cost units, 10,650 low medium-cost units, 21,376 medium-cost units and 12,277 high-cost units were in various stages of implementation. Of the RM1 billion revolving fund, a total of RM596.8 million has been utilised for the purchase of land (Review of Seventh Malaysia Plan, 1998).

2.7.2 Establishment of National Housing Corporation

Syarikat Perumahan Negara Berhad (SPNB) – National Housing Corporation was established in 1997 with a capital of RM2 billion to increase the housing supply costing RM150,000 and below, through the provision of bridging finance to private developers facing liquidity problems in the wake of the Asian currency crisis. Since its establishment, SPNB approved RM732.8 million in bridging loans for the construction of 50,725 units of houses, of which 13,644 were low-cost units, 13,482 low medium-cost units and 23,599 medium-cost units (Eighth Malaysia Plan, 2001).

2.7.3 Four-Tier Pricing Scheme for Low-Cost Housing

A four-tier pricing scheme was introduced in June 1998 for low-cost housing, depending on the location and type of houses, as shown in Table 2.11. The price of low-cost houses has risen to RM42, 000 from RM25, 000 in the 1980's. The low cost housing shortage is most acute in urban areas where demand is highest but land is scarce and expensive. The cost of the house is, therefore, more than the past selling price of RM25, 000. The price impact of the four-tier pricing scheme is that provision of low-cost housing becomes a more attractive and profitable venture and would thus assure increase in supply. This was implemented to motivate and provide incentives to developers to participate more actively in the provision of low-cost houses to the targeted group. However, new designs with a floor area of 60 square metres (or 650 square feet) incorporating three bedrooms as well as washing and drying areas, especially in high-rise buildings were also introduced to improve the quality of low-cost houses.

Under the Seventh Malaysia Plan (1996 – 2000), only 17.1% and 20.1% of the target set were achieved in low-medium cost housing category by the public and private sector respectively. This may due to cautious investment decisions by private housing developers. Housing and Local Government Minister Datuk Seri Ong Ka Ting said a study showed that low medium-cost houses were in great demand but short in supply (The Star, 2001a). Also, there are an increasing number of families, especially in major towns with monthly household income of between RM2000 and RM3000. There are places where low-cost units are not wanted, as people are able to afford low medium-cost houses. As such, emphasis should not just focus in constructing low-cost units but also look into housing needs of the middle-income group. It is proposed that a quota on the number of low medium-cost houses to be imposed in the future projects to avoid the creation of urban slums. Question raised whether the increase in low medium-cost housing ranging from RM48,000 to RM70,000 will inevitably push low-cost housing price limits higher.

Table 2.11. Four-Tier Pricing for Low- and Low Medium-Cost Houses

Category	Effective from	Location (Land Cost per square metre)	House price per unit (RM)	Type of houses	Eligible monthly household income (RM)
Low-cost	10 June 1998	Cities and major towns (RM45 & above)	42,000	Flat (More than five storey with lift)	1,200 to 1,500
		Major towns and fringes (RM15 – RM44)	35,000	Flat (Five storey without lift)	1,000 to 1,350
		Small towns (RM10 – RM14)	30,000	Terrace and cluster	850 to 1,200
		Rural areas (Below RM10)	25,000	Terrace and cluster	750 to 1,000
Low medium-cost	20 August 2000	Cities and major towns (RM45 & above)	70,000	Flat (More than five storey & above with lift)	More than 1,700 to 2,600
		Major towns and fringes (RM15 – RM44)	60,000	Flat (Five storey without lift)	More than 1,500 to 2,500
		Small towns (RM10 – RM14)	53,000	Terrace and cluster	More than 1,350 to 2,000
		Rural areas (Below RM10)	48,000	Terrace and cluster	More than 1,200 to 1,800

Source: National Housing Department, Ministry of Housing and Local Government

2.7.4 Home Ownership Campaigns

The Government and the Real Estate and Housing Developer's Association Malaysia (REHDA) introduced the Home Ownership Campaign I in December 1998 to reduce the property overhang as well as to provide more opportunities for the public to own homes. The one-month campaign attracted 492 developers and achieved sales of RM2,900 million for residential properties and RM600 million for non-residential properties (Mid-term review Seventh Malaysia

Plan). The Home Ownership Campaign II held the following year has also sold properties worth of RM2,404 billion, reflecting good response following the attractive loan packages offered by the banks at lower interest rates. These campaigns helped to stimulate property sales as it offered discounts, attractive loan rates, fast loan approvals, waiver of the stamp duty and withdrawals from the Employees Provident Fund. The large number, of transactions concluded at the campaigns also demonstrated the need for affordable pricing as well as reasonable loan rates.

Besides, some commercial banks have been offering housing loans with a fixed interest rate during the first three years of the repayment period in line with the Government's announcement of stamp duty waiver for residential properties purchased from 1st January to 30th June 2002 in conjunction with MAPEX 2002. MAPEX 2002 was organised by the Real Estate and Housing Developers' Association (Rehda) to enable the public easier access to a wider selection of quality, affordably priced properties in line with the Government's effort to promote house ownership among Malaysians. The exemption of stamp duty by the Government was aimed not only at promoting homeownership but also to generate demand for property development activities and in turn, growth in the Malaysian economy (Ong, 2002). More than 10,000 units of property valued at RM1.6 billion have been sold throughout the country during this period.

2.7.5 Public Low-Cost Housing Programme

Various State Governments also undertake the construction of low cost houses under the Public Low Cost Housing Programme. Up to August 1998, the construction of 10,576 units has been completed and another 22,343 units are at various stages of construction. Under the public low-cost housing programme, new designs will be introduced to optimise land-use through increased density and reduce construction cost. Through the application of the new designs, land plot utilisation is expected to increase from 26 units to 41 units per hectare for low-cost houses, thereby increasing the land-use density.

2.7.6 Integrated People's Housing Programme for Squatter Resettlement

A special low-cost housing programme, namely Program Perumahan Rakyat Bersepadu (PPRB) – Integrated People's Housing Programme for Squatter Resettlement was launched by the Government in December 1998, with the objective of resettling squatters in urban areas, particularly in the Federal Territory of Kuala Lumpur and other major towns. During the Seventh Malaysia Plan (1996- 2000), a total of 34,148 units out of the 35,000 units that were targeted to be built in the Federal Territory of Kuala Lumpur were under various stages of implementation.

The characteristics of this programme are:

Targeted Group: Squatter monthly income of RM1,500 and below

Type of building: 11 – 14 storeys or 16 – 18 storeys in cities and major towns, and 5 storeys in small towns.

Specification: Minimum build-up area of 650 square feet comprising 3 bedrooms, 1 living room, 1 kitchen, 1 bathroom and 1 toilet.

Rent: RM124 per month.

A total of 7,428 housing units to relocate squatters have been completed. Over the next three years, some 37,152 units would be completed, of which 34,148 would be in Kuala Lumpur, said the Housing and Local Government Minister Datuk Seri Ong Ka Ting (The Star, 2001b). In a related development, to ensure that Kuala Lumpur and Selangor achieve their target of “zero squatters by 2005”, the Federal government has set aside RM700.6 million for the implementation of 51 existing projects as well as 13 new projects, altogether involving 65,778 housing units (Property Time, 2001b).

A total of 51,800 units of low cost flats are to be built by the year 2005 in large cities. These 3-bedroom housing units are to be rented out at a low monthly rate of RM124. Social facilities like community halls and libraries are also provided to improve the quality of life. In designing and providing for such facilities, consultations were held with the target groups to ensure that their needs are met adequately.

2.7.7 Acquisition of Land for Urban Areas

One of the major factors that determine the house price is the availability of land, especially in urban areas. In the classic supply and demand question, if there is more land available for houses, there will be less pressure on the land price to rise to an unreasonably high level, which in turn help to lower the house prices. In this connection, the Ministry of Housing and Local Government has taken an important step recently in acquiring vacant land in strategic areas in towns and cities to build more low and medium-cost houses in order to overcome the lack of urban housing land.

2.7.8 Federal Government 's New Guidelines for Low-Cost Housing Scheme

The Federal Government has taken over the implementation of low-cost housing projects from the states under a RM1.404 billion strategy to build and finance 40,000 units over the next five years (Lian, 2002). The new policy would only apply to low-cost units for sale. Prices would be capped according to location, cost per square metre and the types of house (i.e. high-rise, terrace or cluster houses). The prices of houses under The Low-Cost Housing Programme implemented by the Government during the Eighth Malaysia Plan period will be much lower than those built by the private sector as much of the cost involved would be subsidised by the Government. The increased Government allocation in the low and low-medium-cost category means that there will be an increase in competitiveness in the housing market. Private developers must ensure that their selling price is not higher when compared to Government subsidised projects, or they might be facing risk of losing buyers.

2.8 Prospects During Eighth Malaysia Plan (2001 – 2005)

The Eighth Malaysia Plan envisaged a need for a total of 615,000 units of houses to be built over the next five years with emphasis on improving the quality of houses built at the same time providing a better quality living environment to the nation. It stated in the Eighth Malaysia Plan (2001 – 2005) “It is also the Government’s top priority to ensure sufficient housing for the urban poor and squatter dwellers and will continue our efforts to expedite low and medium-cost housing development to meet the increasing demand of the lower income population.”

2.8.1 Housing Needs and Targets

Table 2.12. Housing Needs By State, 2001 – 2005

State	Total Needs	New Requirement	Replacement
Johor	90,174	85,656	4,518
Kedah	55,514	51,247	4,267
Kelantan	54,272	49,051	5,221
Melaka	20,591	19,035	1,556
Negeri Sembilan	30,753	27,088	3,665
Pahang	44,642	41,730	2,912
Perak	76,569	68,085	8,484
Perlis	7,672	7,321	351
Pulau Pinang	41,421	40,266	1,155
Sabah	100,034	93,709	6,325
Sarawak	69,223	65,157	4,066
Selangor	106,055	102,492	3,563
Terengganu	36,940	33,677	3,263
Wilayah Persekutuan Kuala Lumpur	46,093	45,390	703
Wilayah Persekutuan Labuan	2,347	2,196	151
Total	782,300	732,100	50,200
%	100.0	93.6	6.4

Note: Selangor includes Wilayah Persekutuan Putrajaya

Source: Eighth Malaysia Plan

The housing policies in the Eighth Malaysia Plan (2001 – 2005) have reflected the Government’s concern for the low and low medium income groups. The development of low-cost housing will be expedited to ensure that those who are

eligible will be provided houses either for rent or sale. A substantial provision of low and medium cost houses costing between RM26,000 to RM60,000 per unit will be built during the Plan period to enable buyers with monthly income between RM751 to RM1500 to purchase the houses within their affordability (Ismail, 2002). The housing needs in the country will reach an estimated total of 782,300 units due to the increasing population growth, formation of new households and the replacement of existing houses, as shown in Table 2.12. However, only 615,000 units of houses are expected to be built during the Plan period, taking into account of stock overhang in the country and the capacity to supply houses. The public sector is expected to deliver 312,000 units of houses or 50.7% of the total target compared with 230,000 units or 29.8% in the previous plan. Of the total units of houses to be constructed by the public sector, 66.7% will be low-cost houses and houses for the poor, as shown in Table 2.13. The emphasis on low cost houses during this period reflects the Government's commitment to provided affordable housing to the lower income groups. It is also a good idea as the population is expected to increase to 26 million by 2005.

The private sector is expected to construct 303,000 units of houses, or 49.3% of the planned target with emphasis on low medium-cost and high-cost houses. In order to encourage private developers to construct more low medium-cost houses and to reduce demand pressure on the low-cost category, the Government will implement several policy guidelines including guidelines on prices, specifications and design as well as instituting better planning and control mechanisms. Government could play a role in providing state land to private developers for low-cost housing, otherwise most developers would not be able to build these units and even make a reasonable profit.

A total allocation of RM4,223 million will be provided for housing development with 4,018 million and 205 million for public and rural housing programmes respectively under the Eighth Malaysia Plan, as shown in Table 2.14. Of the total allocation for public and rural housing programmes, RM2,018 million or 47.8% will be utilised for the provision of public sector employees and RM2,205 million or 52.2% for public low-cost housing and housing for the poor.

Table 2.13. Public And Private Sector Housing Targets for the 8th Malaysia Plan, 2001 – 2005

Programme	Total	Housing for the poor	Low Cost	Low Medium Cost	Medium Cost	High Cost
Public Sector	312,000	16,000	192,000	37,300	46,700	20,000
%	50.7	5.1	61.5	12.0	15.0	6.4
Public low – cost housing	-	-	175,000	-	-	-
Housing Rehabilitation Site & Services	15,000	15,000	-	-	-	-
Housing by Commercial Agencies	1,000	1,000	-	-	-	-
Housing by Land Scheme	56,000	-	15,000	10,000	16,000	15,000
Institutional Quarters & Staff Accommodation	3,000	-	2,000	1,000	-	-
	62,000	-	-	26,300	30,700	5,000
Private Sector	303,000	-	40,000	94,000	64,000	105,000
%	49.3	-	13.2	31.0	21.1	34.7
Private Developers	289,000	-	39,000	90,000	60,000	100,000
Cooperative Societies	14,000	-	1,000	4,000	4,000	5,000
Total	615,000	16,000	232,000	131,300	110,700	125,000
%	100.0	2.6	37.7	21.3	18.0	20.3

Source: Eighth Malaysia Plan

The financial institutions continue to offer competitive loan packages with attractive interest rates to support the property sector. A stamp duty waiver schemes for purchases of new property from registered developers has been implemented from 1st January to 30th June 2002 to stimulate transactions with the aim to reducing the overhang situation.

Table 2.14. Budget Allocation During Eighth Malaysia Plan Period

Programme	7MP		8MP
	Allocation	Expenditure	Allocation
Public Housing	3,190	3,165	4,018
Low-Cost Housing	1,208	1,204	1,980
Site & Services	21	19	20
Government Quarters & Other Staff Accommodation	1,961	1,943	2,018
Rural Housing	183	166	205
Rehabilitation of Dilapidated Housing	100	84	100
Traditional Village Regrouping & Rural Growth Centres	83	82	105
Total Allocation	3,372	3,331	4,223

2.9 Housing Development Process

The Figure 2.3 illustrates the various stages involved in the housing development process (Ministry of Housing and Local Government, 1999). There may be some variations in the details of the stages from state to state but the broad framework would apply.

Housing development process involves many players including the government, developer, professionals, contractors and financier. Developers have to go through at several stages in the development process in order to be able to successfully sell the houses. These include acquisition of land, arrangement for finance, application of a developer license, preparation of various plans, application for land use and subdivision, obtain approvals for various plans from the relevant government departments, clearance of land of tenants and squatters, obtain advertisement and marketing permits, construction of houses, and obtain certificates of fitness for occupation. Major players will have to play their respective roles effectively in order to establish an efficient and transparent delivery system to ensure that target set is achieved and units are delivered to targeted group. The roles and responsibilities of major players involved in the whole development process are outlined below:

2.9.1 The Government

The Government has a paramount role in the approval procedures of the various stages of the development process from land acquisition to the final delivery of completed housing units, especially at state and local planning authorities. There are various government departments under the Ministry of Housing and Local Government responsible for approving all plans for road and drainage, earthworks, sewerage design, and building plans. The efficiency of the delivery system largely depends on their speedy and timely processing of applications and issuance of approvals.

2.9.2 The Developer

The principal housing legislation governing housing developers is the Housing Developers (Control and Licensing) Act 1966. The principal Act has made a few amendments and is now renamed as Housing Development (Control and Licensing) Act 1966. It was also amended in 1972, revised in 1973 and further amended in 1977 and 1988. The new Act allows anyone who intending to construct more than four units of housing development to apply for a developer license from the Ministry with a minimum paid-up capital of RM250,000 if it is a company and a payable deposit of RM200,000. Developers must comply with the requirements of the Act to ensure that housing projects undertaken are delivered under good quality. On execution of the Sale and Purchase Agreement, the developer is given a maximum period of 24 months to complete the construction of the houses and the required infrastructures for the housing project.

Every stage and progressive payment is controlled by legislation. Payment is released progressively in accordance to pre-specified construction and payment milestones (see Table 2.15). Each payment released should be supported by a certificate signed by the Architect or Engineer responsible for the particular housing development project to prove that the works therein referred to have been completed. All instalments paid by the house purchaser as well as the loan obtained for the construction of the particular housing development should be deposited in the Housing Development Account (HDA). This system is implemented in 1991 to protect the house buyers from any potential misuse or misapplication of funds by the developer. Under the Housing Developers (Housing Development Account) Regulations 1991, no monies in the Housing Development shall be withdrawn by the licensed housing developer except for payment of all legal fees, administrative expenses, as well as the cost carrying out the construction relating to the housing project until the whole project is completed.

Table 2.15. Schedule of Payment of Purchase Price

Instalment payable	%
1. Immediately upon signing of Sale & Purchase Agreement	10
2. Within fourteen (14) days after receipt by the purchaser of the Vendor's written notice of the completion of:	
(a) the foundation and roofing works of the said building	10
(b) the reinforced concrete framework of the said building	15
(c) the walls of the said building with door and window frames placed in position	10
(d) the roofing, electrical wiring, plumbing (without fittings), gas piping (if any) and internal telephone trunking and cabling (if any) to the said building	10
(e) the internal and external plastering of the said building	15
(f) the roads, drains and sewerage works serving the said building	15
3. On handling over vacant possession of the said building with water and electricity supply ready for connection	
4. Upon handling over the vacant possession as in item (3) and to be held by the Vendor's solicitor as stakeholder for payment to the Vendor as follows:	2.5
(a) 2.5 per centum (2.5%) at the expiry of six months after handling over of vacant possession	2.5
(b) 2.5 per centum (2.5%) at the expiry of twelve months after handling over of vacant possession	
	100

2.9.3 The Contractor

Main contractor and nominated sub-contractors are appointed through successful tendering. The duties of contractors are very specific to the contract between him and the developer. They are responsible to construct and deliver the completed project with accordance to the terms and conditions of the contract within the scheduled time scale.

2.9.4 The Professionals

The professionals involved in the housing development process include architects, town planner, consultant engineers, and surveyors.

In most cases, the architect, on behalf of the developer liase with the authorities, other professionals and the contractors regarding technical aspects

as well as most approval submissions. He/she is also the authorised signatory certifying satisfactory completion of each stage of housing development project before payment could be released.

Only professional town planners who are members of the Malaysian Institute of Town Planners may submit applications for planning approvals, land conversion, subdivision and amalgamation purposes in accordance with all requirements, standards and guidelines of the respective local authorities.

Consultant engineers who normally involved civil and structural engineers, electrical and mechanical engineers are responsible for the technical and engineering aspects of the project.

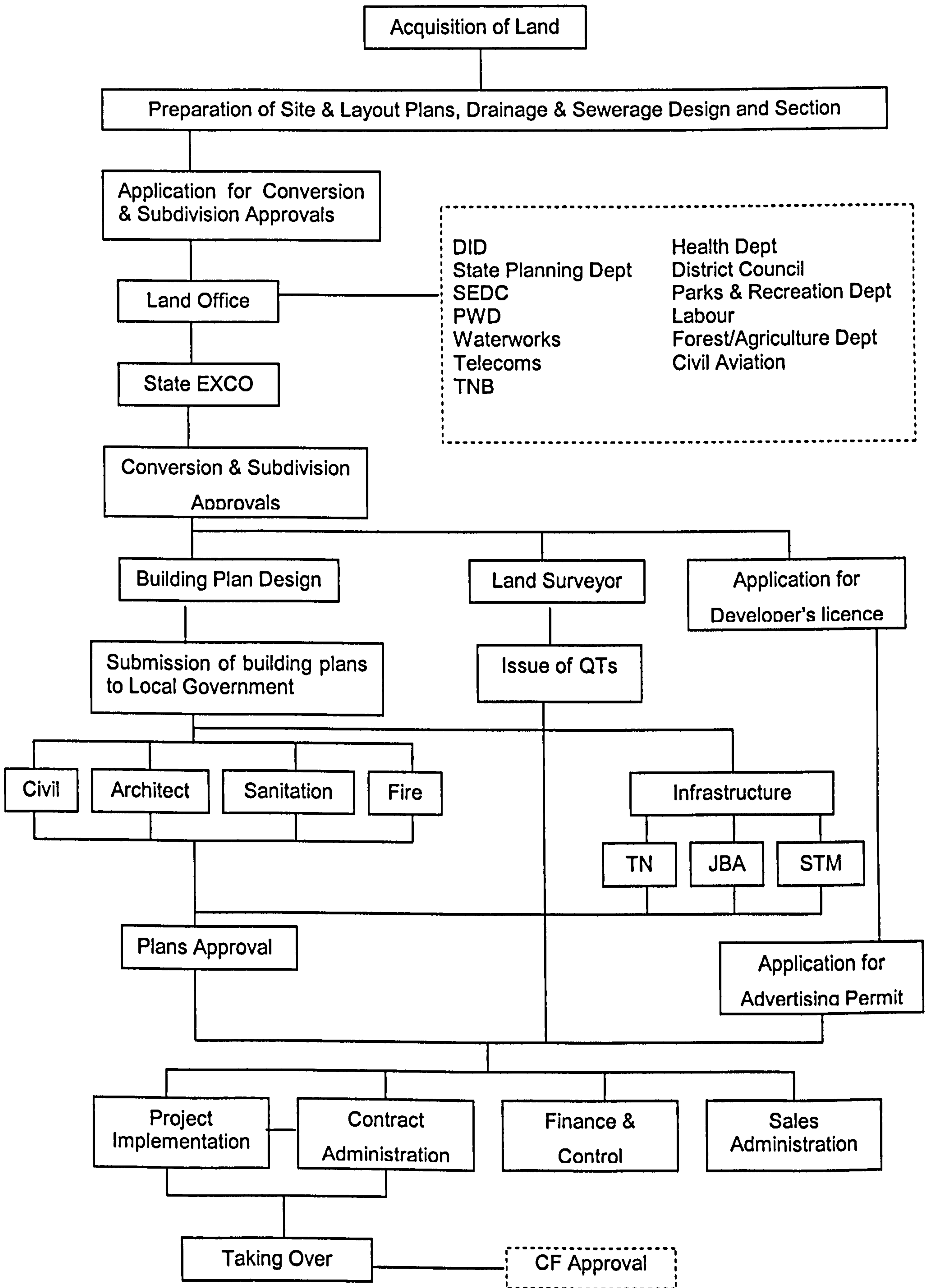
Surveyor may include land surveyors, quantity surveyors, valuers and building surveyors. Land surveyors carry out physical surveys of the particular land and prepare for submission of land title and strata titles. Valuers are responsible for the preparation of valuation studies as well as valuation reports required by the financier. The duties of quantity surveyors including preparation of specifications and tender documents whereas building surveyors are responsible to inspect building plans drawn up by architects.

2.9.5 The Financier

The commercial financial institutions provide bridging finance for developers as well as end financing to house purchasers while the Housing Loan Division under the Ministry of Treasury only provides housing loans to civil servants.

The challenge today is not just about achieving the target set but also about meeting expectations of house buyers for a higher standards and better quality of life. Whether or not these can be met, and how fast it can be met would depends on the commitment and strong political will of all the major players involved in the housing chain, with a common objective.

Figure 2.3. Housing Development Process in Peninsular Malaysia



2.10 Low-Cost Housing Policies – Issues and Problems

The low-cost housing targets are hard to fulfil based on the performance achieved during various plans, which only met a small proportion of the total housing needs of the poor. With the advent of migration of the rural areas to the urban areas, more low-cost housing will be required, and if such housing needs were not met, there would probably be an increase of slums and squatters in urban areas. The following sections examine the low-cost housing policies currently implemented in Malaysia, as well as the various issues associated with it (Ghani, Lee, 1997; Cagamas; 1997).

2.10.1 Government Guidelines for Low-Cost Housing

Controlled Price

The controlled price on low-cost housing units is one of the main reasons for the massive shortfall in the units constructed by private sector. Small housing development companies do not have the incentive to build low-cost houses due to low profit margin. In respect of the well-established companies, cross-subsidisation is required from medium or high-cost units. If demand is low for higher cost houses, there will be less motivation for private developers to build low-cost houses.

Development Controls

A 30% low-cost quota of a ceiling price of between RM25,000 and RM42,000 is to be imposed for any private housing scheme reaching a certain threshold size of development. There is an argument that these policies will be an onerous burden to the private housing developers due to the high cost of construction of low-cost houses. The incentives provided by the Government such as exemption from government levies as well as faster approval of plans/procedures is obviously insufficient to lower the construction cost of low-cost houses. The ceiling price requires some form of cross-subsidy in which the private developers are expected to make up the shortfall through cross-subsidy for the non-low-cost houses. Hence the private housing developers are expected to contribute to the society some of their profits gained from the

developments. In fact, it is the rich who are subsidising the poor (the buyers of low-cost houses). According to Ghani and Lee (1997), this is unacceptable for three reasons: (a) The buyers of the non-low-cost houses are average working class citizens who are suffering from the escalating prices of real estate in the major cities and towns. (b) The delivery mechanism of low-cost houses to target group is defective because of favouritism, patronage, indifference, fraud and inadequate database resulting in units being allocated to undeserving buyers. (c) The whole community should be responsible in the provision of low-cost houses to the poor rather than passing the burden to private developers or the so-called rich house buyers. For the low-cost housing programme to be sustainable, developers must be allowed make profits from their developments.

Other forms of cross-subsidisation introduced by the Government the late seventies and early eighties included:

- The banking sector was required to provide end financing at lower rates to lower income house buyers. This invariably led to other sectors having to borrow at inflated rates to support such subsidies.
- Building material industry was required to supply building materials for low-cost housing at preferential prices.
- Professionals were call upon to charge at a discounted fee for low-cost house buyers.
- Stamp duties were abolished for low-cost housing transactions (Ghani & Lee, 1997).

The cross-subsidisation can only be sustained in a buoyant property market where demand for non-low-cost housing are high and their sales can readily negate the losses from low-cost units. However, the issue is to what extent the cross-subsidisation should occur, and whether it is reasonable for the non-low cost house buyers to shoulder the burden by paying inflated price for their houses?

Bumiputera Purchasing Controls

The Malay, are the largest ethnic group, accounting over half the Malaysia's population. With the oldest indigenous peoples they are also known as "sons" or "princes of the soil", the Bumiputera. A minimum quota of 30% of the housing units has to be withheld by the private developers for sales to Bumiputeras at a discount of at least 5% off the selling price. This quota is imposed in line with the Government's objectives to provide opportunities for Bumiputeras to own houses and to promote greater interaction among various ethnic groups in order to bring about multi-ethnic communities.

Income Purchasing Controls

Buyers eligible for the low-cost houses must have a combined household income of not exceeding RM750 per month. There are two issues associated with this income criterion:

(a) Difficulty in borrowing loan from financial institutions

Although a number of financial packages were made available in the market, the problem encountered by the genuine 'poor' is their inability to provide documentary proof of their creditworthiness when obtaining mortgage loans from commercial financial institutions (Ghani & Lee, 1997). This has led to instances where the financial institution withheld progress payments to housing developers despite having approved loans to the low-cost house buyers. Besides, low-cost buyers are facing difficulties to make the down payment of 10 percent for the purchase of houses due to insufficient household savings.

(b) Weak distribution and delivery controls of low-cost houses

Another issue associated with the income criteria is the failure of delivery system during the distribution process of low-cost houses being allocated to ineligible buyers. There has been criticism regarding the allocation process of low cost houses carried out by various state governments within the country (Ministry of Housing and Local Government, Malaysia, 2001). The relevant authorities claimed that continuous efforts have been carried out to ensure that low-cost units are allocated to eligible buyers but the lower-income group complains about not getting the units after applying for several years. Also,

there are no restrictions on the resale price of the low-cost houses that the purchaser can sell the unit for profit, which sometimes the resale price increases up to two-fold the original price. The purchaser of a low-cost house rented out the house without occupying the unit himself/herself.

There is no readily available data on the actual number of households who fall into this group of income group. It is therefore very difficult to determine whether such income range is feasible and the to establish the total number of low-cost houses needed to accommodate the “poor”.

Design Controls

The policy makers are becoming overzealous in their efforts to prove their social concern and perhaps over specify the design standards required for low-cost housing. Malpezzi and Mayo (1997) revealed that a wide range of the government interventions through regulations such as things as right of way, specific requirements for infrastructure standard such as community facilities, had raised the development cost by 30 percent on average. Previously the policy specifies that each low-cost house must have a minimum built-up area of 550 – 600 square feet comprising two bedrooms, a living room, a kitchen and a bathroom-cum-toilet. The types of houses delivered under this programme may include flats, terrace or even detached houses. However, new designs with a floor area of 60 square metres (or 650 square feet) incorporating three bedrooms were also introduced in 1998 after 15 years to improve the quality of low-cost houses. The three bedrooms design was introduced to accommodate larger household size, especially for Malay families.

Besides, there have been many complaints received regarding substandard materials, shoddy and faulty workmanship and construction in the low-cost housing in the country. These problems have been highlighted almost daily in the media. Examples of such poor quality low-cost house are cracking walls and floors, leaking roofs, damaged sewage pipes and so on.

Provision of Incentives

The Government has promised various incentives to encourage private housing developers to play an active role in the provision of low-cost housing for the poor. These incentives include faster plan approvals, relaxed planning and infrastructure standards and licensing procedures. It is obvious that incentives from the Government are very important to encourage private developers to build more low-cost houses. However it is less clear which of those incentives are sufficient enough to attract private developers in the low-cost housing development.

2.10.2 Issues and Problems Encountered in Low-Cost Housing Provision

Mismatch of Supply and Demand

One of the important issues facing by the housing industry is to bridging the gap between supply and demand and making quality housing more affordable. However, making a precise projection on the housing demand is a difficult exercise as there will always be uncertainties. The mismatch in supply and demand of housing needs to be addressed urgently. More often than not, the housing developers argued that low-cost units are difficult to sell compared to higher cost housing. On the other hand, the low-income earners complain that they have not been offered many opportunities to own homes, and some of them have been applying for years. The Government has a responsibility to ensure that there is an adequate supply of decent and affordable housing with adequate amenities and infrastructure to meet the demand. In terms of low-cost housing, demand continues to exceed supply. The current policy of relying on the private sector to provide low-cost housing as a compulsory part of housing development projects does not seem to have solved the problem of under-supply. In many cases, private developers have delayed or not built the designated quota of low-cost houses.

According to the Eighth Malaysia Plan, there would be at least another 230,000 low-cost units constructed by both public and private sectors by year 2005. The total output may seem substantial but if current and future demand is taken into

account, it cannot be ascertained whether the number is indeed enough to meet the nation's needs.

Delays in Obtaining Plan Approvals

The housing development process in Malaysia is complicated and time-consuming, which is largely attributable to the length of time required for the processing of applications and issuance of approvals at every stage of the development process. The lack of resources in the Government departments has caused delays in obtaining various plan approvals that indirectly incurred additional costs to developers. There is a need to enhance the resources currently available in the Government departments.

Shortage of Construction Labour

The housing industry has been beset with a critical labour situation after the country's amnesty and repatriation of illegal foreign workers that ended on 31st July 2002. The Real Estate and Housing Developers' Association (Rehda) has urged the Government to urgently rectify the acute shortage of labour that may cause the housing industry to lose RM1.2 billion in late delivery penalty charges. Almost 90% of all ongoing projects are currently operating at only 30-40% capacity due to the tight labour situation, while project start-ups have been delayed (Economic Research Services Department, 2002; Chua, 2002).

Price Escalation of Building Materials

The study undertaken by Ghani and Lee (1997) shows that the price of building materials has escalated in recent years. As material costs constitute a large proportion of construction cost, developers have to bear the burden of subsidising the losses made in low-cost units.

Management and Maintenance of High-Rise Building

In order to achieve economies of scale and reduce the amount of land used for low-cost components, developers have to opt for high-density developments for their low-cost construction. One of the major problems with high-rise buildings is their management and maintenance. Without proper building maintenance and management, the housing area will easily be turned into slums. Also, there is

difficulty of collecting monthly fees for management and maintenance services of common space and utilities. There is also an additional cost for lift and fire fighting equipments for building above five storeys (Mahyuddin, R. & Norizal, M. N, 1998).

Lack of Household Savings

Undoubtedly private household savings constitute substantially on housing investment as savings are normally used as down payment (10 percent) upon signing of the sale and purchase agreement (SPA). Private savings can also be used to cover professional fees and disbursements of house purchase such as legal fees, stamp duties and agreement fees. This has resulted in the low-income earner losing the opportunity of owning houses. The Government encourages household to save in schemes that bring better monetary returns and benefits especially in government-regulated savings schemes and institutions.

The 2000 Property Market Report showed that loans approved for the purchase of residential properties had increased. This is particularly evident during the fourth quarter of 1999 and the second quarter of 2000, where increases of 8.5% and 6.9% were noted, supported mainly by the home ownership campaigns. However, it was the high-cost category that forms the largest proportion of loans for residential property purchases, which accounts for almost 50 percent. For the low-cost houses, despite the high volume, this category made up only 1.3 – 1.6 percent of total loans and 3.4 – 5.9 percent of residential property loans.

Lack of Technical Skills and Building Technology

As stated in (Agus, 2002), there has been a change in housing construction technology from the conventional system to a wider application of industrialised building system. However, there are still a large number of construction companies that are unable to cope with the technical challenges of industrialised building. In addition, the increase in prices of the building materials has diluted developers' profit, which in turn has raised the selling price of houses.

2.10.3 “Build then Sell “ Concept

There have been calls for adopting “build then sell” concept that houses are only placed on the market after they have completed, not just boxes and barracks. This concept was also endorsed by the Government as reflected in the Seventh Malaysia Plan in 1996 (Property Times, 2002b). From the buyer’s perspectives, many argued that developers should use their own fund when undertaking housing development and not rely on buyer’s deposits and progressive payments (Buang, 2002c; House Buyers Association, 2002; 2003). However this concept is currently not applicable in Malaysia as the country’s property market has yet to mature and there is still a strong demand for housing, commented by Datuk Jeffrey Ng, the President of the Real Estate and Housing Developers’ Association (Ng, 2002). He added that this concept could only be realised for big developers with sound financial standing. Although this would encourage more buyers to come forward to buy but it should also look at the implications on developers.

Under the Australian system, developers only build a few hundreds of houses when compared to Malaysia market. If this concept were implemented, a shortfall of houses would be expected which will lead to an escalation of house price if demand is high. Lower income people will not reach this and hence the initial objective of providing housing for the targeted group will not be realised. Not to forget that a total of 615,000 houses to be built under the Eighth Malaysia Plan (2001 – 2005). Developers will need a big capital on their own to complete their projects if “build then sell” concept is to be implemented.

2.11 Role of Employees Provident Fund (EPF) In the Provision of Housing

The Employees Provident Fund (EPF) in Malaysia, as is common to other national provident funds, is a publicly mandated savings scheme with contributions shared between employees and employers, at a prescribed rate of 9% and 12% of employee's monthly wages respectively.

The Employees Provident Fund (EPF) that was established on 1st October 1951 has a role to provide financial security to its members to enable them to lead a comfortable life beyond retirement. Members can withdraw their EPF savings at age 55 without worrying about not having a regular income upon retirement. The EPF funds are also invested to accumulate interest or dividend, and these together with the contributions are accumulated and credited to individual member's account until they are withdrawn when certain conditions are satisfied. They are also allowed to utilise part of their savings for house ownership, healthcare, computer purchases and withdrawals of savings by civil servants who are on the pension scheme through the following EPF withdrawal schemes as shown in Table 2.16. Information are extracted mainly from the official website of The Employees Provident Fund Malaysia.

Table 2.16. Withdrawal Schemes for EPF Members

Schemes	Description
1. Age 55 Years Retirement Withdrawal Scheme which consists of: <ul style="list-style-type: none"> - Lump Sum Withdrawal Scheme - Periodical Payment Withdrawal Scheme - Annual Divided Withdrawal Scheme - Part Lump Sum Payment and Balance in Periodical Payment Withdrawal Scheme 	Withdrawal of the member's total savings when member attains age 55 years
2. Medical Withdrawal Scheme	A member can withdraw all his/her contributions on medical grounds subject to approval by a medical board.
3. Physical or Mental Incapacitation Withdrawal Scheme	Withdrawal of the member's total savings when the member is physically or mentally incapacitated from any further employment.
4. Leaving Country Withdrawal Scheme	The EPF contributions can be withdrawn in full if the member leaves the country permanently.
5. Death Withdrawal Scheme	The member's savings will be returned to his next-of-kin or beneficiaries.
6. Age 50 Years Withdrawal Scheme	Withdrawal of one-third of member's contributions when member attains a minimum age of 50 years.
7. Housing Withdrawal Scheme which consists of: <ul style="list-style-type: none"> - To Purchase or Build a House Withdrawal scheme - Reducing or Redeeming Housing Loan Withdrawal Scheme - Withdrawal for Second House - Withdrawal to Reduce or Redeeming Housing Loan for Second House - Withdrawal to Reduce or Redeeming Housing Loan for Spouse 	Details are described under heading "EPF Housing Withdrawal Scheme (Account II)"
8. Computer Purchases Scheme	With effect from 1 st July 2000, EPF funds can be withdrawn for computer purchases and withdrawals of savings by civil servants who are on the pension scheme. Under the computer purchases scheme, only members with children aged 10 and above are eligible for this scheme. They can withdraw RM3,500 from their account to purchase a computer from local post office with free installation. However, those with children studying at tertiary level can withdraw a total amount of RM5,000.
9. Member's Savings Investment Scheme	

The changes to the housing schemes are set out in Table 2.17 & Table 2.18 below:

Table 2.17. Changes to Low-Cost Housing Withdrawal Scheme

Year	Purchase Price as Low-Cost House			Withdrawal Amount	Remarks
	<i>Peninsular Malaysia</i>	<i>Sabah</i>	<i>Sarawak</i>		
1977	RM20,000 and below	RM20,000 and below	RM20,000 and below	Member's total savings or 10% of the purchase price of the house whichever is lower	The low-cost housing was enforced with effect from 26 th May 1977
1981	RM25,000 and below	RM25,000 and below	RM25,000 and below	As above	The purchase price of a low-cost house was increased from RM20,000 to Rm25,000 by the Minister of Finance
1986	RM25,000 and below	RM25,000 and below	RM25,000 and below	Member's total savings or 40% of the purchase price of the house whichever is lower	The government agreed to increase the amount of withdrawal to 40% of the purchase price of the house, which was proposed by the EPF
1988	RM25,000 and below	RM25,000 and below	RM25,000 and below	As above	The purchase price of a low-cost house in Sabah & Sarawak was increased from RM25,000 to RM32,000 by the Minister of Finance
1991	RM25,000 and below	RM25,000 and below	RM25,000 and below	Member's total savings or 40% of the purchase price of the house or the difference between the purchase price and the total housing loan obtained by the buyer, whichever is lower	The difference between the purchase price of the house and the total housing loan was included in the new EPF Act 1991, as a new condition

Table 2.18. Changes to Non-Low Cost Housing Scheme

Year	Withdrawal Amount	Remarks
1982	45% of the member's savings or 10% of the purchase price of the house whichever is lower subject to a maximum of RM20,000	
1986	45% of the member's savings or 20% of the purchase price of the house whichever is lower subject to a maximum of RM20,000 45% of the member's savings or the balance subject to a maximum of RM20,000, whichever is lower (Mortgage withdrawal scheme)	With effect from 1 st July 1986, Mortgage withdrawal scheme is introduced for those members who has purchased a house before 1982, and thereby could not benefit from scheme I to withdraw his/her savings for the purpose of reducing or redeeming his/her housing loan
1991	45% of the member's savings or 20% of the purchase price of the house or the difference between the purchase price and the total housing loan, subject to a maximum of RM40,000, whichever is lower	The difference between the purchase price of the house and the total housing loan was included in the new EPF Act 1991, as a new condition

In 1996, a further amendment is enforced, which allowed an EPF contributor to withdraw up to 30% of his/her total savings to purchase or to refinance his housing loan, at three-year intervals. The member is also permitted subsequent withdrawals of up to 30% of that balance to purchase a better house or to reduce/settle his/her housing loan on a five-year intervals basis before age 50. The withdrawal is allowed for the purchase of any type of house with condition on the amount withdrawn cannot exceed the purchase price of the house. This withdrawal is only applicable on condition that the applicants have not obtained 100% loan from other sources. EPF contributors who have obtained 100% loan financing from other sources are entitled to withdraw only 10% of the purchase price of the house or 30% of their savings, whichever is lower.

2.11.1 Conditions for Withdrawal of EPF Contributions

The EPF Board launched a new system on 1st November 1994 that the contributions standing to the credits of and received in respect of each individual member will be divided into three separate accounts, each with specific withdrawal conditions, namely Account I, Account II and Account III. With effect from this date, all contributions will be divided into these three accounts according to the following percentage:

- i. 60% of contributions for Account I
- ii. 30% of contributions for Account II
- iii. 10% of contributions for Account III

Applicants for the withdrawal of EPF funds must have contributed to the EPF for at least 5 years from the date of membership. Any member who attains the age of 55 can withdraw all his/her contributions, together with the balance of savings in Account II and III (if any), but he/she can still continue payment if the employment is continued.

Account I:

60% of the contributions are deposited in Account I, which cannot be withdrawn until the member reaches age 55 unless if he/she dies, leaves Malaysia or is incapacitated from further employment.

Account II:

30% of the contributions are deposited in Account II for housing purchases or pre-retirement plans. It allows members to withdraw their EPF funds for the purposes of:

- Purchase or building of a house
- Reduce or settle the balance of a housing loan
- Purchase or building of second house
- Reduce or redeem a housing loan for second house
- Reduce or redeem a housing loan for spouse

Part of the savings can be withdrawn at age 50 but before age 55 for retirement plans, if there is still a balance of savings in this account. Further details will be discussed in Section 2.11.2 below.

Account III:

10% is held in Account III, which can be withdrawn for medical purposes including critical illness such as cancer, heart problems etc. This facility is provided to help members whose medical expenses are not covered or is partly covered by their employers. This medical treatment is not only limited to the member but also to the member's spouse, children, parents and siblings.

2.11.2 EPF Housing Withdrawing Scheme (Account II)

The various EPF housing withdrawal schemes, which are available under Account II are described as below:

a) To Purchase or Build a House Withdrawal Scheme

Under the current rules, members can withdraw the difference between the price of the house and the housing loan with an additional 10% of the price of the house or all the savings/balance in Account II, whichever is lower. Members will be allowed to make withdrawals once every three years instead of the previous once every five years.

Example:

House Price	RM85,000
Housing Loan	RM60,000
Difference between the House Price and Housing Loan	RM25,000
Additional 10% of the House Price	RM8,500
Amount Eligible for Withdrawal	RM33,500
Balance in Account II	RM20,000
Amount which can be withdrawn	RM20,000

In this case, the member can only withdrawn RM20,000, which is the balance in his/her Account II. The withdrawal for house purchasing must be within 2 years from the date of signing of the Sale and Purchase Agreement.

b) Reducing or Redeeming Housing Loan Withdrawal Scheme

This scheme allows members to withdraw from their Account II to reduce or redeem their housing loans. Withdrawal can be made once in every three years from the date of the previous withdrawal from the same account until the member attains age 55.

Under the latest amendments, one member can withdraw for joint-ownership properties. This allows members to withdraw their EPF savings to pay for housing loans taken by their spouses if the couple is registered as joint owners of the property. Members can withdraw their savings under this scheme as below or which ever is lower:

- For individual application – total outstanding balance of the loan, or balance in Account II
- For joint application – total outstanding balance of the loan, or balance Account II for both applicants.

Under joint application, EPF will process the application of first purchaser. If the amount is insufficient, EPF will proceed to process the second purchaser.

Example:

Individual Application

Price of the House	RM 85,000
Housing Loan	RM 60,000
Outstanding Balance	RM 31,500
Balance in Account II	RM 15,000
Amount eligible for withdrawal	RM 15,000

Joint Application

Price of the House	RM180,000
Housing Loan	RM140,000
Outstanding Balance	RM 88,500
Balance in Account II	RM 25,000
Balance in Account II	RM 15,000
Amount eligible for withdrawal	RM 40,000

c) Withdrawal for Second House

Effective from 2nd January 2001, members can withdraw part of their savings in Account II to purchase or build their second house on condition that the first house, which was funded from their EPF savings, has been sold. This only applies to houses purchased or built after 2nd January 2001. Before this date, members can only withdraw to reduce or redeem their housing loan.

d) Withdrawal To Reduce or Redeeming Housing Loan For Second House

Effective from 2nd January 2001, members can also withdraw to reduce or redeeming housing loan for their second house on condition that the first house, which was funded from their EPF savings has been sold.

e) Withdrawal to Reduce or Redeeming Housing Loan For Spouse

Effective from 2nd January 2001, members can withdraw from their account II to reduce or redeem housing loan for their spouse based on condition that:

- They are non-borrowers;
- They are registered as co-owners;
- The house is mortgaged to the financial institution.

Source: Employees Provident Fund (EPF), Malaysia

2.11.3 Analysis of the Role of EPF

The housing withdrawal scheme is intended to provide a member a “roof over his head” before and during his retirement while the partial withdrawal scheme at age 55 is to enable him to prepare for eventual retirement. Since the introduction of this scheme, 88,759 applications were approved, and a total of RM1.1 billion is withdrawn under this purpose (Seventh Malaysia Plan, 1996 – 2000).

The current amendments allow EPF contributors to withdraw the difference between the price of the house and the housing loan with an additional 10% of the price of the house or all the savings/balance in Account II, whichever is lower to purchase a new house before they attain age of 55 years. This withdrawal can be made once in every three years instead of the previous once every five years. This three-year withdrawal interval would promote higher homeownership, especially among the low-income households and at the same time allow contributors, to pay their loans faster as well as providing them with opportunities to upgrade or invest in additional residential properties.

This revised rule is generally more favourable for EPF members purchasing medium or high-cost houses when compared to the old rule, which announced in 1991. Members who wished to purchase non-low cost houses were only allowed to withdraw an amount up to 20% of the purchase price or 45% of the total savings, whichever is lower, subject to a maximum of RM40,000. On the other hand, in respect of a member who is buying a low-cost house, this revised rule may or may not be more favourable as the old rule permitted a member to withdraw all his/her total savings or an amount up to 40% of the purchase price of the house, whichever is lower. This does not allow the poor to fully utilise their captive savings with the EPF and thus cause low home ownership among poorer households. However, if contributors are allowed to withdraw more from their savings and borrow (say from the EPF) against their future contributions to purchase a house, this will promote higher home ownership. It will also reduce the inequity in respect of contributors who were able to buy houses on a

mortgage from a bank but who faced a higher interest rate of 1.5 –3% than what they earned as dividends on their EPF balances (Thillainathan, 1997).

One of the important objectives of the EPF is to provide adequate savings to support members during old-age retirement. To achieve this objective, the EPF has to ensure that the available schemes must not drastically reduce the member's savings with the EPF, which will adversely affect the quality of retirement life of its members. This is avoided because the EPF Board has divided the contributions of each member into three separate accounts. 60% of the total contributions are deposited in Account I, which cannot be withdrawn before the member attains age 55 unless if he/she dies, leaves Malaysia or is incapacitated from further employment. Secondly, if a low-income earner started his/her working life at or before age 20 and is expected to stay in the labour force for 35 years, he/she will have about 20 years to accumulate the retirement fund. Furthermore, with improving life expectancy and a tightening labour market, retirement age will increase, which in turn increase the number of years he/she can work. Table 2.19 outline the growth of a contributor's accumulated fund based on a withdrawal of RM5,000 from EPF for down payment to purchase a low-cost house priced at RM30,000.

Given the success of the Housing Development Board (HDB) and the Central Provident Fund (CPF) in promoting housing development and home ownership in Singapore, there have been calls on EPF to go into property development as a key area of activity, either directly or indirectly from time to time. However, both the government and the EPF have resisted moving towards this direction. By not promoting a Housing Development Board type of organisation, the EPF has been able to implement its initial objectives better since it is able to deal with a more competitive industry in housing development. According to (Thillainathan, 1997), EPF as a pension or provident fund should remain as a portfolio investor instead of direct investor in businesses and property development activities. EPF is therefore more efficient in managing portfolios with the available skills and resources compared to managing a diverse range of business which they are unfamiliar with. Besides, Malaysia is a federation and land is a state matter, this would create problems with respect to land

acquisition, conversion and planning approvals. Unlike Singapore, such problems would not exist, as it is a country with unitary government.

The EPF can play a significant role in the provision of finance in housing. OCBC Investment Research estimates that there could still be some RM24 billion available for withdrawals for housing purchase purposes even if half of the EPF contributors are assumed to have already withdrawn funds for house purchases and would thus not be eligible for further withdrawal. This is more than the country's total residential transaction value of RM18.54 billion in 1999 (Lim, 2000). The EPF can play a key role in housing finance by providing fixed rate funds either directly or through financial institutions or banks or through Malaysia Building Society Berhad (MBSB).

Table 2.19. Withdrawal of EPF Contributions for Housing Purchase

Age of entry into workforce: 20 Initial annual wage: RM800 Annual wage increase: 5% EPF contribution rate: 23% Annual dividend return from EPF: 5%		Property price: RM30,000 Qualified housing loan: 25,000 Initial down payment: RM5,000 Annual income repayment: RM2600 Repayment Period: 20 years		
Age	Annual Salary	EPF Contribution	Housing Withdrawal	Accumulated fund
20	9600	2208		2208
21	10080	2318		4689
22	10584	2434		7293
23	11113	2556		10028
24	11669	2684		7900
25	12252	2818	5000	9415
26	12865	2959	1500	11081
27	13508	3107	1500	12906
28	14184	3262	1500	14896
29	14893	3425	1500	17061
30	15637	3597	1500	19410
31	16419	3776	1500	21951
32	17240	3965	1500	24693
33	18102	4164	1500	27648
34	19007	4372	1500	30826
35	19958	4590	1500	34238
36	20956	4820	1500	37895
37	22003	5061	1500	41810
38	23104	5314	1500	45996
39	24259	5580	1500	50466
40	25472	5858	1500	55234
41	26745	6151	1500	60316
42	28083	6459	1500	65727
43	29487	6782	1500	71484
44	30961	7121	1500	77604
45	32509	7477		85604
46	34134	7851		94005
47	35841	8243		102825
48	37633	8656		112087
49	39515	9088		121811
50	41491	9543		132022
51	43565	10020		142743
52	45743	10521		154001
53	48031	11047		165821
54	50432	11599		178233
55	52954	12179		191265
56	55601	12788		204948
57	58382	13428		219316
58	61301	14099		234402
59	64366	14804		250242
60	67584	15544		266875

2.12 Summary and Conclusions

With no exemption, the Malaysian Government has committed in the provision of “adequate and affordable” housing to its population, especially the lower income people over the past three decades. However, even with the numerous housing programmes implemented throughout the various five-year Malaysia Plans, there is still a shortage of affordable homes for the low-income people. From the literature, the main issues and problems associated with low-cost housing development include:

- Mismatch of housing demand and supply;
- Scarcity and expensive of land costs in urban areas;
- Delays in obtaining necessary approvals from Government departments/agencies
- Difficulty in obtaining financing loans from commercial banks
- Less profitable when compared to other types of houses
- Expensive professional fees or contributions to Government department/agencies
- Escalating price of construction materials
- Shortage of construction labour
- Difficulty in selling the low-cost units
- Insufficient of incentives provided by the Government
- Lack of resources (finance, expertise) in Government departments;
- Unsuitability of sites and locations;
- Financial & management problems of developers;
- Misuse of funds collected from house buyers, and
- Incompetent contractors

For this study, the author defines “affordable housing” as housing made available to and affordable by very-low, low and medium income persons and households who cannot either rent or purchase housing appropriate to their needs in the free housing market. An element of subsidy is often evident to make such housing accessible to the targeted groups and its affordability must not be achieved by compromising appropriate design and construction

standards. The terms “affordable housing” and “low-cost housing” are used interchangeably in this research.

According to the Ministry of Housing and Local Government, low-cost housing policies and guidelines can be summarised as follows:

- 30% low-cost quota is required for private housing scheme reaching a certain development size.
- Low-cost housing must be sold at a selling price ranging from RM25,000 and RM42,00 per unit, depending on different location.
- Low-cost houses can only be sold to households with monthly income of between RM500 and RM750.
- Each low-cost house must have a minimum built-up area of 650 square feet comprising three bedrooms, a living room, a kitchen and a bathroom-cum-toilet. However, the minimum design standard for low-cost housing varies from state to state.
- A minimum quota of 30% of the housing units has to be withheld by the private developers for sales to Bumiputera at a discount of at least 5% off the selling price.
- Provision of incentives from the Government includes faster plan approvals, relaxations in Uniform Building By-Law and standards and licensing procedures, direct or indirect subsidy.

The EPF should also play a more direct role in funding the purchases and monthly repayments in support of home ownership, especially allowing retrenched workers to use their savings for monthly repayments.

The Malaysian Government alone has yet to succeed in meeting the demands of affordable housing in the country and effective public-private partnership could be a solution in delivering affordable housing where the Government and the private sector can pool their resources together and cooperate as a team to deliver the demands. Chapter 3 examines and assesses the suitability of public private partnership as an alternative financing solution for the procurement of affordable housing in Malaysia.

3.0 PRIVATE FINANCE AND PUBLIC PRIVATE PARTNERSHIPS

3.1 Introduction

Provision of infrastructure has traditionally been the preserve of governments. However, growing awareness of the difficulties and limitations of public funding for infrastructure development have led many governments to utilise private finance as a financing tool to fund public infrastructure projects. The role of the government is changing from that of the 'direct provider' to that as the 'enabler' of housing via a more appropriate regulatory and financial environment (Smith, A, 1999).

The trend of liberalising and privatising infrastructure activities has been booming around the world since 1980s. When the United States passed the Public Utility Regulatory Act (PURPA) in 1978 and established a private market for electric power, it provided a strong model for the growth of private financing in other developed countries. The private sector is willing to take the risks and at the same time governments are also willing to provide incentives to encourage private investors into investments in new sectors (Schell, C, 1995).

As stated in Merna and Dubey (1998) significant process in the provision of infrastructure facilities under public leadership in many countries has resulted in '*serious and widespread misallocation of resources*', '*poor performance*' and '*failure to respond to demand*'. The involvement of the private sector not only helps to reduce the financial burden of governments in maintaining or developing infrastructure, but it also encourages better risk sharing, accountability, monitoring and management in infrastructure provision (World Development Report, 1994).

The World Bank's Private Participation in Infrastructure (PPI) Project Database as stated in (Neil, 1999), shows that private participation grew dramatically between 1990 and 1997, rising from about US\$16 billion to more than US\$120 billion. It then declined by roughly 20% of the total in 1998 and 30% in 1999, as a result of the financial crisis in Asia that began in mid-1997. Private sector investment in project finance deals rose to almost US\$100 billion in 1998 and it is expected to grow significantly in the next few years (Akash, 2000). Although the Asian financial crisis has brought a significant pause in the private finance market, many believed that the investment needed in many countries still clearly remains enormous (Merna & Njiru, 2002,1998; Allen et at, 2001).

This chapter aims to investigate the literature in public private partnership for infrastructure projects or related services in order to determine if the process is applicable in the implementation of affordable housing. It begins with providing a general understanding of the concept and importance of private finance and public private partnerships (PPPs), followed by reviewing the development of private finance infrastructure delivery around the world. Build-Operate-Own-Transfer (BOOT) concession contract is selected to illustrate how private finance is used to finance infrastructure projects. Case studies will be presented illustrating the key success factors for projects procured by privately financed concession contracts with a view to assessing the suitability of such financing solutions for the procurement of affordable housing. It also discusses the conditions for successful privately financed public infrastructure projects followed by a presentation of three international case studies to examine the involvement of local community in the provision of affordable housing under partnering arrangement. This chapter, however, does not examine the different types of public private partnerships but attempts to address their impacts in public infrastructure projects.

3.2 Overview of Private Finance and Public Private Partnerships

Increasingly over the last twenty years, public private partnerships have been implemented in many industrialised and developing countries as a tool for economic investment. It can cover a wide range of activities including funding in construction, privatisation and concession of large scale, capital-intensive infrastructure projects. Build-Operate-Own-Transfer (BOOT) concession contract. Notable examples are the Eurotunnel between France and UK (worth US\$19billion), the Trans-Alaska Pipeline System Project (US\$7.7billion), the Sincor Heavy Oil Project in Venezuela (US\$4.5billion), the Hibernia Oil Field Project off the coast of Newfoundland (US\$4.1billion) and the Melbourne City Link Project (US\$1.2billion).

Public private partnerships allow governments to utilise private finance and expertise to reform inefficient and under-funded public services. It can provide the public sector with better value for money in procuring modern, high quality services from the private sector (Li et al, 2001; 2002a; Lenard et al, 2002). Li and Akintoye (2002b) believe that risk management can assist in achieving value for money by allocating risks to the party who has the best ability to manage it within the public sector PPP/PFI environment. This structure also raises finance at a relatively low cost, which benefits both the sponsors and lenders.

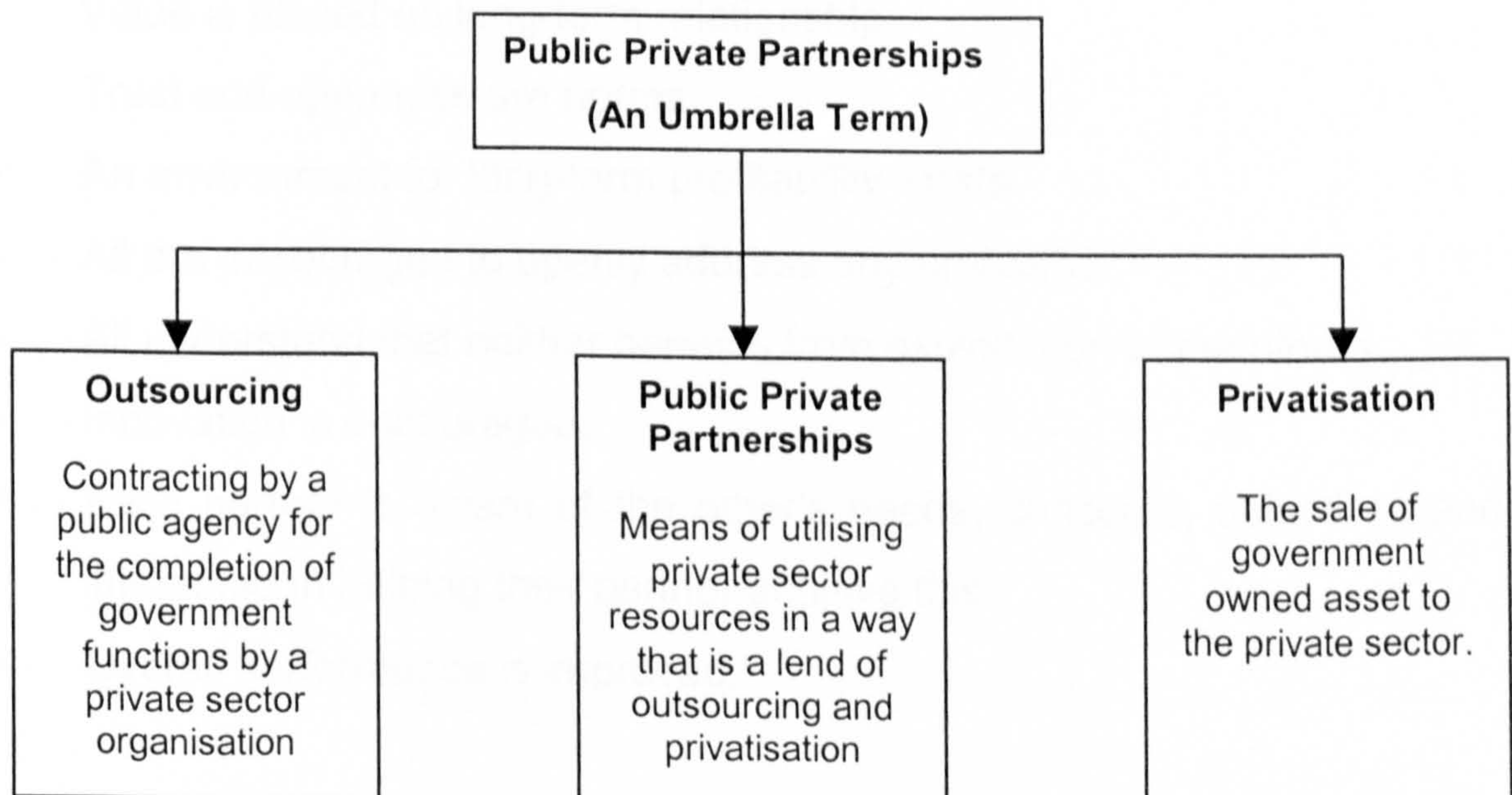
On the other hand, there is still a residual distrust of the partnership concept amongst the media and public at large. Specific issues of concern include public private partnerships are complex and potentially confusing; cost overruns and time delays for certain projects (Allen, S et al). There are also ongoing debates as to whether privatisation is a political phenomenon and should be analysed as such, or whether it is an economic response to the growth of the state and the cost of state provision (Feigenbaum et al, 1998). This chapter does not address this question but acknowledges that it is an important issue. Public private partnership is playing an important role in the delivery of major services and infrastructure in many countries.

3.3 Concept of Public Private Partnership

Although the concept of “Public Private Partnership” has been widely used as a method of procurement for public infrastructure all around the world, there is no precise legal definition of public private partnership. PPPs can embrace a range of structures and concepts, which involve the sharing of risks and responsibilities between public and private sectors. According to Wragge, H (2000), a typical PPP would usually have the following characteristics:

- The private party typically invests in a capital asset and is responsible for maintaining and operating it over the life of the contract.
- The focus is on the services provided and not on the assets used.
- Risk transfer is a key element.
- State assets are often transferred or made available to the private party.

Public private partnerships can take different forms. A White Paper on Partnerships prepared by the United States National Council for Public Private Partnerships (2001) described different forms of public private partnerships by demonstrating in the diagram below:



The Council continued to define Public Private Partnerships as “a contractual agreement between public agency (federal, state or local) and private organisations. Through this agreement, the skills and assets of each sector

(public and private) are shared in delivering a service or facility for the use of the general public. In addition to the sharing of resources, each party shares in the risks and rewards potential in the delivery of the service and/or facility”.

Similarly, The Public Private Partnership Programme of United Kingdom described public private partnership as “a generic term for the relationships formed between the private sector and public bodies often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services. The term PPP is used to describe a wide variety of working arrangements from loose, informal and strategic partnerships to design, build, finance and operate (DBFO) type service contracts and formal joint venture companies.”

It can be clearly seen that there is no common definition of partnership but they do highlight specific attributes and procedures for successful partnering. Departing from the clinical definitions, Cook and Hancher (1990) stated, “Partnering is simply a relationship wherein:

- All seek win-win solutions.
- Value is placed on long-term relationship.
- Trust and openness are norms.
- An environment for long-term profitability exists.
- All are encouraged to openly address any problems.
- All understand that neither benefits from exploitation of the others.
- Innovation is encouraged.
- Each partner is aware of the other’s needs, concerns, objectives and is interested in helping their partner achieve this.
- Overall performance is improved.”

The author defines public private partnership as “a contractual arrangement between the government and the private sector (including non-profit organisations and community) to deliver better quality projects – by drawing on the best of both sectors in order to achieve common goals and shared benefits.”

3.4 Development of Private Finance and Public Private Partnerships Around the World

There is no comprehensive readily available information on the financing of projects on non-recourse or limited recourse basis. However, since 1984 eighty-six countries have privatised 547 infrastructure companies including the UK's British Telecom and British Gas, and at least 574 private Greenfield infrastructure projects are under way in some eighty-two countries (World Bank, Private Sector Development, 1995). These figures show that many countries both in developed and developing countries are changing their economic policies in order to survive in the modern world by encouraging participation of private sector in infrastructure developments.

Table 3.1. Top Ten New Private Infrastructure Investment Projects, 1984 – September 1995

Location	Project	Contract	Cost (US\$ millions)
France/ United Kingdom	Channel Tunnel	BOT, 55 Years	19,000
Taiwan (China)	Taipei Mass Rapid Transit System	BOT	17,000
Japan	Kansai International Airport	BOT	15,000
Argentina	Buenos Aires Water and Sewer Services	ROT, 30 years	4,000
Thailand	Telecom Asia Communication network	BTO, 25 years	3,700
China	Daya Bay Nuclear Power Plant Phase 1	BOO	3,700
Malaysia	North-South Toll Expressway	BOT, 30 years	3,400
Mexico	Petacalco Coal-fired Power Plant	BOT	3,000
Thailand	Bangkok Elevated Road and Train System	BOT 30 years	2,981
Note: BOO = Build-Own-Operate; BOT = Build-Operate-Transfer; BTO = Build-Transfer-Operate, ROT = Rehabilitate-Operate-Transfer			

Source: World Bank Private Infrastructure Database

Table 3.2 shows the top ten project finance deals around the world. Six out of ten projects are in developing countries, reflecting the importance of project finance in those countries.

Table 3.2. Private Finance Transactions by Region, 1997-1998

Region	Number of Projects		Amount (millions of U.S dollars)	
	1997	1998	1997	1998
Europe	207	104	81,703	26,173
Asia	191	63	58,405	27,477
Latin America	105	49	41,610	33,554
North America	75	33	28,400	15,033
Middle East and North Africa	35	14	22,876	7,169
Sub-Saharan Africa	11	8	3,429	2,114
Total	624	271	236,423	111,520
Share of developing countries	380	140	123,169	60,069

Source: Capital DATA Project Finance Ware

Greater involvement of the private sector has created new markets in many sectors previously seen as the preserve of government. From Table 3.2, the total number of project finance deals worldwide in 1997 (both Greenfield and expansion projects) was 624, which had a value of US\$236 billion. The value dropped back to US\$111 billion in 1998 due to the Asian financial crisis that began in mid-1997. 380 out of 624 project transactions, at a value of approximately US\$123 billion, were in developing countries.

3.4.1 Asia

Figure 3.1. Regional Distributions of Project Finance Flows to Developing Markets, 1994-1998 (number of projects)

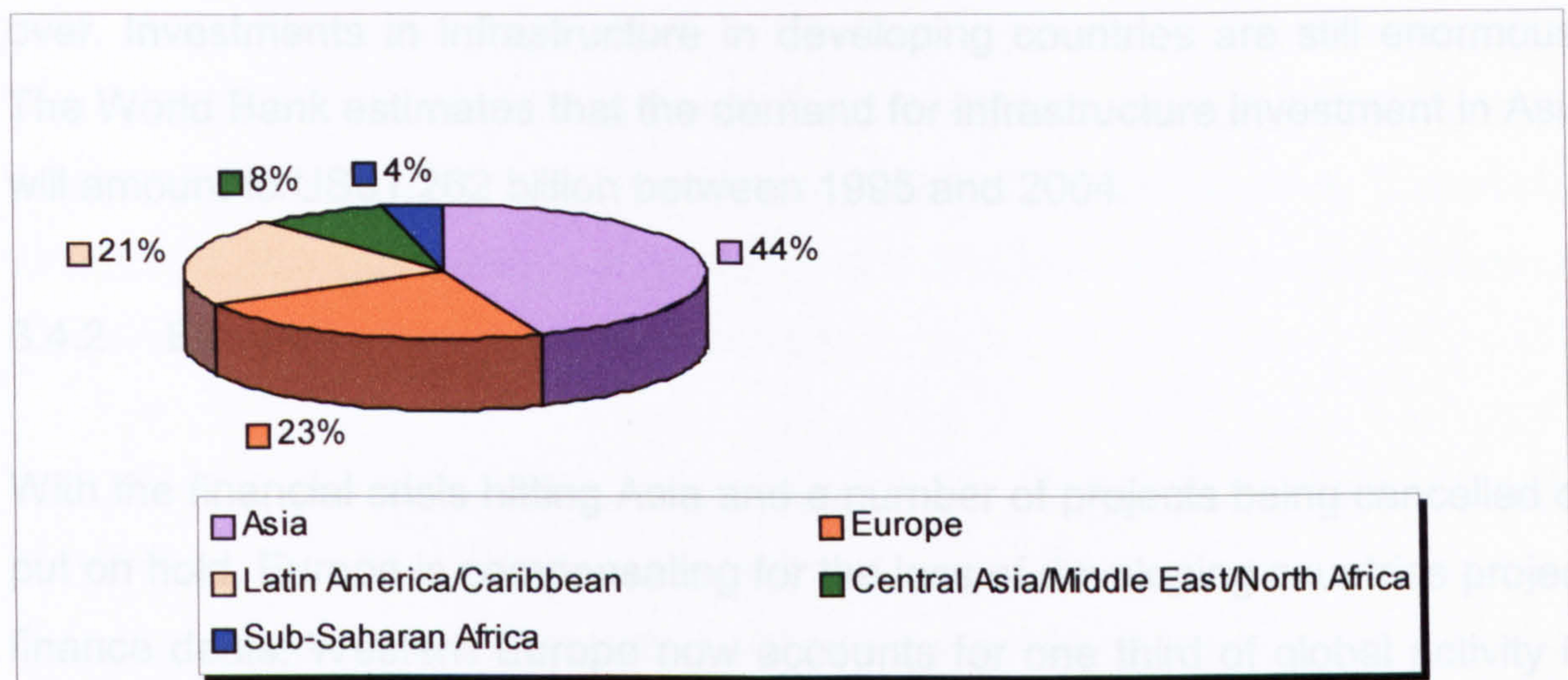


Figure 3.1 shows the regional distribution of project finance flows to developing markets from 1994 to 1998. It can be seen that a large proportion of project deals were undertaken in Asia, which is 44% of the total number of projects as compared to 23% in Latin America/Caribbean, 8% in Central Asia/Middle East/North Africa and 4% in Sub-Saharan Africa. According to Taylor (1998), East Asia is the world's busiest construction market in the 1990s, and the number of project finance deals funded and in the pipeline in East Asia are 51 and 205 respectively, which are larger than the proportion in other regions.

Between 1990 and 1999, US\$61 billion of private investment was committed to 279 projects in 26 developing countries, comprising 34369 kilometres of toll highways, bridges and tunnels (Gisele, 2000). The impact of infrastructure on economic growth is significant and the availability of infrastructure is crucial for the modernisation and diversification of production in both developed and developing markets. The investments in infrastructure development have fallen sharply since the start of the Asian Financial crisis. Many high-profile projects have been cancelled or delayed and private investors and lenders are less willing to support projects facing deteriorating markets and unstable macroeconomic environments. Public criticisms of support given by

governments to projects and the allegations of corruption in the awarding of contracts have exacerbated the situation in some countries.

However, the demand for infrastructure will no doubt pick up once the crisis is over. Investments in infrastructure in developing countries are still enormous. The World Bank estimates that the demand for infrastructure investment in Asia will amount to US\$1,262 billion between 1995 and 2004.

3.4.2 Europe

With the financial crisis hitting Asia and a number of projects being cancelled or put on hold, Europe is compensating for the loss of developing countries project finance deals. Western Europe now accounts for one third of global activity in project finance. The launch of the single currency, tighter budget deficit requirements and the liberalisation of the energy sector are the reasons behind the rapid growth of the project finance market in Europe. The tight fiscal policy due to the European monetary union also means that the governments of Italy, Spain and Portugal, all of which have high levels of public debt, can no longer afford to spend large sums of money on infrastructure development (Arkady, O, 1999). Furthermore, the launch of this single currency with the exception of Denmark, Greece and United Kingdom, removes the risk of foreign currency exchange within the European Union (EU), which is one of the main factors that led to the financial crisis in Asia.

However, recent report published by the United Nations (2002) stated that there has been a growing interest in Public Private Partnerships to fund their infrastructure projects in Europe over the last few years. The Dutch, the United Kingdom and the French experiences are significant examples of possible Public Private Partnership approaches.

United Kingdom

The United Kingdom's Private Finance Initiative (PFI) was launched by the Chancellor of the Exchequer, Norman Lamont, in 1992. The number of PFI projects has increased steadily since the Labour Government came into power (HM, 2000). PFI was designed to involve the private sector in the financing and management of public sector projects. Recent infrastructure projects include the £320 million rail link to Heathrow Airport, the £10 billion Channel Tunnel Rail Link; £500 million to operate trunk roads and the £96 million redevelopment of King's College teaching hospital in London.

The PFI has started to deliver its promises but is still some way from achieving its full potential. The UK Government, while keen to highlight the amount of project work that has resulted from PFI, has also had to admit that there have been many administrative problems in the implementation (Birnie, 1999). On the other hand, the construction Industry, while initially interested in this type of partnership arrangement has continued to express doubts about the likely success. (Merna and Owen, 1998) stated that the problems with the PFI are (a) lack of clarity in guidelines; (b) over-complicated and expensive tendering procedures; and (c) a lack of confidence in the financing community. At the same time, Ezulike et al (1997) identified six barriers of entry into PFI market: lack of appropriate skills; high participation costs; high project values; high risk; lack of credibility and contacts; and demands on management time. Akintoye et al (2001) commented that greater standardisation of the planning practices associated with PFI, could help counter criticisms of PFI such as costly and inefficient. Also, there is a need for skills development to improve the process (Ahadzi and Bowles, 2001).

Overall, the emphasis of PFI is not acquisition of an asset but procurement of a service. It aims to promote higher cost efficiency, improve the quality of public services and stimulate fresh flow of investment. In return for aiding the public sector in achieving the efficient and economic delivery of services and improved infrastructures, the PFI offers real benefits to the private sector in the form of increased business and profit. This should allow the public sector to expand its

role as an enabler of private sector investment rather than a provider of services without the need of the initial capital investment.

Portugal

In Portugal, a number of large infrastructure projects have been financed successful through public private collaboration. Most notably is the Euro 1.3 billion-project finance deal for the construction of 170km of toll motorways in Portugal. Three toll roads have already reached the financial close and around a dozen other road projects are being implemented (United Nations, 2002).

Italy

A special PPP taskforce – Unita tecnica Finanza di Progetto (UFP) was set up recently. According to the 2001 – 2004 Economic and Financial Planning Document, the Italian Government expects to finance through private funds of Euro 9 billion of new infrastructures. In Italy, the defence sector has been the biggest success to date with over Euro 7 billion of projects reaching financial close and another Euro 5.5 billion under Negotiation. The waste sector has seen a number of waste and energy plants financed and built, also two water concessions have been awarded and a number of others are in advanced stages. The Ministry of Justice has also allocated Euro 400 million in the construction of 22 new prisons. Also, the health sector is considering the potential use of private finance and a Euro 181 million Public Private Partnership new build hospital scheme providing 680 beds is in tender in Venice (Project Finance News, 2002).

Other European Countries

Other pipeline projects include a light railway system in Barcelona and the new high-speed Amsterdam to Antwerp rail system in the Netherlands. Italy, which has been very slow in attracting private funding to finance infrastructure projects, has already planned a number of projects using project finance. Projects proposed include two motorways, one being a 400km motorway connecting Salerno and Reggio Calabria in the south. In Greece, Public Private Partnerships have been used with great effect for Athens and Sparta airports, the Rion-Antirion Bridge and the Essi motorway (Allen, S. et al. 2001).

However, not all countries are keen on the prospect of using project finance (Benoit, 1997). Germany considers that project finance is complicated and costly to arrange, while countries such as Luxembourg, Sweden, Belgium and the Netherlands are only just starting to turn to project finance.

3.4.3 Latin America

The World Bank's Private Participation in Infrastructure (PPI) Database states that Latin America and East Asia dominate the private participation investments. The debt problems of the 1980s and the 1994 Mexican Peso crisis have hindered the growth of the private finance market in which lenders and investors lack confidence to invest in those regions that are perceived to be of high risk. Furthermore, the impact of the Asian financial crisis hit them before the project finance market could regain its full momentum after the 1994 Peso crisis, and thus resulted in cancellation and postponement of many high profile projects.

Project finance in Latin America has expanded rapidly in recent years. The World Bank estimates that the demand of infrastructure in Latin America amounts to US\$60 billion a year. Some significant projects have gone ahead, including the US\$ 1.45 billion Petrozuata oilfield development in Venezuela's Orinoco Belt, the country's first big project finance deal since the 1970s.

3.5 Procurement Strategy Utilising Private Finance Structure – BOOT

There has been a growing trend in recent years for Principals, usually governments to utilise concession contracts to encourage private sector participation in major infrastructure projects across the world. The adoption of this form of contract strategy is often referred to as a Build-Own-Operate-Transfer (BOOT) contract. The concession offers governments to finance infrastructure and industrial developments without incurring massive public sector and hence reducing its expenditure on infrastructure development activities. This approach also provides technology transfer, and improves performance and efficiency.

Any BOOT project is also referred to as a concession contract. Merna & Smith (1996) define a concession contract as:

A project based on the granting of a concession by a Principal, usually a government, to a Promoter, sometimes known as the Concessionaire, who is responsible for the construction, financing, operation and maintenance of a facility over the period of the concession before finally transferring the facility, at no cost to the Principal, a fully operational facility. During the concession period the Promoter owns and operates the facility and collects revenues in order to repay the financing and investment costs, maintain and operate the facility and make a margin of profit.

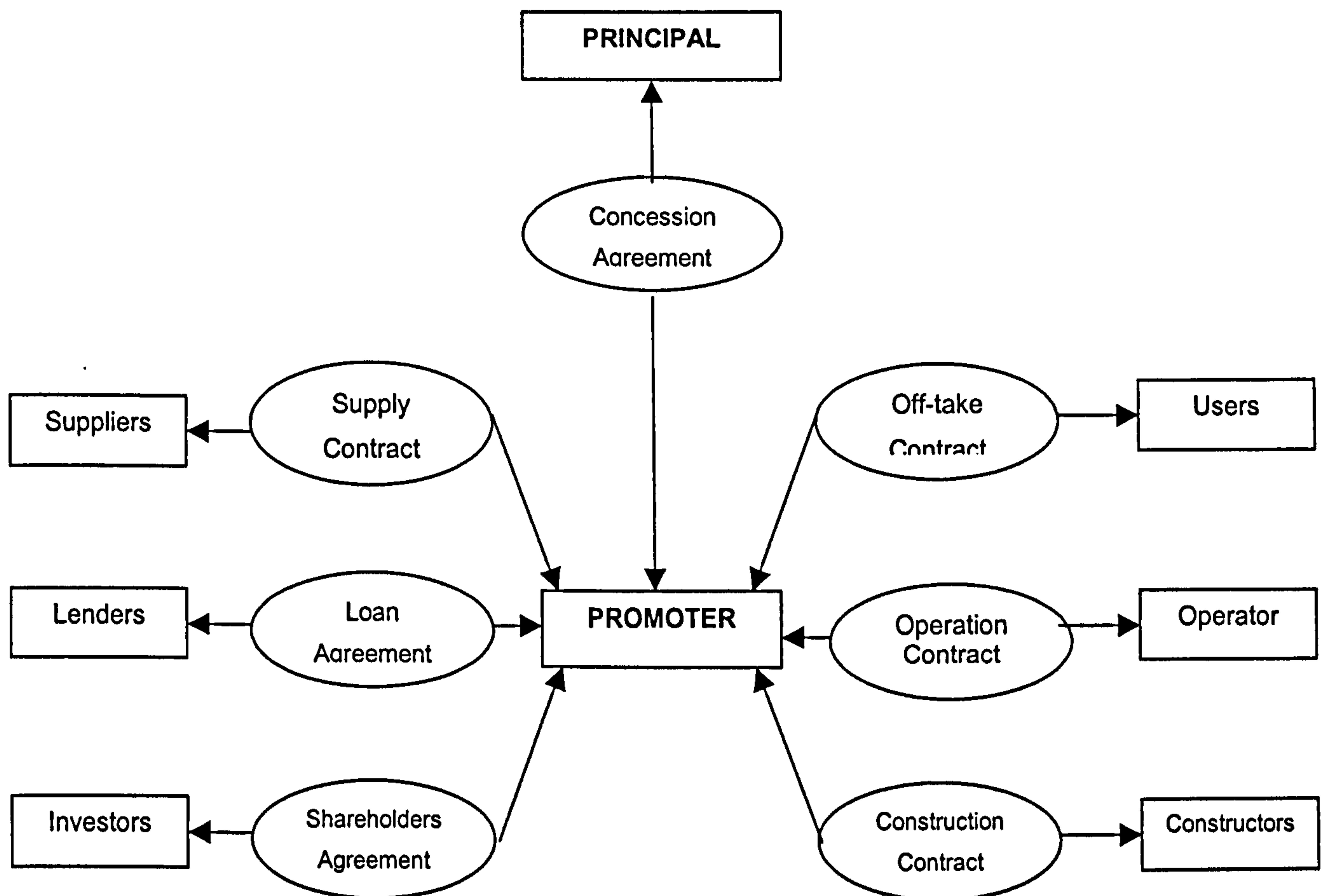
In a BOOT project, a project company, normally a SPV is given a concession to build, operate and maintain a facility over a period of concession. The concession period is usually determined by the length of time needed for the facility revenue to pay off the company's debt and provide a reasonable rate of return for its efforts and risks (UNIDO, 1996).

There are many acronyms used to describe concession contracts. They are alternative names for BOOT projects, but some denote projects that differ in one or more particular aspects, although they all adopt the main function of a concession strategy. For example, in a BOO project, the promoter finances, owns and operates the facility. The promoter retains the ownership of the facility, without the requirement to transfer the facility back to the principal. In a BOOT project, the promoter is required to transfer the facilities back to the principal at the end of the concession period. The descriptions of build-operate-transfer (BOT) and build-own-operate-transfer (BOOT) are often interchangeable. For the purposes of this thesis, the acronym BOOT will be used to cover all forms of concession contracts.

It is also worth to mention here that the term 'promoter' applies to those who first identified the project. In BOT/BOOT concession contracts, the private sector that accepts the franchise to manage the project is referred to as the 'sponsor'. These two terms are often interchanged and sometimes refer to the same meaning.

A typical structure indicating the number of organisations and contractual arrangements that may be required to realise a particular BOOT project is shown in Figure 3.2 below:

Figure 3.2. Typical BOOT Corporate Structure (Smith, 1995; Merna & Smith, 1996)



3.5.1 Advantages and Disadvantages of Procuring BOOT Project

BOOT projects may offer both direct and indirect advantages and disadvantages to the host governments, the citizens of the host country and the BOOT consortium. Smith (1995) outlines the following advantages and disadvantages for BOOT projects:

The advantages are:

- *Additionality.* This would offer the possibility of realising a project that would otherwise not be built. This approach also allows additional financial source for priority projects in the host country.
- *Credibility.* This would propose that the willingness of equity investors and lenders to accept the risks would indicate the project was

commercially viable. On the other hand, the host government will incur little or no risks, as there are generally sufficient bonds or letters of credit in place to ensure timely completion in the event that the sponsors/promoters default prior to project completion.

- *Efficiencies.* The promoter's control and continuing economic interest in design, construction and operation of a project will produce significant cost efficiencies, which will benefit the host country.
- *Benchmark.* The usefulness to the host government to use a BOOT project as a benchmark to measure the efficiency of a similar public sector project.
- *Technology transfer and training.* The continued direct involvement of the project company would promote a continuous transfer of technology, which would ultimately be passed on to the host country. A strong training programme would leave a fully trained local staff at the end of the concession period.
- *Privatisation.* A BOOT project will have obvious appeal to a government seeking to move its economy into the private sector.

The privatisation of infrastructure projects through BOOT approach can also reduce the size of bureaucracy. A less bureaucratic administration and management system can provide a better service to the public.

The disadvantages are:

- *Additionality.* Commercial lenders and export credit guarantee agencies will be constrained by the same host country risks whether or not the BOOT approach is adopted.
- *Credibility.* This benefit may be lost if the host government provides too much support for a BOOT project, resulting in the promoter bearing no real risk.
- *Complication.* A BOOT project is a highly complicated cost structure, which requires time, money, patience and sophistication to negotiate and bring to fruition. The overall cost to a host government is greater than that of

traditional public sector projects, although proponents of the BOOT approach argue that overall costs are less when design and operating efficiencies are taken into account and compared with public sector alternatives.

- *Viability.* Only a few BOOT projects have reached the construction stage due to the lack of experienced developers and equity investors; the lack of necessary support from the government, and the workability of corporate and financial structures.

Although there are a number of advantages and benefits associated with BOOT projects, problems may arise before, during or after the construction of the project. The risks associated with BOOT projects are far greater than those considered under traditional forms of contract as the revenues generated by the operational facility must be sufficient enough to pay for the finance, construction, maintenance and operation. It is the author's view that political instability is the main concern for all BOOT projects. Since most concessions range from 20 to 40 years, the political stability must be equally long range. For example, a cancellation of a power plant will cause the developers into huge troubles or even bankruptcy if they cannot cover their damages from the new regime. Anything could happen over the concessions period, for example, unfavourable exchange rate fluctuations can occur, which place an undue burden on the consortium which must pay back loans with devalued revenue. The 20 percent devaluation of the Mexican peso in December 1994 and the Asian financial crises began in mid 1997 reverberated through many countries. Investors are less willing to fund projects in those countries.

3.6 Is BOOT the Solution for Government in Financing Infrastructure Developments?

What will happen in the future? We do not know. Is BOOT the wonder solution to solving the governments' infrastructure funding problem? According to the World Bank, increased private sector involvement in infrastructure projects offers the "*twin benefits of additional funds and more efficient provision.*" It

allows private sector to invest directly into infrastructure while relieving the governments' financial burden.

However, Pahlman (1996) refutes this statement by arguing that the BOOT model is greatly based on free market ideology rather than empirical evidence or fact. This is further substantiated with the lack of track record as no major BOOT project has been completed successfully up to the last stages of the Build-Own-Operate-Transfer procedure. BOOT projects that have been either abandoned or delayed as a result of the 1997 Asian financial crisis further reinforces Pahlman's views.

Quiggin (1996) brought in a new angle of argument by stating that BOOT schemes are usually not feasible for the reason that companies may be adept in construction methods and technicalities but not necessarily so with operation and maintenance. Thus leading to a possible solution, which contracts involving operation and maintenance services is scrutinised and open to competition after a period of time.

On the other hand, Guislain & Kerf (1995) pointed out that the BOOT concession contract is a flexible mechanism that can be designed to overcome a broad range of obstacles to private participation in infrastructure. An example of its flexibility is the option of leaving formal ownership of the project facilities to the host government. This is particularly useful in countries in which the law or constitution excludes private ownership of certain infrastructure assets. However, they agreed that designing a BOOT scheme that strikes a balance between the interests of the investors, the consumers, and the host government and that fits the conditions of the sector and country concerned is pivotal.

It has been stated that although the governments are able to borrow at a lower cost to fund infrastructure projects, private management of the facilities are better and more efficient as the government is unable to balance the project's finance and the general budget (Klein & Roger, 1994). The authors also claimed that state firms that receive budget subsidies to operate the facility have problems maintaining quality operations when fiscal problem arises.

3.7 Analysis of Case Studies for BOOT Projects

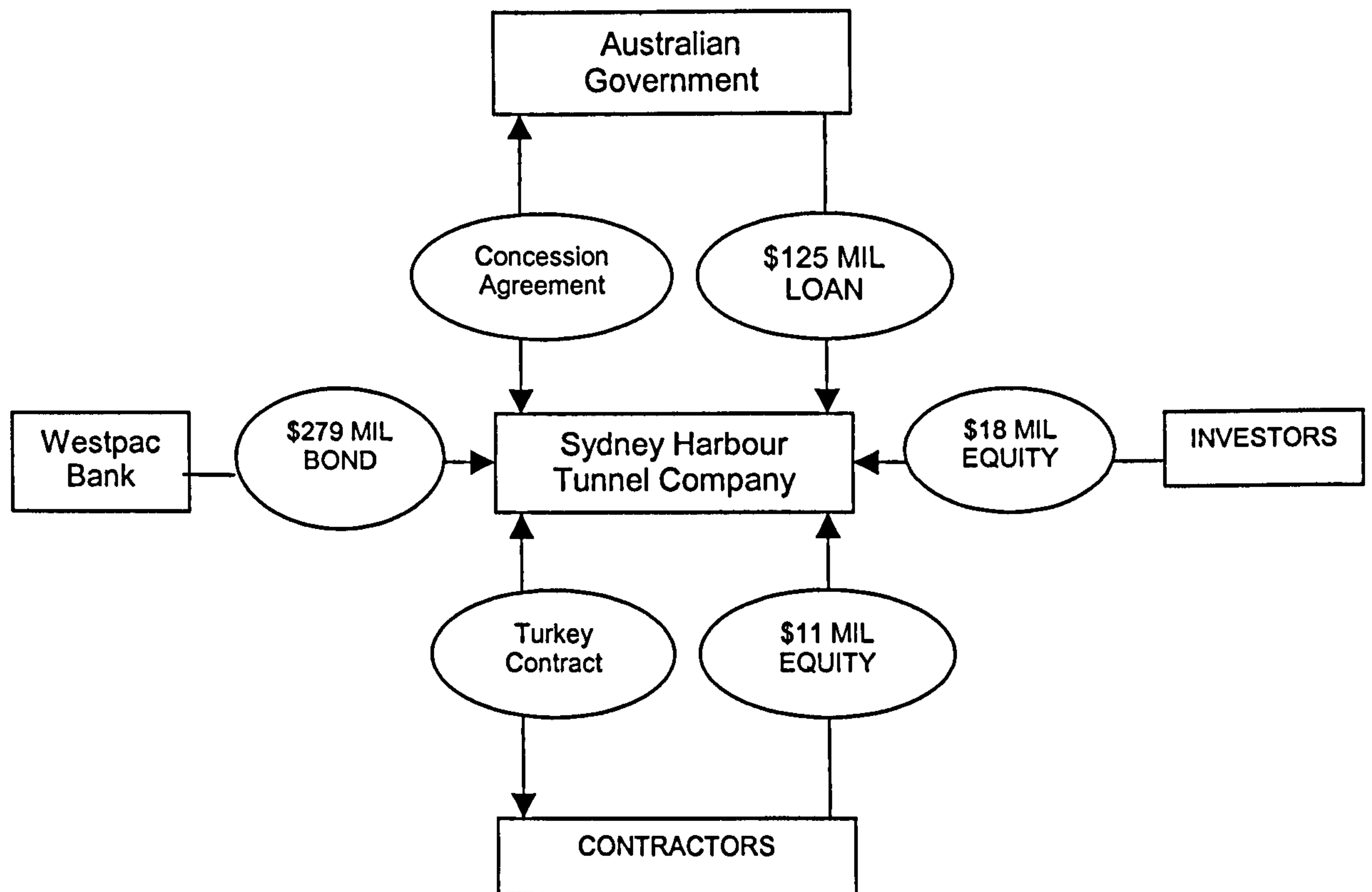
This section aims to present four case studies for BOOT schemes, which are carefully selected by the author, in order to illustrate the structures and features of BOOT projects that are already in operation, two in developed countries and two in developing countries. These sources were mainly extracted from (Tiong, 1990; 1995a & 1995b). The author compares the four case studies in terms of sources of finance, responsibility and role of host government and undertakings proposed by project sponsors. This section also includes the incentives and guarantees provided by the government, which have proved to be an important element in attracting the interest of private investors. The four case studies are:

- I. Australia's US\$550,000,000 Sydney Harbour tunnel
- II. United Kingdom's US\$310,000,000 Dartford bridge
- III. China's US\$517,000,000 Shajiao power plant in Guangdong province
- IV. Malaysia's US\$1.8 billion North-South expressway

3.7.1 Australia's Sydney Harbour Tunnel

The Sydney Harbour Tunnel project was won by the Sydney Harbour Tunnel Company, which is a joint venture by two construction companies, Australia's Transfield and Japan's Kumagai Gumi in 1986 that had a concession period of 30 years. Of all the submissions received by the government on the proposed crossing, none was regarded as a suitable option when compared to the immersed tunnel scheme proposed by Kumagai Gumi and Transfield due to the cost and the amount of private land to be acquired by the project. The Sydney tunnel proposal was fully engineered and investigated by the joint venture using private funds and it offered a simple solution to the traffic congestion. By linking the existing roads at either end of the Sydney Bridge, the tunnel would not need any additional private land and not a single house would need to be abolished (Tiong, 1995b). Figure 3.3 below shows the project structure of Sydney Harbour Tunnel:

Figure 3.3. Project Structure of Sydney Harbour Tunnel



Out of the four case studies selected, only the Sydney Harbour tunnel and the Malaysia's North-South expressway received support loans from governments. The Australian Government provided an interest-free loan of US\$125,000,000, i.e. about 23% of total project costs repayable over 30 years to cover the preliminary construction costs of the tunnel. In BOOT arrangement, the principal can influence pricing mechanisms by making available to promoter existing facilities that are capable of earning revenues during the construction period. In the Sydney Harbour Tunnel project, the project company obtained the government's concession to operate the Sydney Bridge. Revenues generated are shared between the Australian Government and the Sydney Harbour Tunnel Company. This enables the project company to generate income to service part of the debt prior to completion of the tunnel. The project company accepted the limits imposed by the Government by keeping the bridge and tunnel tolls to US\$1.25 per car at 1986 prices over the project life. This will increase US\$0.65 at a time to keep pace with inflation.

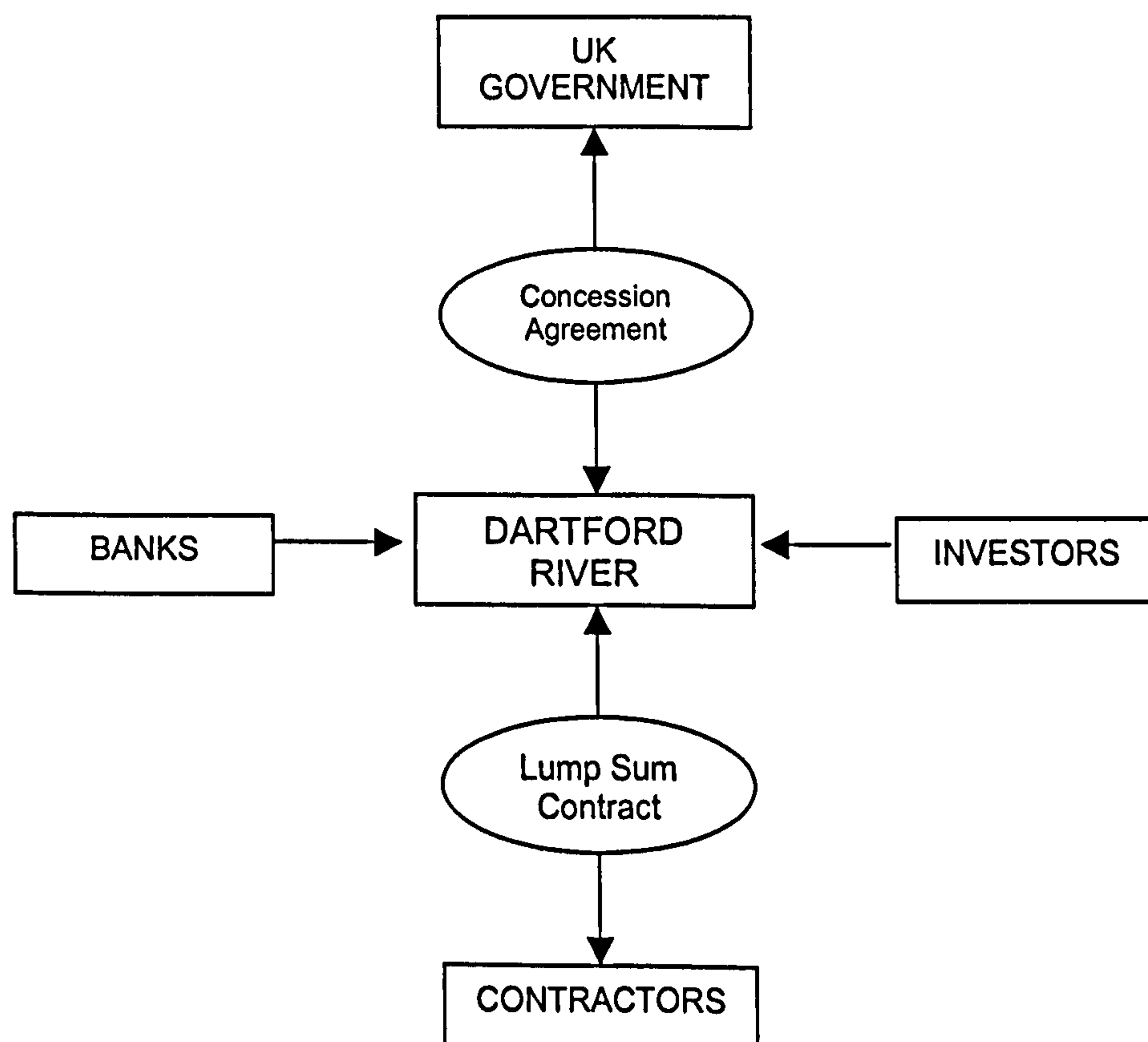
As the project was locally financed in debt and equity, there were no foreign exchange risks associated in this project. Loans and equity provided by the government and sponsors, amounted to about US\$150,000,000 will give the support for the construction costs of the tunnel. However, the central financing instrument is the US\$279,000,000, 30-year tunnel bonds, which will provide the balance of funds for the capital expenditures (refer to Figure 3). This innovative, all Australian financing reduced fund-raising costs, which would be substantial with the traditional debt-equity structures or offshore funding such as that associated with the Channel Tunnel. The bonds contained some unusual features that proved to be attractive to the Australian institutional investors:

- (a) The extended maturity that is longer than the usual maturity of 10-20 years in the Australian capital market;
- (b) Repayments of principal with quarterly interest instalments; and
- (c) Yield of about 6%, indexed to inflation.

3.7.2 United Kingdom's Dartford Bridge

The Dartford Bridge is the third River Thames crossing at Dartford, joining the London M25 orbital motorway. The need for an additional crossing at Dartford has been realised for many years as the crossings through the existing Dartford tunnels exceeded the initial design capacity by 25,000 vehicles per day in 1987-1988. The project company is a consortium comprising of several banks and Britain's Trafalgar House Group. Together, they formed the Dartford River Crossing Company. Figure 3.4 shows the project structure of Dartford Bridge.

Figure 3.4. Dartford Bridge BOOT Structure



The agreement was signed in 1988 under a maximum concession period of 20 years. The concession offered the project company to acquire the lease and operate the existing tunnels but required the promoter to purchase two existing toll tunnels at a cost of US\$80,000,000 in order to clear off the existing US\$88 million debt on the tunnels carried by Kent and Essex County Councils. This is considered one of the incentives provided by the government, as the project company would earn toll income from the start of the concession where the toll revenues are estimated to be US\$120 million (about 40% of the total investment) during the construction period. At the same time, it reduces the initial financing requirements and allowing immediate payments to be made to the institutional investors (Tiong, 1990). The concession period started in 1988 and will end in 2018. The ownership of the project will revert back to the British Government either at the end of the period or when all accumulated debt has been repaid, whichever is earlier.

As similar to Sydney Harbour Tunnel, all the funds were raised locally for the Dartford Bridge project. The loans were arranged and provided by several banks led by The Bank of America and the majority of the funds are raised by institutional funds led by Prudential Assurance Company. A feature of this project is that there is no equity contribution. In this case the lenders take the risk that revenues will be sufficient to pay off the debt by the end of the concession period. In this project, the promoter provided pinpoint equity of only \$1,800 (a form of equity under which shareholders do not receive dividends). This illustrates the confidence of lenders in the success of this project. Table 3.3 shows the finance structure of the project.

The Dartford Bridge can be considered as one of the best potential BOOT projects in Britain. The bridge was completed in 1991 on time and within budget as the construction cost of this scheme was carefully calculated and controlled by the project sponsor's management team. In this project, the main source of revenues comes from the tolls collected from motorists and hence the projected traffic flows played an important role in the project's success. In 1998/1999, a total number of 50,420,231 vehicles passed through the tunnels and the bridge, a daily average of 138,137 vehicles. There has been an increasing volume of

traffic since the bridge was opened, thus ensuring a steady stream of revenue. Table 3.4 shows the total traffic flow of the tunnels and the bridge since 1991.

Table 3.3. Finance Structure of Dartford Bridge

Sources of Funds	Amount (US\$)
Dartford River Crossing Company	1,800 in nominal equity (pinpoint equity)
Bank of America and other Commercial Banks	185,000,000 in term loan 18,000,000 in standby facility 18,000,000 in working capital facility
Prudential Assurance Company and other Private Institutional Funds	64,000,000 in subordinated loan stocks at 16 years 57,000,000 in subordinated loan stock at 20 years

To ensure that infrastructure projects are commercially viable, especially those market-led projects, for example bridge and toll road, the revenue stream must be clearly identified. In the case of Dartford Bridge, the major risk associated is that motorists may not be willing to pay for the use of the bridge. However, the promoter has recognised the need for another river crossing in Dartford, as it is the vital link in the M25 Motorway, which is considered as Britain's most important orbital road. The initial projection for traffic flows has also turned out to be true, as the statistics in Table 3.4 shows that the daily averages of vehicles using the bridge has far exceeded the promoter's projection.

Table 3.4. Traffic Flows of Dartford Bridge and Dartford Tunnels

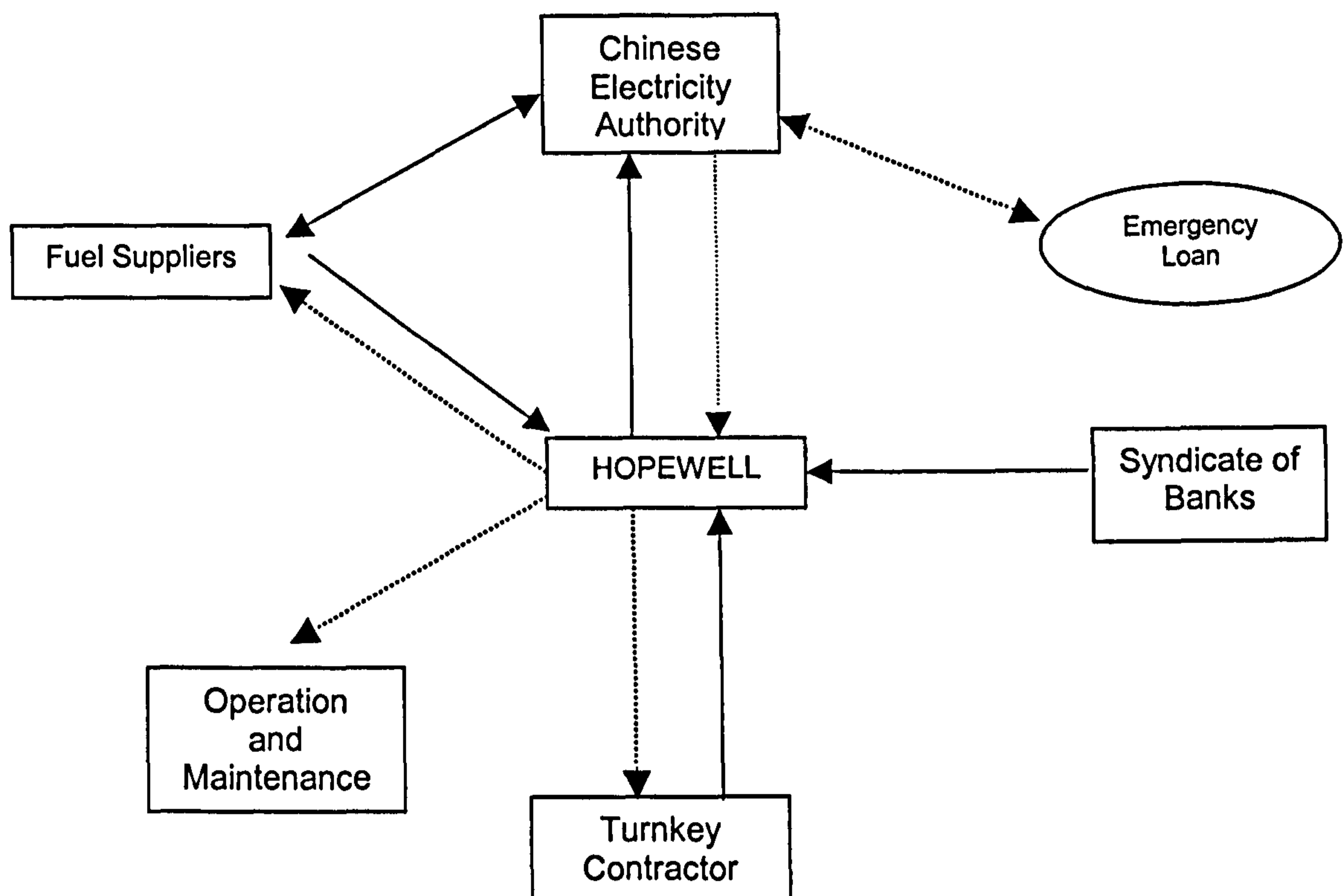
Year	Total Vehicles	Daily Averages	Highest Daily Throughput
1991/1992	34,797,684	80,440	128,047 (28 August)
1992/1993	37,385,483	95,076	135,351 (27 August)
1993/1994	39,947,382	102,426	144,728(26 August)
1994/1995	42,557,309	109,445	148,088 (25 August)
1995/1996	44,363,898	116,596	153,156 (30 August)
1996/1997	46,403,105	121,213	161,734 (1 August)
1997/1998	48,455,901	127,132	169,098 (28 August)
1998/1999	50,420,231	132,756	174,368 (28 May)

Source: Dartford River Crossing Company Website

3.7.3 China's Shajiao Power Plant

Shajiao power plant is a 2 x 350 MW coal-fired power station in the Guangdong province of the Peoples' Republic of China (PRC), which is the first power station procured on a BOOT basis in China. Rapid economic developments in the Guangdong province had led to a vast expansion in infrastructures such as roads, bridges, railways and ports. This in turn requires an expansion of electricity generation facilities. There was a great demand for electricity for further developments. At that time, China did not have the resources and expertise to finance the development of power station and therefore had to rely on foreign investments. The Project sponsor, Hopewell Holdings of Hong Kong, signed a concession agreement with the Chinese Electricity Authority to design, construct, test, commission and operate a power station. Figure 3.5 shows the BOOT structure of the project.

Figure 3.5. BOOT Arrangement of Shajiao Power Plant, Republic of China



The concession agreement was signed in 1984 and it had the shortest concession period among the four case studies, i.e. 10 years from 1987 to 1997. This period did not include construction time. The power station was fully tested, commissioned, and in full commercial operation within a period of 33 months, 6 months ahead of schedule. The successful completion of the project was due to good engineering design, efficient site supervision and a dedicated management team.

In this project, the Chinese Electricity Authority agreed to purchase a minimum 60% of the plant electricity on a 'take-and-pay' basis and also agreed to pay Hopewell a fixed price per kilowatt-hour over the concession period. This effectively determined the revenue stream for the project. According to Hopewell, the power plant has been operating profitably since 1987 through the sale of electricity to the Chinese Electricity Purchasing Authority. The authority also agreed to arrange for the supply of coal for the whole of the concession period at a fixed price per tonne. Payments for fuel come from the electricity sales proceeds.

In developing countries, loans are usually made available to projects in hard currencies, and lenders will expect the repayments to be in the same currency. Governments must provide some form of foreign exchange guarantees to assure lenders that their loans will be paid in hard currency and to assure project sponsors that their earnings and dividends will be remitted freely (Tiong, 1990). In the case of Shajiao Power Station, it was 100% financed in foreign currency. Hopewell negotiated for half of the electricity price to be paid in foreign currency and the other half is in the nonconvertible Chinese currency of Renminbi to pay for Chinese coal. This effectively covers the foreign exchange risk.

Instead of providing support loans, the Government assisted in the arrangement of an 'emergency loan facility' to the investor group to provide funds in the events of 'force majeure'. The project sponsor contributed some equity into the project and the rest of the project financing is arranged from a syndicate of 46 international banks. The construction consortium, allowing for repayments over a 7.5-year period to ease the cash flows of the project, also provided deferred credits. Table 3.5 shows the finance structure of the project.

Table 3.5. Finance Structure of Shajiao Power Plant

Sources of Funds	Amount
International Banks	US\$500,000,000 in term loans
Hopewell Holdings	US\$17,000,000 in equity

The concession for this project has ended and it has turned out to be a great success, both for the Chinese Government and Hopewell Holdings. Walker and Smith (1995) cited the following factors that contributed to the success:

- Gordon Wu, Chairman of Hopewell Holdings, who was able and willing to promote the scheme and to lobby effectively for its construction.
- Willingness of government officials to co-operate and,
- Good control of technological risk through the use of tried and tested turbine and construction technology, and
- Huge demand for electrical power in Guangdong Province.

From the author's point of view, the most important factor, which contributed to the success of this project, is the take-and-pay contract between Hopewell and the Chinese Electricity Authority. The Chinese Electricity Authority agreed to purchase 60% of the electricity output that has guaranteed a constant stream of revenue for the promoter. Besides the promoter realised that the demand of electricity in Guangdong Province is huge and thus the remaining 40% of the electricity output would soon be purchased. Accordingly to Walker and Smith (1995), the province would have lost some US\$500 million in economic value due to factory closures through power shortages if the power plant were not completed on time. This further cements the need for the power plant to be built. The power station has been handed back to the Chinese Electricity Authority in full operation and there are plans to build more power stations in Guangdong Province to meet the increasing demand for electricity.

3.7.4 Malaysia's North-South Expressway

Malaysia is a fast developing country and is described as the 'Asian tiger with the biggest bite'. The Malaysian Government has implemented a number of BOOT projects including roads, and water and electricity supply facilities. The North-South expressway is a key feature in the development of the Malaysian road transport system. The expressway is aimed to provide major economic benefits to Malaysia by increasing industrial productivity, facilitating access to ports and airports and promoting domestic tourism.

The 30-year concession contract was awarded in 1988 to the United Engineers (Malaysia) Berhad who then formed another project company called Project

Lebuhraya Utara Selatan Berhad (PLUS) to design, construct, finance and operate the expressway. The completed toll road formed part of the 800-km North-South expressway that stretches from the Thai border to Singapore and runs through seven west-coast states and links 40 major towns and cities in Peninsular Malaysia. The major focus of this investment was in line with the Malaysian Government's privatisation policy first announced in 1983 to encourage participation of private sector in the management and financing of public assets. Figure 3.6 shows the project structure of Malaysia's North-South Expressway.

Under the concession agreement, the consortium would take over the operation of the existing 377 km of tolled Federal Highways 1 and 2 without having to purchase them so that an early income could be received thereby easing their cash flow. The project was financed through a conventional debt: equity structure with an equity-ratio of about 10:90. Most of the finance required for the project was raised offshore in Hong Kong, Singapore and London on a limited recourse to the Malaysian Government.

The Government also allocated a support loan of US\$235,000,000 (about 13% of the total project cost) to the promoter. It was stated in Tiong (1990) that the promoter promised to pay its subcontractors 87% of the contract values in cash and the remaining 13% in equity shares in the project company, which is listed on the Kuala Lumpur Stock Exchange. The shares can only be sold at the end of the construction period. Furthermore, the Malaysian Government provided the project company with the guarantee that it would make up for the shortfall if local currency falls more than 15% against the rates at the time of drawdown of funds. PLUS was also given an interest rate guarantee by the government, i.e. if the interest rates increase by more than 20%, the promoter will be reimbursed the difference in repayment cost. Table 3.6 shows the finance structure of the project.

Figure 3.6. North-South Expressway BOOT Structure

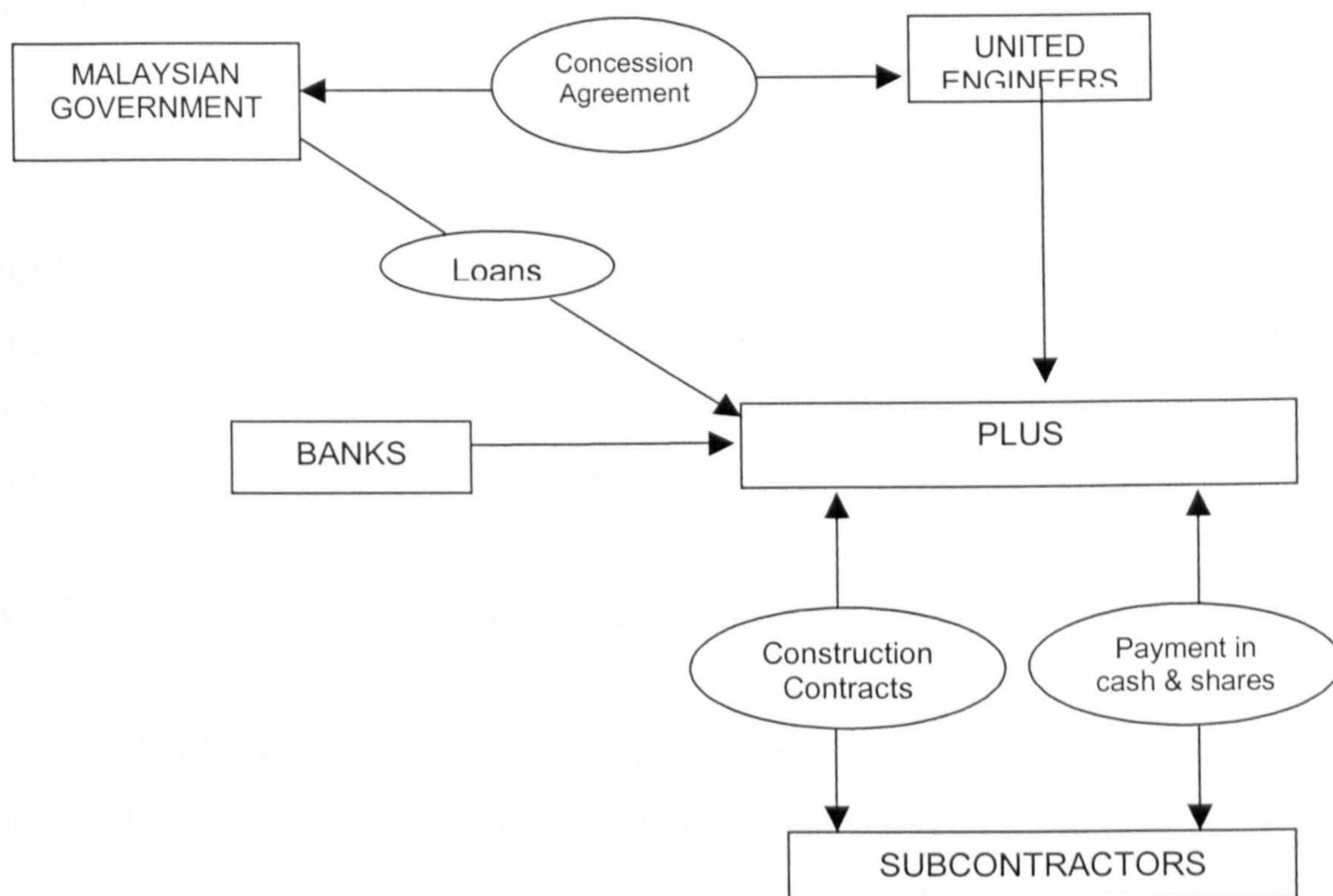


Table 3.6. Finance Structure of North-South Expressway

Sources of Funds	Amount (US\$)
Offshore Banks	900,000,000 in term loans
Malaysian Government	235,000,000 in support loans payable over 25 years at a fixed interest rate of 8% per annum, with 15-year grace period
PLUS	9,000,000 in equity
Shareholders	180,000,000 in equity

The project was opened to traffic 15 months ahead of schedule and the expressway has halved the travel time for interurban journeys in the west coast. However, the financial crisis in 1997 has greatly affected the parent company of PLUS, Renong Berhad. This forced PLUS to restructure its debt with the help of the Corporate Debt Restructuring Committee (CDRC). In 1999, under the debt

restructuring scheme, PLUS issued a seven-year zero coupon bond valued at about US\$2 billion to settle the claims of Renong's and the United Engineer's creditors.

The financial crisis in 1997 did not help this project at all. The depreciation of the Malaysian Ringgit against the dollar has increased the promoter's debt burden and although the economy is recovering, the promoter was left in a dire financial position. However, given the current economic situation in Malaysia and barring any crisis, together with substantial government support, the project should be successful in the long term.

3.7.5 Conclusions for Case Studies

The study of the above four case studies shows that the project sponsors used different types of financial instruments and assumed different kinds of risks and responsibilities, while the governments provided their own direct or indirect guarantees and incentives to the project sponsors.

It is important that government supports are available, risks are properly allocated, and that each party involved is given sufficient incentives and guarantees. The above examples prove that the BOOT concept will bring together the government, sponsors, lenders, investors and contractors with one common interests, and it is viable for many sectors including infrastructure developments, healthcare and prison.

3.8 Conditions for Successful Public Private Partnerships

The route to successful public private partnerships development is complex and time consuming, and involves significant expenditure. The requirements for successful public private partnership projects can be summarised as below:

(a) Economic stability of the host country

The economic stability of a country is the main concern of many investors in which decisions will be made as to whether to proceed or abandon the proposed project. Parameters that affect the economy include interest rates, inflation, strength of the local currency and the cost of labour and materials (Keong et al, 1997). If a country's economy is unstable, for example, with sharp interest rate fluctuations and high inflation rates, sponsors and lenders will be unwilling to invest in such a country, as the forecasted revenues will no longer be viable.

(b) Strong political will and commitment

There must be strong political will and commitment from all levels of government and agencies concerned with the project. Host government support – legislative, regulatory, administrative and sometimes financial is essential (Merna & Njiru, 2002). Sir Gordon Wu, the Chairman of Hopewell Holdings Ltd, admitted that political stability and government support and incentives are the key factors for privately funded projects, especially in developing countries. The host government must accept and fully understand the concept of a project finance structure project (e.g. BOOT) if it has an active participation in the project. The authors believe that an uncorrupted and honest political regime is required and, most importantly, there should be no intervention of politics throughout the implementation and operation of the project.

(c) Well-established local stock and capital markets

Local stock and capital markets should be well developed so that equity and loans can be raised if required or when additional funding is needed for further investment. (Keong et al, 1997).

(d) Equitable and clear legal system

An equitable and clear legal system for private investment should be developed to assure private investors that disputes could be easily resolved through litigation. Projects should be carefully structured to assure the lenders and investors that the project is technically, financially, and economically viable.

(e) Willingness to trust and ability to communicate

Trust and communication are the essential ingredients in any partnership relationships. Besides, it is important to establish an understanding of the requirements of a long-term relationship in partnership structure.

(f) Careful selection of right partner

Prospective partners should be mutually and carefully selected. Selection of partners should depend on the capabilities (such as technical ability, management skills, financial backing) and reputation. Therefore selection based on the lowest cost is not encouraged.

(g) Common goal and objectives

Common goals and objectives should be established and prioritised. It is also important that various roles of each partner is defined and ensure that all partners understand and accept these roles. Early involvement of every party is essential in order to ensure that goals and strategies reflect the best thinking of parties involved and that they feel that they truly have a stake in the partnership.

(h) Proper allocation of risk and incentives

Incentives should be available and provided fairly and equally to all parties involved in the partnership arrangements. This will motivate individual parties to perform successfully throughout the relationship. Potential risks should be identified at the early stage of the project to minimise design changes. Partnership is about transferring certain risks to appropriate partners who are more able to manage them, hence reducing the overall risk to an acceptable level.

(i) Suitability of privately financed projects

Not all projects are suitable for private financing and careful planning should be adopted. Although there is no rule on the size suitable for a project finance structure project, it must be large enough to secure development capital and time required by the sponsor/promoter to generate revenues, and eventually the returns expected by investors and lenders. The lenders and investors will only invest in a project if there is evidence that they will get a better return from this type of investment than in other investment opportunities. The source of revenue must be clear and certain and capable of providing a return on equity commensurate with the risks borne by the investors and lenders (Ong & Lenard, 2001; 2002b; 2002c).

(j) Learning from project lessons

No project is unique. However, the nature of the cycle of activities and decisions that each requires is similar (Wearne, 1994). The ability to learn the lessons from completed projects by making comparisons is one of the hallmarks of a mature applied science. Parties involved should be prepared to accept each other's mistakes without acrimony. In addition, the survival of relationship not only lies within acrimony but also in their joint commitment to solve and learn from the errors or mistakes together (NEDC, 1991).

(k) Provision of Training

Due to the complexities of this type of project arrangement, trained and experienced personnel should be assigned to manage the project and to be able to negotiate its terms and conditions. The efficiency of the project management team is another important factor in ensuring the success of a project. Losses are significant due to bad management and can result in delays. Necessary training should be provided to all levels of project management, including project managers and administrators (Ong & Lenard, 2001; 2002b; 2002c). Training can greatly help people to learn from their own and other people's experience. Techniques for risk analysis, cost estimating, project planning and resource allocation should be learnt by those who are appointed to that specific task.

3.9 Community Participation and Banking

The concept of community participation is not new but there is still no clear definition of what it means and how it should perform. According to Sanoff (2000), There are a number of different synonyms such as community planning, community development, empowerment and so on. This simply implies that community participation is an umbrella term or a generic concept that covers different forms of decision-making by a number of parties. It is important to note that community participation does not assume the ability of participants to design a physical environment, but their input can simply inform the process (Salama, 2000). Involvement of community may take place through a wide range of participatory processes and techniques that depends on the goals and objectives identified by different parties involved (Sanoff, 2000).

Community participation has been crucial in sustaining active community participation in the decision-making and planning process. Their participation will yield better results, as housing provision is responsive to tenants' needs. It is important to provide education and skills training to local community. This will allow them to acquire the skills necessary to enable them to participate as equal partners. Local community should be encouraged to attend meetings regularly and contribute as required, thereby increasing the commitment to the project and create a greater sense of ownership. Other activities such as media campaign; distribution of newsletters to households, television programs should also be implemented.

Financial services of the formal banking system have remained inaccessible to majority of the poorer sections of the rural population in most developing countries (Nanda, 1997). The core problem of rural finance is high transaction costs to the banks in financing a large number of small borrowers who require credit frequently and in small quantities. Besides the high transaction costs, the perception of risks in financing small borrowers who are unable to offer physical collateral, articulate their case or submit proper loan proposals, the urban orientation and the lack of flexibility in their operations are the other constraints which restrict the out-reach of the formal banking system for the poor.

Mainstream financial institutions are withdrawing from providing financial services to people who suffer from irregular employment and who do not have a history of good credits, which make them non 'bankable'. The withdrawal of mainstream financial institutions has forced many low-income households to rely on informal credit channels to meet their credit needs. These include moneylenders who operate outside the legal and policy framework of banks, market vendors, and shopkeepers charging extortionate rates of interest. Some mutual self-help organisations are offering their help, particularly in socially and economically excluded communities. However, these organisations are very small in size and the supports provided are very limited. (Dayson et. al, 1999) concludes that credit unions, while doing a good job, are at present too small, too few in number and alone, will never solve the problem of economic deprivation. Furthermore, the promotion of credit unions as the only major anti-poverty tool by various agencies far outweighs their likely effectiveness.

National and regional financial institutions should be encouraged to facilitate access to micro-credit or other micro-financing schemes and other economic opportunities for informal settlement residents. Micro-credit and suitable finance schemes should be more widely replicated as a means to give access of informal settlement residents to affordable finance (Lenard & Powell, 2001). This is all particularly true in the production of affordable housing.

The trend towards community banking will continue and national and regional financial institutions are emerging to facilitate access to micro-credit or other micro-financing schemes and other economic opportunities for the poor and in support of small-scale and family endeavours to enter into affordable housing.

3.10 Analysis of Case Studies in Affordable Housing

Habitat II "best practices" have shown how partnerships, involving local community participation with governments, can improve quality of housing and reduce the cost of government subsidies. For example, the Brazil's Mutirao programme in which the Government provides funding for the purchase of building materials. The funding is managed by the community and used to

construct houses for themselves. A monthly charge, set at a small percent of the minimum monthly wage is then paid by the dwellers into the community fund for a fixed period. More houses are built as the fund is replenished. Due to the free labour and monthly charges of 50 per cent of the value of their subsidy repay back to the community fund, the subsidy given from the Government is extremely low.

Although community participation in the delivery of housing is well established in many nations, the production is not keeping pace with the growth in housing demand (Lenard & Powell, 2001). International agencies, financial institutions, governments, the private sector, and NGOs acknowledge that there is a need to work together to seek the appropriate solutions for community-based affordable housing. The United Nations Declaration of 1974 was drafted primarily to encourage developing nations to expand low-cost housing on a “self-help basis” through the establishment of co-operatives utilising, as much as possible, local raw materials and labour (Canadian Community Reinvestment Coalition, 1999).

One of the key requirements is that community networks need norms and trust which facilitate co-operation for mutual benefit (Ong & Lenard, 2002a). The community learning is through interaction, and requires the formation of teams, processes and relationships within which learning interactions take place to create a sustainable environment facilitating the on-going delivery of affordable housing. The three case studies are presented below:

3.10.1 Australian Case Study - The Namatjira Housing and Infrastructure Project

This case study is extracted from one of the stories posted on website <http://www.communitybuilders.nsw.gov.au/stories/>. These stories share ideas for action. They tell what people are doing and what's working, what communities have learned from their experience and how it has made a difference. They provide inspiration and show what is possible (Anon, 2001c).

The Dareton community had been one of the more disadvantaged Aboriginal communities in New South Wales (NSW), Australia. A Working Party was set

up in 1996 with representation from all Aboriginal organisations, local community members and invited government agencies including NSW Health. The collaboration between community members and agencies has led to a strong sense of partnership in service planning and delivery. Since its formation, the Working Party has had agreed authority to direct the projects, and it forms the peak point of contact with the Aboriginal community

In 1996, the Working Party engaged Sydney firm Burns Aldis as its project manager and work started on planning the housing and infrastructure project. One of the first actions was to develop a Housing and Environmental Health Plan resulting in a comprehensive community study, comprising the site, demography, existing housing and infrastructure, physical infrastructure, social infrastructure and human services, and incorporating the project delivery methodology and community 'capacity development' proposal. The NSW Government, Aboriginal Environmental Health Infrastructure Forum (AEHIF), provided some initial funding. Dareton was one of the three pilot communities for AEHIF.

The project comprised several elements: Housing and infrastructure to re-house 20 families in tin huts; water supply; sewerage; road works; power and street lighting; landscaping, site restoration, fencing and service upgrading; community facilities and building a capacity for community participants to acquire skills to facilitate future employment.

The community was appraised of sustainability; energy efficiency and appropriate technology and the twenty houses were designed collaboratively with the future residents to meet individual needs. This involved placing model houses on a topographic model of the site, to ensure that socio-spatial arrangements would meet cultural imperatives. Most residents chose to site their new houses exactly where their tin huts were located, and privacy and space were key requirements.

The project was delivered using local labour. Twenty-five apprentices were recruited from within local Aboriginal community and an on-site training

structure was negotiated with Sunraysia Institute of TAFE (NSW Technical and Further Education) and Mildura and District Educational Council (MADEC), a local not-for-profit community education provider engaged to co-ordinate site activities. TAFE trainers work on-site full-time with apprentices. The apprentices completed their training at the end of 2000, and have become skilled in various construction trades with an emphasis on multi-skilling.

The collaborative, co-ordinated approach has led to a growth in community confidence and helped develop a community spirit. The Working Party approach piloted at Dareton has been so successful it has become the model for housing and infrastructure project delivery throughout the region. It has been more recently adopted as the structure for the new Aboriginal Communities Development Program (ACDP), a Department of Aboriginal Affairs - funded programme to address environmental health issues in Aboriginal communities. Allocation of current and future ACDP funding to Dareton helps the Namatjira Working Party to take their community development programme to the next step, moving from welfare to sustainable economic and social independence.

3.10.2 Community-Based Low-Cost Housing in Indonesia

The Government of Indonesia has adopted a community-based housing strategy to allow low-income households who do not have access to institutional housing finance to acquire affordable housing. In line with United Nations recommendations the aim to provide an alternative to the formal housing delivery system that does not provide viable housing for poor communities. The strategy includes all aspects of the previous Australian study such as the promotion of informal and community-based housing delivery, the active participation of communities in the mobilization of resources to lower housing costs and the involvement of project managers. The strategy also includes the development of innovative credit policies, taking into account the limited loan absorption capacity of low-income households.

Development Consultants are used as management partners and catalysts for community-based housing projects. The Development Consultants manage the

community and the project build teams, and develop skills in the community. They provide financial and cost management as well as planning services to the community. Development consultants from several cities have organised themselves into a network, Association for Cooperative Housing (ASPEK), which serves as a partner in the development of community-based housing in Indonesia.

The State Savings Bank (BTN) introduced a new loan package: the Kredit Triguna or Triple Function Loan. The loans in this package can be used for land purchases, housing construction and income-generating activities. The Kredit Triguna is designed for households that do not have a fixed income and no alternative means of credit. Loans are only awarded to the Community on behalf of individual households. The community provides security to the special purpose fund (Dana Mitra) in the form of cash savings or property.

Each member of the community has to pay an additional amount, the solidarity fund (Dana Solidaritas) besides the monthly loan repayment. The Dana Solidaritas is a compulsory saving scheme as part of the collective responsibilities of the borrowers to shoulder the cost of defaulters, if any. If there are no defaulters, the Dana Solidaritas remains with the community as part of their capital fund.

A typical project is the Ulu community-based urban renewal scheme covering 16 hectares of slum area on the banks of the Musi River in the Sumatran city of Palembang involving 4,456 inhabitants on very low incomes. The project, which is ongoing, addressed serious physical infrastructure problems associated with slum clearance and also non-physical problems such as a low economic capacity, lack of environmental awareness and access to financial resources. Project implementation involves community participation (community self-surveys and participatory planning), income-generating activities (commercial activities integral in the development) and the creation of community based management organisation. Progress had been modest because Indonesia is still suffering the affects of the South East Asian Financial crisis, which happened in 1997.

Since the programme commenced 1989, the low-cost housing schemes have developed about 500 units, which were constructed using community resources. Nearly forty community-based organizations have been formed in more than twelve cities and villages. An extensive network of development consultants has been established to work with community groups. It is felt that progress has been severely affected by the regional financial crisis but a decade of experience can provide a foundation for the provision of affordable and sustainable housing in Indonesia (Suyono, 1999).

3.10.3 The Grameen Bank in Bangladesh (GB)

The concept of Grameen Bank (GB) was first launched by Professor Muhammad Yunus, Head of the Rural Economics Program at the University of Chittagong in 1976. He introduced an action research project to examine the possibility of designing a credit delivery system to provide banking services to the rural poor. He believed that if financial resources can be made available to the poor on terms and conditions that are appropriate and reasonable, “these millions of small people with their millions of small pursuits can add up to create the biggest development wonder”. He began a micro-credit initiative aimed at lending funds to the poorest of the poor, which allow a loan of as little as US\$100. This system has allowed millions to cross the poverty line who would otherwise not have been able to secure credits from other banks in the country. They are able to use the funds they obtained to start their own business and actually be able to start saving for the future.

The action research demonstrated its strength in Jobra (a village adjacent to Chittagong University) and some of the neighbouring villages during 1976-1979. With the sponsorship of the central bank in the country and support of the nationalized commercial banks, the project was extended to Tangail district (a district north of Dhaka, the capital city of Bangladesh) in 1979. With the success in Tangail, the project was extended to several other districts in the country. In October 1983, the Grameen Bank Project was transformed into an independent bank by government legislation. Today Grameen Bank is owned by the rural

poor whom it serves. Its borrowers own 92% of the Bank while the Bangladeshi government owns the remaining 8% of the shares.

Grameen Bank has reversed conventional banking practice by providing credits to the poor without any collateral and created a banking system based on mutual trust, accountability, participation and creativity. It serves as a catalyst in the overall development of socio-economic conditions of the poor who have been kept outside the banking orbit on the grounds that they are poor and hence not bankable. Currently, GB is the largest rural finance institution in the country. It has nearly 2.4 million borrowers with 94% of them are women. With 1,160 branches, GB provides services in 40,212 villages, covering more than half of the total villages in Bangladesh.

The lending system of Grameen Bank is simple yet effective. A bank branch is set up with a branch manager and a number of centre managers and covers an area of about 15 to 22 villages. The manager and the workers start by visiting villages to familiarise themselves with the local environment in which they will be operating and identify the prospective clientele, as well as explain the purpose, the functions, and the mode of operation of the bank to the local population. To obtain loans, a group of five potential borrowers must be formed, gather once a week for loan repayment meeting and to start with, learn the bond rules and “16 Decisions” which they chant at the beginning of the weekly meeting session. These decisions incorporate a code of conduct that members are encouraged to adopt in their daily life. For example, investment for better quality of life (improvement of houses) and education on child and family planning, production of fruits and vegetables for own consumption as well as for profit, keeping the environment clean and using safe drinking water for better health, involvement in social activities and self-discipline. The Grameen Bank organises loan borrowers in local peer bonding loan circles or circles of trust. Loans are made to the loan circles. In the first stage, only two of them are eligible for, and receive, a loan. The group is observed for a month to see if the members are conforming to the rules of the bank. Only if the first two borrowers begin to repay the principal plus interest over a period of six weeks, the next two borrowers can then apply and, subsequently, the fifth member as well. If the

intended borrower is unable to repay, the others in the loan circle repay the loan. Due to the imposed restrictions, there is substantial group pressure to keep individual records clear. In this sense, the collective responsibility of the group serves as the collateral on the loan. By not defaulting, they assure that funds will be available in the future. It also builds support circles among people, such that the success of each person is dependent on the other members.

Through a set of incentives, the bank encourages its borrowers to save 5% of the loan amount, plus one taka per week. The accumulated saving of the borrowers, one of the indicators the bank uses to gauge its impact on poverty eradication, have grown from nothing in 1983 to US\$108 million today. The interest rate on all loans is 16%, which is only charged once at the end of the year. Loans can be repaid in weekly instalments spread over a year, which is particularly suitable for the poor. The repayment rate for loans is currently 96%, as high as, or even higher than the most successful commercial bank in the world. This is due to group pressure and self-interest, as well as the motivation of borrowers.

The Bank also provides a US\$300 10-year housing loan. A family would qualify for this loan if the land title is in the wife's name. So far, more than 350,000 houses have been built with this loan. The interest on the housing loan (8%) is cross-subsidised from the interest earnings on the 'working capital' loan. The house, designed by a special group of local architects, has many sleek features besides its low cost. These include clever use of indigenous raw material, ventilation, efficient use of space, ability to stand high wind velocity and aesthetic appearance. This US\$300 house has even received a prestigious Architecture Award awarded by the Swiss based Aga Khan Foundation. In the glittering world of architecture, this award normally goes to stunning multi-million dollar designs.

The success of this approach can be attributed to the following factors: participatory process in every aspect of lending mechanism, peer pressure of group members on each other, lending for activities which generate regular income, weekly collection of loans in small amount, intense interaction with

borrowers through weekly meetings, strong central management, dedicated field staff, extensive staff training willingness to innovate, committed pragmatic leadership as well as decentralised and participatory style of working.

The Grameen Bank model has showed an important role through providing housing loans to poor borrowers and allowing repayment over 10 – 15 years at a market interest rate of 8 percent per annum. This again proves that the poor are self-reliant and bankable and such track records are almost universal in banking among the very poor and has passed the test of time.

The development and progress of the Grameen Bank of Bangladesh provides a model of financial success for the rural poor with inspiring socio-political benefits (Dumas, 1998). Today Grameen Bank outperforms other banks in the country, and indeed most banks around the world. More than 100 institutions in 40 countries around the world is operating micro-credit programs based on the practices and philosophy of Grameen Bank including the Australia's Grameen Support Group and the Grameen Foundation in United States. (For more details please visit the official site of Grameen Bank <http://www.grameen-info.org/>).

In Malaysia, a Grameen style micro-credit programme for the poor in a pilot project undertaken at the village in Sungai Besar is also established. The funds were provided by the United Nation Development Programme (UNDP) through its Asia and Pacific Development Centre, and co-sponsored by the Selangor State Government (Wan Srihani, 2001). Initially they had to motivate the poor by approaching them in their homes to gain their confidence and trust. The pilot project has now expanded into a full-scale national micro-credit programme known as Amanah Ikhtiar Malaysia (AIM) with more than 56,000 borrowers and savers.

Although the Grameen Banking addresses the issue of accessibility to credit for the poor, the author believes that this concept could be a platform for an alternative finance for housing credit among the lower income group in Malaysia. Further research in this community banking area would be worth

looking into with collaboration with all players involved in the provision of affordable housing.

3.11 Can Public Private Partnership be Applied in the Provision of Affordable Housing

Over the last three decades, partnership projects by various different industries have been implemented in both developed and developing countries. This procurement option has become an increasingly important means of delivering a variety of public infrastructure projects such as transport, health, prisons, education and defence (Allen & Abbott, 2001). However, it has not been implemented to the same extent in affordable housing. In the case of Malaysia, partnership between public and private depends very much on the government policy. The current housing development tends to benefit the privileged few rather than the marginalised poor.

Governments' initiatives to provide housing for low-income population have largely failed because houses built were not affordable to the targeted group. Furthermore, the output could not be produced in the quantities necessary to make a significant contribution towards meeting the large-scale of housing needs. Most countries in the Asia and Pacific region acknowledged the importance of community participation in the area of affordable housing. Active community participation in the decision-making and planning process helps to cultivate a sense of ownership and responsibility for the implementation of affordable housing thus making sustainability more likely. Local community need to be given the technical and planning skills and techniques enabling them to implement acceptable solutions to provide affordable housing.

Mainstream financial institutions are expected to expand their role in housing provision, especially for the lower income group. One of the challenges today is to fill the missing link between the financial institutions and the low-income people. This allows accessibility of affordable finance at a reasonable interest rates with housing compatible to their needs and at the same time seeking a balance between shareholder value and social responsibility.

There are two principal arguments in supporting public private partnerships. Firstly, the utilisation of private sector expertise, skills and capital resources can achieve best value for money in the delivery of public services, which can be reflected in terms of improved quality of service, higher efficiency, and lower costs. Secondly, partnerships allow the government to reconcile capital investment by reducing capital expenditure.

In summary, the main conditions for successful implementation of privately financed infrastructure projects include:

- (a) A strong economic condition of a country;
- (b) Political will and commitment to carry out the project;
- (c) A well developed local stock and capital markets
- (d) Equitable and clear legal system
- (e) Willingness to trust and ability of communicate
- (f) Careful selection of right partner
- (g) Common goals and objectives
- (h) Proper allocation of risk and incentives
- (i) Suitability of privately financed project
- (j) Learning from project lessons
- (k) Provision of Training

After all, public private partnership has stimulated private sector investment in infrastructure development and has brought investors, lenders, governments and community itself to share the costs, risks and the benefits of a new investment strategy. Mutual commitment towards the project from all parties is the key factor for a successful project. The prospect of public private partnership would be brighter if we can learn from our success and failures. It seems that this type of public-private partnership will continue to grow in infrastructure developments and it could be the solution for the housing sector in the near future.

4.0 RESEARCH METHODOLOGY AND DIRECTION

4.1 Summary of Findings in Phase I Investigations

In the Phase I investigations, the literature review focused on two main areas: (a) housing market and policies in Malaysia with special emphasis of low-cost housing; (b) private finance and public private partnership for infrastructure projects or related services to determine if the process is applicable in the implementation of affordable housing. The literature review highlighted a number of key findings, which can be summarised as below:

- (a) There is still a shortage of affordable housing in Malaysia.
 - Performance of both public and private sectors in the low-cost housing delivery has been unsatisfactory during the various five-year plans.
 - In the Eighth Malaysia Plan (2001 – 2005), the Government is committed to construct 61.5% of the planned target on low-cost housing, with special emphasis given to low-medium cost houses.

- (b) There is a shift from public to private finance for the delivery of infrastructure and policy-driven projects or related services all around the World.
 - Public private partnership has not been implemented to the same extent in affordable housing.
 - Public private partnership could be an alternative solution in the provision of affordable housing.
 - Active community participation in the decision-making and planning process helps to cultivate a sense of ownership and responsibility for the implementation of affordable housing thus making sustainability more likely.
 - There is not much evidence that community engagement is implemented in the affordable housing provision in Malaysia.

- Education and training, and skill developments are important for affordable housing delivery schemes.
- Community banking could facilitate the accessibility of finance for the poor in affordable housing.
- Mainstream financial institutions are expected to expand their role in housing provision for the lower income group.

Findings from literature review have led to the need for further investigations into the market for affordable housing in Malaysia. The purpose of this chapter is to present the subsequent methodologies for data collection and analysis during Phase II investigations.

4.2 Phase II Investigations

Having concluded the Phase I investigations, it is now possible to develop the research methodologies that could further explore the low-cost housing situation in Malaysia after a working definition of affordable housing is established. The research proposition for this study is expressed as:

“Innovative partnerships between the Government and private housing developers will provide tangible benefits in the provision of and access to affordable housing in Malaysia.”

This proposition provides the focus for the Phase II investigations. The objectives of the Phase II investigations are:

- a) i) Confirm the findings of Phase I in terms of factors under investigation;
ii) Establish whether any other factors should be taken into account;
iii) Identify a sample of developers with which to conduct a qualitative investigation.
- b) Determine a model of the existing market for affordable housing in Malaysia. This model will identify all the factors that affect the provision of affordable

- housing and will provide an explanation of how those factors interact to produce the failure of the affordable housing market identified in Phase 1.
- c) Investigate alternative, partnership-based models for the affordable housing in Malaysia and identify the model that offers the most potential for improvement.
 - d) Undertake a preliminary evaluation of the proposed model.

4.3 Further Development of Research Methodology

The following sections discuss the methodological approaches adopted by researchers in construction management with reference to the debate took place in Construction Management and Economics during the late 1990s. The research debate suggests that a multi-paradigm approach is the most suitable to construction management research. Different types of qualitative approaches and qualitative data collection strategies are also presented together with the subsequent methodologies chosen for data gathering and testing results.

4.3.1 Research Approaches in Construction Management – A Review

There are two fundamentally different and competing school of thought or enquiry paradigms to conduct a good research. According to Easterby-Smith et al (1991) and Remenyi et al (1998), positivism uses quantities and experimental methods to test hypothetical-deductive generalisations. It searches for causal explanations and fundamental laws, and generally reduces the whole into simplest possible elements to facilitate analysis. On the other hand, interpretive science (phenomenological) uses qualitative and naturalistic approaches to inductively and holistically understand a phenomenon, rather than search for external causes or fundamental laws.

The research tradition underpinning the majority of research in construction management for its first four decades is based on a quantitative approach from a positivist (rationalist) or scientific paradigm (Cater & Fortune, 2002). As stated in Edum-Fotwe et al (1996) and Seymour & Rooke (1995), this is often attributed to the origins of construction management research lying in the

engineering discipline. It is reported that 57 percent of the construction management research adopts a quantitative approach, 8 percent is based on qualitative approach and 13 percent used a mixed methodology while the remaining are classified as “non-research” papers (Loosemore et al, 1996). A review carried out by (Betts & Lansley, 1993) conclude 70 percent of the research within Construction Management and Economics over the last ten years has been empirical research, which did not make a large contribution to theory development. This had led to a difference of opinions as shown from enormous responses received in the research debate on research approaches in construction management.

Seymour & Rooke (1995) claimed that positivist paradigm is not a valid approach to investigate construction management research because of its wide degree of human subjectivity. The authors proposed an interpretive paradigm as a better approach within construction management research. Runeson (1997) defended that positivism reduces subjectivity and it is “the best insurance against bad research”. At this time, Raftery et al (1997) commented that an alternative way to conduct construction management research would be to adopt mixed methodologies as a combination of quantitative and qualitative analysis can help to tackle the diversity of construction research. This is also supported by Amaratunga & Baldry (2001), particularly in the built environment research due to its wide scope.

For more information, refer to papers published in Construction Management and Economics, Engineering Construction and Management and the Journal of Construction Procurement from 1993.

4.3.2 Defining Qualitative Analysis

As Denzin and Lincoln (1994) state the word “qualitative” implies an emphasis on process and an in-depth understanding of perceived meanings, interpretations, and behaviours, in contrast with the measurement of the quantity, frequency, or even intensity of some externally defined variables. Since qualitative methods have different meaning for different people depending

on a person's intellectual background, research problem, and theoretical interests, it is therefore worthwhile to examine several definitions.

According to Denzin and Lincoln (1994):

"Qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the studied use of a variety of empirical materials-case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts-that describe routine and problematic moments and meanings in individuals' lives." As such, the central methods of qualitative research include interviewing people through various techniques and recording what they say, observing people in the course of their daily routines, and recording their behaviours.

According to Miles & Huberman (1994), qualitatively analysis is "a powerful tool for assessing causality and is able to identify mechanisms, going beyond sheer association. It is local, and deals well with the complex network of events and process in a situation. It can sort out the temporal dimension, showing clearly what precedes what, either through direct observation or retrospection and show the underlying variables, and that these variables might have connections over time."

Patton (1990) pointed out "quantitative measures are succinct, parsimonious, and easily aggregated for analysis, quantitative data are systematic, standardised, and easily presented in a short space. By contrast, the qualitative findings are longer, more detailed, and variable in content; analysis is difficult because responses are neither systematic nor standardised." In other words, quantitative analysis is good in measuring reactions of many subjects or people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. On the other hand, qualitative methods can produce a large quantity of detailed information about a much smaller number of people and cases. Qualitative methods permit the researcher to study selected issues, cases, or events in depth and detail. Data collection is not constrained by

predetermined categories of analysis, allowing for a level of depth and detail that quantitative strategies can't provide (Patton, 1987).

Strauss and Corbin (2000) offered an even broader definition of qualitative methods in the course of developing the methodology of grounded theory: "By qualitative research we mean any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification." Strauss and Corbin (2000) however noted that some researchers employ qualitative interviewing techniques to gather textual data that are subsequently coded and analysed statistically; in effect, they quantify qualitative data.

4.3.3 Characteristics of Qualitative Research

Although there is no one "right" way to do qualitative analysis, several authors have developed categorisation of methods to assist the discussion of analysis (Tesch, 1990; Crabtree & Miller, 1992; Maxwell, 1996). The choice of analysis strategies depends upon the research questions, on current stage of the research topic, or knowledge about the topic of interest, and on the methods of data collection. Fraenkel and Wallen (1996) has identified the following five major features of qualitative research:

- The natural setting is the direct source of data, and the researcher is the key instrument;
- Qualitative data are collected in the form of words or pictures rather than numbers;
- Qualitative researchers are concerned with process as well as product;
- Qualitative researchers tend to analyse their data inductively – constructing a picture that takes shape as they collect and examine the parts;
- How people make sense of their lives is a major research concern;

Qualitative research provides rich descriptions about the nature of a phenomenon: what it is, how it works, why it works that way, and under what

conditions it works that way. It provides in-depth information that may be difficult to convey with quantitative methods, or when the numbers are not sufficient.

4.3.4 Types of Qualitative Approaches

A qualitative "approach" is a general way of thinking about conducting qualitative research. It describes, either explicitly or implicitly, the purpose of the qualitative research, the role of the researcher(s), the stages of research, and the method of data analysis. Here are a few of the more common qualitative approaches:

Ethnography

Ethnography is a study of cultural processes in action (Carspecken, 1996). Ethnographic questions generally concern the link between culture and behaviour and/or how cultural processes develop over time. It is used to develop theories that are grounded in life experiences, beliefs and practices. For example: *Which birth control methods are most widely used in United Kingdom, and how are birth rates affected over a five year period?* Participant observation is the most common ethnographic approach as a part of field research (Adler and Adler 1994; Agar 1980; Bernard 1988).

Phenomenology

Phenomenology is considered a philosophical perspective as well as an approach to qualitative methodology, which has a long history in several social research disciplines. Its central focus is people's subjective experiences and interpretations of the world. It is about describing the meaning of lived experiences about a phenomenon, and coming to understand the experience itself (Creswell, 1998). Phenomenology answers the question, "What it is that like?" For example, Bargdill (2000) studies the phenomenon of life boredom and describes the lived experiences of several sufferers who have been afflicted by chronic boredom.

Grounded Theory

The major difference between grounded theory and other methods is its specific approach to theory development that emerged from data that is grounded in reality. It deals with questions like “how does it works”; “what happen during the process”; “what are the factors affecting the process”. It suggests that there should be a continuous interplay between data collection and analysis.

According to Strauss and Corbin (2000),

A grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory, then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge.

The process of data analysis in grounded theory research is systematic, which involve three types of coding: open coding, axial coding, and selective coding. Grounded theory involves a set of procedures, which requires high levels of both experience and acumen on the part of the researcher.

General Inductive Approach

This approach is a systematic procedure for analysing qualitative data where the analysis is guided by specific objectives (deductive) and multiple readings and interpretations of raw data (inductive). It allows research findings to emerge from both the research objectives outlined by the researcher(s) and findings arising directly from the analysis of the raw data, without the restraints imposed by structured methodologies. The researcher must make decisions about what is important in the data. The primary mode of analysis is the development of categories into a model or framework that summarises the raw data and conveys key themes and processes.

4.3.5 Qualitative Data Collection Strategies

In qualitative research, data collection and analysis are often conducted together, rather than as distinct and separate stages. There are a wide variety of methods that are common in qualitative data gathering. Basically there are three data gathering strategies that characterise qualitative methodology as stated in Patton (1990):

In-Depth Interviews

In-depth interviewing, also known as unstructured interviewing, is a type of interview, which researchers use to elicit information in order to achieve a holistic understanding of the interviewee's point of view or situation; it can also be used to explore interesting areas for further investigation (Berry, 1999). Questions are open-ended, and respondents are encouraged to express their own perceptions freely. As in-depth interviewing often involves qualitative data, it is also called qualitative interviewing. Patton (1987) identifies three basic approaches to conducting qualitative interviewing:

- The informal conversational interview

This type of interview resembles a chat, during which the respondents may sometimes forget that they are being interviewed. Under such circumstances it is not possible to have pre-determined set of questions. Informal conversational interviews are useful for exploring interesting topic/s for investigation and are typical of 'ongoing' participant observation fieldwork. The disadvantage of this approach is that less systematic information may be generated and therefore data is difficult to analyse and time-consuming.

- The general interview guide approach (or semi-structured interview)

When employing this approach for interviewing, a pre-determined set of questions or issues is prepared to make sure that all relevant topics are covered. Yet, the interviewer is still free to explore, and pursue certain questions in greater depth. This type of interview approach is useful for eliciting

information about the topic of interest in a more systematic and comprehensive way.

- The standardised open-ended interview

This approach consists of a set of open-ended questions, which are carefully worded and arranged for the purpose of minimising variation in the questions posed to the interviewees. This type of interview is particularly when two or more researchers are involved in the data collecting process. It allows the interviewer to collect detailed data systematically and facilitate comparability among all respondents. Although this method provides less flexibility for questions than the other two mentioned previously, probing is still possible, depending on the nature of the interview and the skills of the interviewers.

Direct Observation

Observation is particularly useful in (Adler and Adler, 1994; Atkinson and Hammersley, 1994):

- Getting a better understanding of context;
- Cross-checking information and possible differences between what people do and what they say they do;
- Assessing the quality of relationships between individuals or groups;
- Gaining new insights;
- Building rapport with informants.

Direct observation is distinguished from participant observation in a number of ways. First, a direct observer deliberately does not become a participant in the context in order not to influence it. Participant observation, on the other hand, requires that the researcher become a participant in the culture or context being observed in order to get a better understanding of insider views and experiences. Second, direct observation suggests a more detached perspective. The researcher is watching rather than taking part. However, videotape or photograph the phenomenon or observe from behind one-way mirrors can be extremely helpful. Third, direct observation tends to be more focused than participant observation. The researcher is observing certain

sampled situations or people rather than trying to become immersed in the entire context. Finally, direct observation can often be a rapid and economical way of obtaining information compared to participant observation. The main advantage of this method is that participants are not aware that they are being observed, and then they are less likely to change their behaviour and compromise the validity of the evaluation.

Written Documents

Usually this refers to existing documentary materials including program records, newspapers, magazines, books, websites, memos, transcripts of conversations, annual reports, personal diaries and so on. These documents can generate ideas for questions that can be pursued through interviewing and observation. One of the major advantages of this method is the documents were generated contemporaneously with the events they refer to. They are a useful source of information that may not be assessable by other means, for example information about things that the researcher cannot observe because the event took place before the evaluation began.

Other types of qualitative data collection techniques include:

Focus Groups – Interviews with groups of people selected because they share certain characteristics relevant to the questions of study. Interviewer encourages discussion and expression of differing opinions and viewpoints. It has an advantage of generating ideas and topics, which are unlikely to arise with individual interviews.

Case Studies – which combines different methods to compile holistic understanding of individuals, households, communities, markets, organisations, or policies. For more details see Patton (1990); Yin (1994); Stake (1994).

4.3.6 Methodological Approaches for Phase II Investigations

A qualitative approach was considered the most appropriate mechanism with which to research the low-cost housing market in Malaysia. A survey is a flexible research approach used to investigate a wide range of topics, which is particularly useful for non-experimental descriptive designs that seek to describe reality (Matthews & Fox, 1998). Yin (1994) commented that survey approach is likely to deal with “who”, “what”, “where”, “how many” and “how much” questions which are particularly advantageous in when the research aim is to describe the incidence or prevalence of a phenomenon or when it is to be predictive about certain outcomes.

In order to achieve Objective (a), questionnaire approach is chosen as a confirmation tool to justify the findings found in Phase I investigations from a large number of respondents. It is also used to identify potential private developers for follow-up interviews. The data will be analysed and presented in graphical tabulation along with a descriptive discussion of the results.

Due to the exploratory character of this investigation and the lack of empirical evidence found in the literature review, the methodological approach was built on inductive reasoning and a hybrid of grounded theory. Grounded theory uses a systematic set of procedures for data collection and analysis to develop inductively derived theory grounded in data. However, by using inductive reasoning a relationship between the research proposition and the findings that are to be derived from the raw data (i.e. questionnaires and semi-structured interviews) can be established. It is then possible to determine the existing model of affordable housing market in Malaysia and factors influencing the housing market can be identified. However, inductive approach does not provide the information on how those factors interact and affect the provision of affordable housing. Therefore, grounded theory will be used as it allows the author to develop the properties and dimensions of the factors identified from the interviews. The dimensions of the properties developed are very important in determining an explanation for the failure of the existing housing model and

to develop a new model of public private partnership for affordable housing in Malaysia.

Objective (b) will be dealt with using semi-structured interview strategy so that more focused and in-depth data can be gathered and the proposition tested.

The interviews will examine the following issues:

- To explore and understand the views and perceptions of private developers on current housing situation in Malaysia, particularly with respect to the low-cost housing developments.
- To investigate the actual information on incentives claimed to have been provided by the Government to the private developer and its effectiveness.
- To determine the incentives or concessions that would encourage private developers to consider constructing low-cost housing.
- To determine whether partnership between the Government and private developer could provide tangible benefits in the provision of and access to affordable housing.
- To determine whether community participation could assist in housing delivery process under partnership-based affordable housing scheme.
- To determine the role of financial institutions in the provision of housing finance to lower-income people.

In qualitative approach, data analysis is interactive with data collection. Therefore data will be analysed as they collected through the interviews process with the developers. Initial data analysis from questionnaire guided further and more focused data collection obtained from semi-structured interviews. Through this process, subcategories, properties and dimensions of each factor emerged. These were then checked with the interviewees to confirm their agreement.

For Objective (c), three models of public private partnership will be developed for affordable housing in Malaysia. The development of the models will be

based on the findings obtained from Phase I investigations as well as the questionnaires and interviews with a sample of private developers.

The three models of public private partnership developed will be evaluated based on the key factors influencing the failure in low-cost housing provision with the same sample of developers participated in the interview survey in order to achieve Objective (d).

4.4 Data Collection Procedures

4.4.1 Questionnaire Survey

Questionnaire survey is used as a preliminary study to achieve Objective (a) in Phase II investigation. The questions asked in the questionnaire were designed to be a mixture of closed and open-ended in order to collect both quantitative and qualitative data. Open-ended responses on questionnaires represent the most elementary form of qualitative data (Patton, 1990). These types of questions allow the respondent to interpret the question in their own way, and at the same time enable the researcher to understand and capture the points of views. Open-ended questions also allow emergent ideas. However there were several problems encountered in these open-ended data collected such as limitations related to writing skills of respondents, and the efforts required to complete the questionnaires. Yet the depth and detail of actual experiences and feelings of the private developers revealed in the questionnaire are very supportive to this research.

4.4.1.1 Pilot Study

The questionnaires were designed to cover a wide range of issues identified from the literature review in Phase I investigations. It was piloted with a local developer to evaluate the respondents' ability to understand the questions, to assess the feasibility of the collecting information on the extent to which quality information is measured (see Appendix A for pilot study questionnaire). The pilot study found problems on the wording/form of some of the questions asked

in the questionnaire, and identified the concern of private developers on the purpose of this questionnaire and the confidentiality promised. Revisions to the pilot study questionnaire were made based on these problems and concerns. A sample of the questionnaire as issued to private developers can be found in Appendix B.

4.4.1.2 Questionnaire Sample

A sample of private developers involved in both low-cost (either 100 percent low units or mixed developments) and non-low-cost housing developments was selected for the purpose of this research study. Respondents to the questionnaire survey were selected from housing developer's list issued by the Ministry of Housing and Local Government. Personal details of each private developer/housing development company will not be identified in any part of the thesis to preserve participant's anonymity.

According to the Ministry of Housing and Local Government, the total number of houses constructed by private housing developers was 78,9472 in 2001 of which 16,886 units were low-cost houses. The total number of private housing developers in Peninsular Malaysia was 1,508 in 2001. The greatest number of developers was operating in Selangor with the least number in Perlis. Table 5.1 shows the number of housing developer's licences issued by state.

Table 4.1. Number of Housing Developer Licences Issued by State in 2001

State	Number of Housing Developer Licences	
	<i>New</i>	<i>Renewed</i>
Johor	200	66
Kedah	92	29
Kelantan	31	8
Melaka	62	27
Negeri Sembilan	63	35
Pahang	76	21
Perak	130	70
Perlis	6	0
Pulau Pinang	68	33
Selangor	303	98
Terengganu	37	9
Kuala Lumpur	27	17
Total	1,095	413

Source: Ministry of Housing and Local Government, 2002

The samples chosen for the questionnaire survey were 150 housing projects in Peninsular Malaysia, of which were located in southern region, from northern region, from eastern region and from central region (see Table 5.2). The samples selected were based on the following factors:

- Location of projects

The location of projects both in rural and urban areas in different states was taking in to consideration in the sample.

- Development size

The development sizes in this study is defined as below:

Small – housing projects with less than 200 units

Medium – housing projects with 200 – 500 units

Large – housing projects with more than 500 units

- Types of houses

Different types of houses including terrace and cluster houses, walk-up and high-rise flats (more than five-storeys) were also included in the samples.

- Percentage of low-cost units built in the housing project

Only projects that constructed more than 20% of low-cost units were selected in order to obtain higher accuracy of data.

Table 4.2. Number of Housing Projects in 2001 and Number of Samples Selected

Region	Number of Housing Projects	Number of Samples Selected
Southern Region		
Johor	266	30
Melaka	89	10
Northern Region		
Perak	200	25
Penang	101	15
Eastern Region		
Terrengannu	46	5
Kelantan	39	5
Central Region		
Selangor	401	50
Pahang	97	10
Total	1239	150

4.4.1.3 Questionnaire Topics

Section A: Definition of Low-Income, Low-Cost Housing and Housing Situation in Malaysia

The questions in this section asked for perceptions of definition of low income, low-cost housing. It also dealt with perceptions of current housing situation in Malaysia that likely to influence the performance of housing development.

Section B: Government Guidelines for Low-Cost Housing

In this section, respondents were asked to comment on the several guidelines set by The Ministry of Housing and Local Government for low-cost housing category in Malaysia. The guidelines are 30 percent low-cost quota; controlled price; minimum design standard; income purchasing controls, bumiputera privileges and incentives.

Section C: Issues and Problems Encountered in Low-Cost Housing

This section covered the major issues and problems encountered in constructing low-cost housing schemes. The section also asked questions on

possible factors that are important to developers in reducing overall cost for low-cost housing development.

Section D: Provision of Incentives to Private Developers

The questions in this section dealt with various incentives promised or given by the Government to private developers in to get a clearer view of the situation.

Section E: Partnership between Government and Private Developers

In this section, respondents were asked to indicate their willingness to partner with the Government in the provision of housing to the lower-income group. The respondents were also asked to describe incentives or concession, which they might consider attractive to build low-cost houses when partnering with the Government.

Section F: Community Involvement In Housing Delivery

Questions dealt with perceptions of getting local communities to participate in the provision of housing to strengthen sense of collective community ownership and responsibility. More questions were about skills and training that are available or might consider providing to local people.

Section G: Borrowing Capacity of Low-Income Group

This section used the ranking scale to identify the most serious problem faced by private developers when dealing with low-cost buyers. It also asked about the idea of letting the low-cost houses to whom do not have the financial capability to purchase the unit.

Section H: Sustainability and Land Acquisition

Questions dealt with high-density development in low-cost housing category and its major problems in choosing such form of construction. Other possible alternatives of achieving sustainability were also included.

Section I: Role of Private Developers In the Provision of Low-Cost Housing

In this section, developers were asked for opinions on their role and responsibility in the provision of low-cost housing in Malaysia.

4.4.2 Semi-Structured Interviews

Using the data gathered from questionnaires it was then possible to conduct semi-structured interviews with selected private developers

A total of 10 private developers were selected who were believed to have an important role in assisting the provision of affordable housing. Semi-structured interview allows the author to explore the views, opinions and feelings of private developers about issues concerned in more detail. Unlike structured interview where pre-determined questions with structured responses, semi-structured interviews are conducted with a fairly open framework, which allow for focused, conversational, two-way communication. The data gathered would be very rich in details but one of the problems with asking an open-ended question is it may be difficult to compare the responses over a large number of subjects, which can be difficult and time consuming to code.

4.4.2.1 *Pilot Study*

A pre-determined set of questions or issues were prepared to make sure that all issues of concern previously identified in the questionnaires are covered. The questions was then piloted with the same local developer and subsequently revised before the 10 developers to be participated in the survey were contacted (see Appendix C for pilot study interview schedule). Some of the questions required reorganised and reformulated in order to develop a more effective way to explore the opinions, and experiences of the developers. A sample of the interview schedule can be found in Appendix D.

4.4.2.2 *Sampling*

In this investigation there has been a deviation from the Glaser and Strauss's grounded theory for data collection. The form of data recording that took place during data collection was writing down of important notes during interviews with selected private developers. Therefore, the decision on when to stop sampling, as suggested by Glaser and Strauss is indicated by theoretical saturation. This happens when no additional data develops any further the properties of the category. The theoretical saturation occurred after the 10 interviews undertaken with private developers in Malaysia.

It is important to make it clear that the term *sampling* used in this study is quite distinct from the statistical use of the term. Theoretical sampling is the process of collecting data for comparative analysis and to develop emerging theory until the researcher reaches a point of data saturation. It was aimed to discover categories, properties and dimensions rather than to obtain accurate evidence on a wide distribution of private housing developers in Peninsular Malaysia. Working on a small sample of private developers, that have been carefully selected through questionnaire results and volunteering is a process of theoretical sampling. The aim of the selection of interview participants here is not statistical representatively but gaining access to developers who are willing to share their real experiences and perceptions on housing situation for the lower-income people. This will indirectly help the emergence of rich theoretical categories regarding the promotion of public private partnership for affordable housing in Malaysia.

There are no transcripts produced from the interviews because the languages used are Chinese and Bahasa Malaysia. No transcripts are required based on the nature of this research in which only a hybrid of grounded theory is adopted. In addition, it is decided not to translate into English as translation between languages may contaminate the contents of the interviews.

4.4.3 Validity and Trustworthiness of Data Collected

With regards to the validity of qualitative analysis, Patton (1990) commented that qualitative method has more to do with the information richness and the observational/analytical capabilities of the researcher than with the sample size. Qualitative analysis requires the creative involvement of the researcher. In qualitative analysis, the researcher is the instrument. Hence, the validity in qualitative method depends greatly on the skills, competence and rigor of the researcher doing the fieldworks (Guba and Lincoln, 1981; Patton, 1990).

There are many ways of demonstrating the robustness and trustworthiness of qualitative analysis. According to Scandura and Williams (2000), "triangulation can improve external and internal validity as the combination of separate research strategies in one study helps to counter the trade-offs inherent in others." Strauss and Corbin (2000) as well as Denzin & Lincoln (1994) support the method by commenting that data triangulation from multiple sources and techniques is important in verification and validation of qualitative analysis. There are four types of triangulation (Denzin, 1984):

- *Data source triangulation* – when the researcher looks for the data to remain the same in different contexts; the use of a variety of data sources such as interviews, observational data, archival materials etc.
- *Investigator triangulation* – when several researchers examine the same phenomenon to achieve agreement;
- *Theory triangulation* – when researchers with different view points interpret a single set of data; and
- *Methodological triangulation* – when one approach is followed by another, to increase confidence in the interpretation. For example, combining quantitative and qualitative approaches in a single study.

Data triangulation and methodological triangulation were used in which qualitative and quantitative data were collected from questionnaire survey and semi-structured interviews with private developers. Supplement data from

bibliographical and archival documentations as well as literature review were crucial to this study. It is stated in Denzin (1970) “by combining multiple observers, theories, methods and data sources”, researcher can hope to “overcome the intrinsic bias that comes from single-methods, single-observer, and single-theory studies.

Another method adopted to improve the credibility of the research is respondent validation (or member checking). Drafts of manuscript were sent back to selected developers to allow them to revise or check the accuracy of the contents. The analysis of data was presented to private developers for their confirmation or revision. Many researchers consider ‘respondent validation’ of qualitative research to be a mark of quality, and evidence of respondent validation’s findings is increasingly seen as a way of demonstrating rigor. By involving respondents in feedback or validation has been seen as an important stage to avoid sole power of researchers in interpretation of data (Wiersma, 1995).

5.0 DATA ANALYSIS AND PRESENTATION OF RESULTS

5.1 Introduction

The aim of this chapter is to present the data analysis in a general discussion section together with a presentation of results specifically relating to the testing of the proposition. As discussed in Chapter 5, data collection in the preliminary study was carried out by questionnaires in the hope of confirming the issues that were identified in the literature review, and identifying any other issues that are important to the developers. The study was further investigated through semi-structured interviews with selected private developers to explore the views, opinions and experiences of private developers about issues concerned.

The author has attempted to combine the benefits of both data collection methods to minimise the limitations of using an individual methodology. While questionnaire results have the advantage of providing general information from a larger population about low-cost housing situation in Malaysia, the results will lack depth. The interview approach however adds depth to the study by looking at the topics in detail. By using both questionnaire survey and interview methodologies, the author was able to compare and contrast the data for inconsistencies. Research findings were gathered and presented in a combination of both quantitative (questionnaires survey) and qualitative (semi-structured interviews) data, which helped to enrich the study.

5.2 Questionnaires – Results, Analysis and Discussion

150 questionnaires were sent to selected developers involved in the construction of low-cost houses (either 100 percent low-cost units or mixed developments) in different states in Peninsular Malaysia. Those who do not build low-cost houses in their past housing projects were also selected to ask whether they would voluntarily construct low-cost units in their development project if the construction of low-cost housing is made profitable, or reasons for deciding against this. Private developers returned a total of 15 forms. This low return rate is disappointing, but it should be recognised that the study was carried out from the United Kingdom. Additionally, respondents may have had difficulties in understanding and filling in the questionnaire in English. However, the 10 percent response rate is considered acceptable based on the purpose of the questionnaire and the level of consensus of the results obtained (see sections below). Therefore a repeat circulation of the questionnaire is considered unnecessary. The following sections present and discuss the results gathered from questionnaires as a preliminary study.

5.2.1 Section A: Definition of Low-Income, Low-Cost Housing and Housing Situation in Malaysia

This section examined the definition of low-income and low-cost housing from the developers' point of view. It also dealt with perceptions of current low-cost housing situation in Malaysia. Respondents were asked to indicate their level of agreement or disagreement about the statements under Question A1. Figure 5.1 and Table 5.1 show the results of Question A1.

Table 5.1. Response Data of Question A1

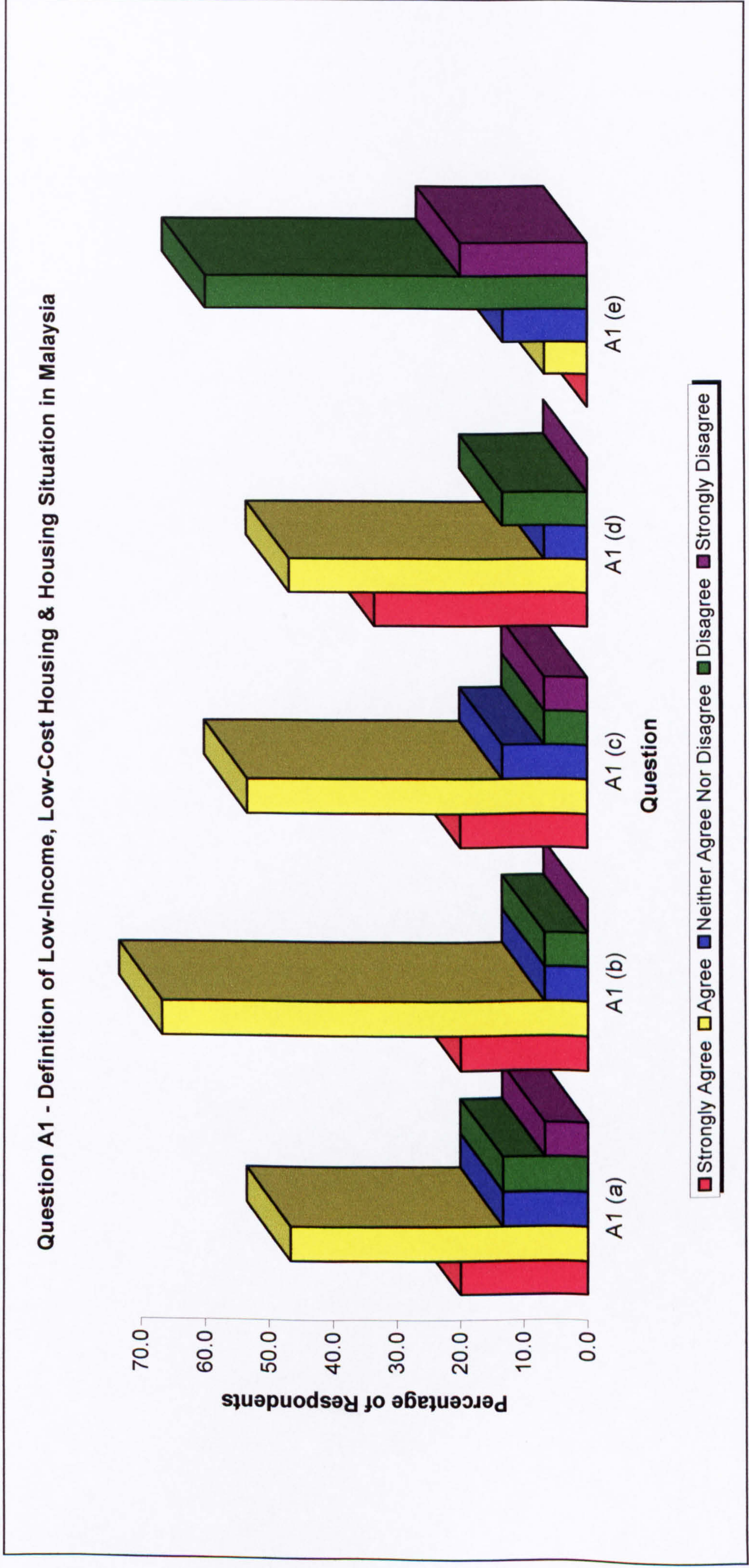
	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
<i>Question A1 (a):</i> Low-income is classified as under the monthly income range of RM500 – RM750 per household.	20.0	46.7	13.3	13.3	6.7
<i>Question A1 (b):</i> Low-cost housing should be sold at selling price according to location and standard requirements for quality houses.	20.0	66.7	6.7	6.7	0.0
<i>Question A1 (c):</i> The property market is recovering from the Asian Financial Crisis that began in mid 1997.	20.0	53.7	13.3	6.7	6.7
<i>Question A1 (d):</i> There has been an increasing demand for low-cost and low-medium cost houses in the past 5 years.	33.3	46.7	6.7	13.3	0.0
<i>Question A1 (e):</i> There has been an oversupply of low-cost houses in the past 5 years.	0.0	6.7	13.3	60.0	20.0

67 percent of the respondents agreed (i.e. the sum of “strongly agree” and “agree”) that low-income should be within a monthly household income ranging from RM500 to RM750. There were only a small proportion of respondents disagreeing (i.e. the sum of “disagree” and “strongly disagree”) with this statement. More than 85 percent of the respondents agreed that low-cost housing should be sold at a selling price that recognises the different location and the minimum design standard for a quality house.

The literature review showed that the residential sector has achieved a positive growth in housing development and is also expected to contribute significantly to growth in the construction sector due to increasing demand for low and low-medium cost houses. More than 70 percent of the respondents agreed with this statement. 80 percent of the respondents agreed that there has been an

increasing demand for low-cost and low-medium cost houses in the past 5 years. A position confirmed by the Housing and Local Government Minister Datuk Seri Ong Ka Ting that low medium-cost houses were in great demand but short in supply (The Star, 2001a). 80 percent of the respondents disagreed with the statement that the industry has been oversupplying low-cost houses while 13.3 percent remained neutral, and 6.7 percent agreed with it.

Figure 5.1. Response Data of Question A1



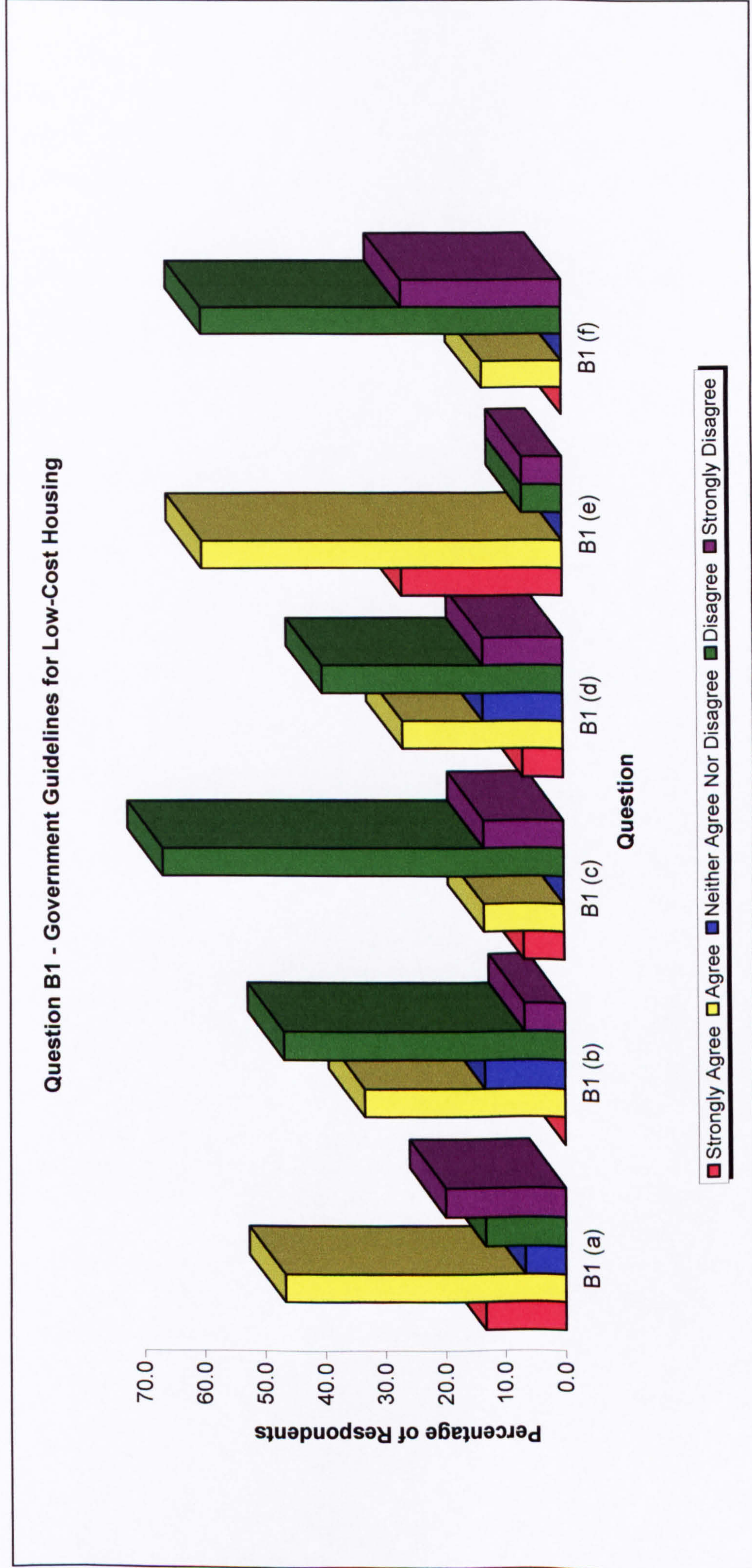
5.2.2 Section B: Government Guidelines for Low-Cost Housing

In this section, respondents were asked to indicate their level of agreement or disagreement about the Government guidelines on low-cost housing based on several issues. Figure 5.2 and Table 5.2 shows the response data of Question B1.

Table 5.2. Response Data of Question B1

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
<i>Question B1 (a):</i> 30% low-cost quota is required for private housing scheme reaching a certain development size	13.3	46.7	6.7	13.3	20.0
<i>Question B1 (b):</i> The selling price for low-cost houses should be fixed at a price range between RM25,000 and RM42,000 per unit	0.0	33.3	13.3	46.7	6.7
<i>Question B1 (c):</i> Minimum design standard of low-cost housing required	6.7	13.3	0.0	66.7	13.3
<i>Question B1 (d):</i> Low-cost units can only be sold to household with monthly income of not exceeding RM750	6.7	26.7	13.3	40.0	13.3
<i>Question B1 (e):</i> A minimum quota of 30% of the housing units has to be withheld by the private developers for sales to Bumiputeras at a discount of at least 5% off the selling price.	26.7	60.0	0.0	6.7	6.7
<i>Question B1 (f):</i> Various incentives promised by the Government to encourage private developers to construct low-cost houses are sufficient	0.0	13.3	0.0	60.0	26.7

Figure 5.2. Response Data of Question B1



60 percent of the respondents agreed that 30% of low-cost quota should be imposed for housing projects reaching a certain development size while 33.3 percent disagreed with this guideline with 7 percent of the respondents remained neutral. More than half of the respondents disagreed that low-cost houses should be sold within a controlled price ranging from RM25,000 and RM42,000 per unit. The selling price should be adjusted accordingly taking into account of different locations as discussed in Question A1 (b). Private developers must be allowed to gain a reasonable profit from their low-cost housing development projects.

80 percent of the respondents disagreed with the minimum design standard required for low-cost houses while the remaining respondents agreed with it. About half the respondents disagreed that low-cost units should be sold to buyers who have a combined household income of not exceeding RM750 per month. From the literature review undertaken, the two main issues associated with this guideline are a) the failure of the delivery system during the allocation process of low-cost houses to eligible buyers; b) difficulty in obtaining housing loans from financial institutions. The responsible authorities should review the income eligibility for low-cost by studying income growth and expenditure patterns in order to establish the amount, which the poor households can afford in housing.

86.7 percent of the respondents have no objection towards the Bumiputera purchasing control. 86.7 percent of the respondents complained that incentives provided by the Government were not sufficient for their low-cost housing projects. Various incentives promised or given by the Government to private developers were further investigated in Section D.

5.2.3 Section C: Issues and Problems Encountered in Low-Cost Housing

This section dealt with major issues and problems faced by the respondents when undertaking low-cost housing development. The section also asked about possible factors that are important to developers for reducing development cost in low-cost housing scheme.

Question C1: Main issues/problems encountered in low-cost housing

Table 5.3. Mean Value and Ranking Position for Main Problems/Issues in Low-Cost Housing

Main Problems/Issues	Mean	Ranking Position
Delays in obtaining necessary approvals from Government departments/agencies	1.73	1
Less profitable when compared to other types of houses	2.80	2
Escalating price of construction materials	3.27	3
Shortage of construction labour	4.07	4
Difficulty in obtaining financing loans from commercial banks	4.67	5
Difficulty in selling the low-cost units	5.27	6
Expensive professional fees or contributions to Government department/agencies	5.60	7

Figure 5.3. Response Data of Question C1

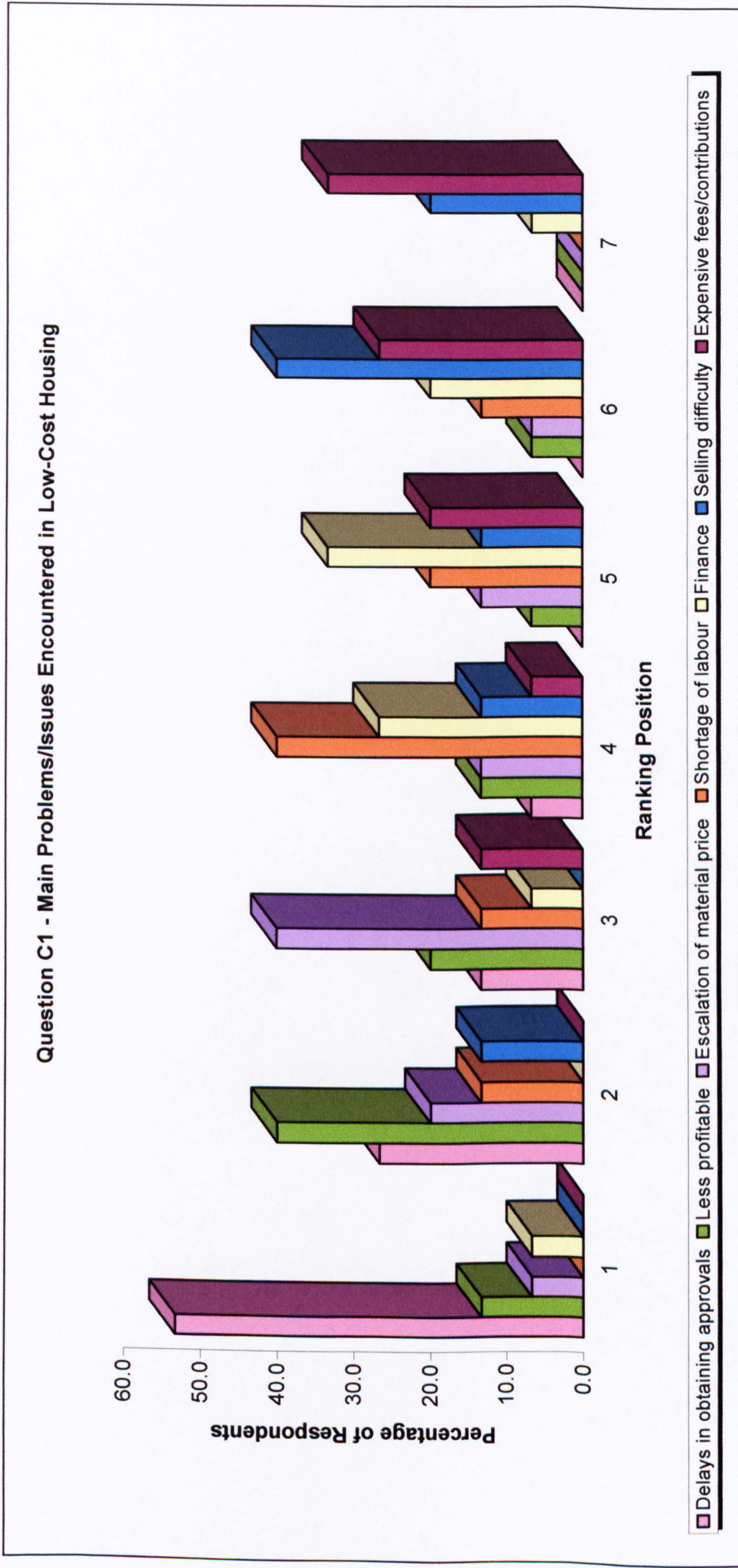


Figure 5.3 shows the data received regarding the main problems/issues encountered in low-cost housing developments. Respondents were asked to rank the seven main issues/problems in order of their seriousness (i.e. 1 for the “most serious problem faced and 7 “the least seriousness”). Table 5.3 shows the mean value and ranking position of each problem/issue.

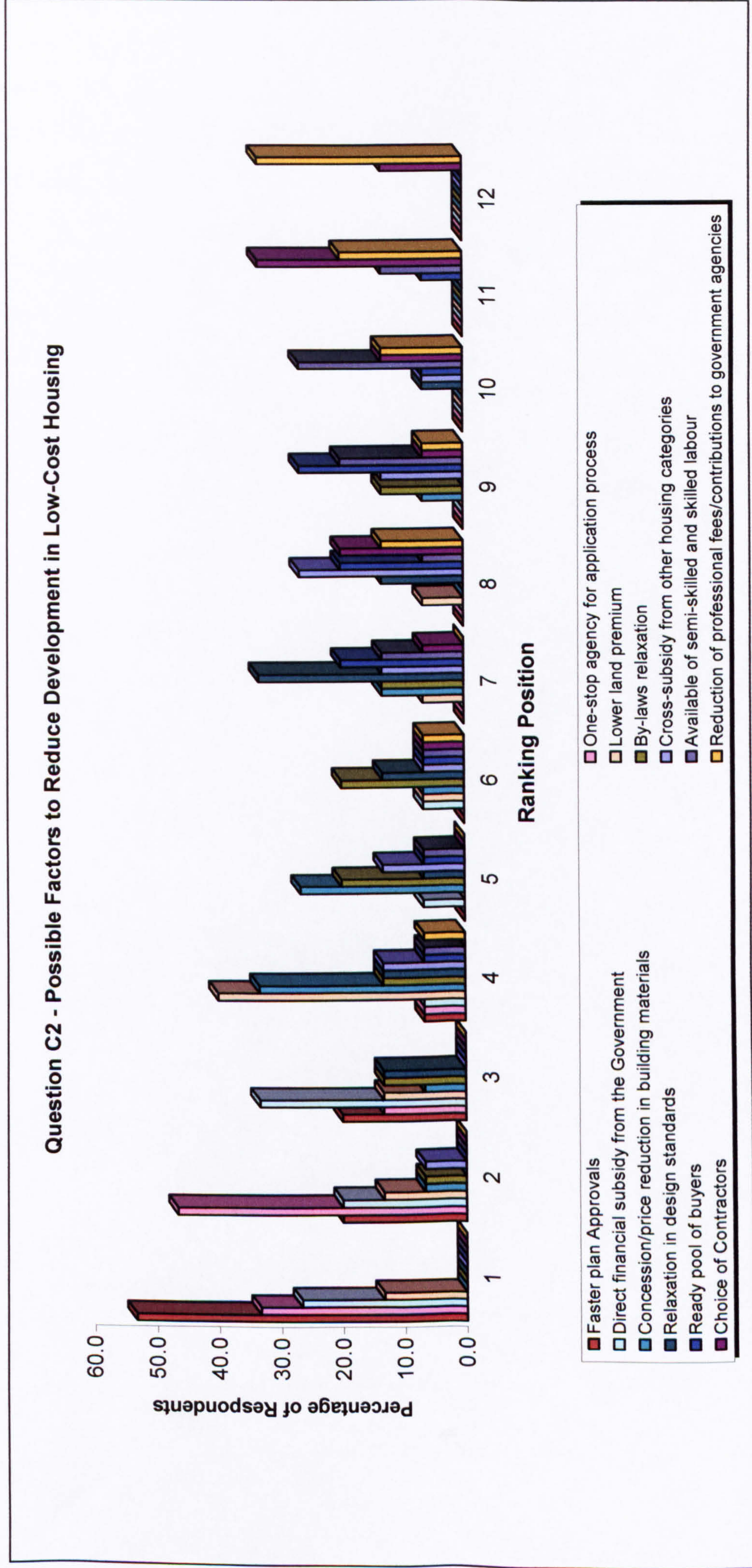
The results revealed that the most serious problem facing by the private housing developers is the “delay in obtaining various approvals of plans from government agencies”. Private developers still viewed low-cost housing development as a “less profitable” project when compared to other types of housing construction. This is ranked as second followed by “escalation price of construction materials”. “Professional fees and/or contribution to government agencies” were found to be the least serious problems in constructing low-cost houses. These issues/problems were explored in further detail when conducted interviews with selected private developers.

Question C2: Possible factors in reducing costs for low-cost housing development

Table 5.4. Mean Value and Ranking Position for Factors in Reducing Costs for Low-Cost Housing Development

Possible Factors	Mean	Ranking Position
Faster plan approvals from Government departments/agencies	1.80	1
Set up of a one-stop agency to speed up the application process	1.93	2
Direct financial subsidy from the Government	2.67	3
Lower land premium	3.80	4
Concessions/price reduction in building materials	4.93	5
By-Laws relaxation for low-cost housing scheme	5.40	6
Relaxation in design standards for low-cost units	6.13	7
Cross-subsidy from other housing categories	6.67	8
Ready pool of buyers eligible to purchase low-cost units	7.80	9
Available of semi-skilled and skilled labour	8.40	10
Capability and past experience of contractor to avoid time overrun, which incurred additional cost.	9.67	11
Reduction of professional fees/contributions to Government department/agencies for low-cost housing scheme	9.87	12

Figure 5.4. Response Data of Question C2



In the questionnaire survey, respondents were asked to rank twelve possible factors that would reduce the development cost of low-cost housing projects. The factors were ranked in order of their importance in reducing cost (i.e. 1 for the “most important factor” and 12 “the least important factor”). These factors were identified earlier in the literature review of the study.

Figure 5.4 shows the data obtained from the questionnaire survey for Question C2. Table 5.4 shows that the most important factor is “faster plan approvals from government departments/agencies” followed by “set up of one-stop agency to speed up the application process”. These two factors demonstrate that urgent measures need to be taken to reduce the time scale in the processing and approving applications of housing development project, which might incur additional costs to private developers. The third ranked factor is “direct financial subsidy from the Government” and “lower land premium” is ranked as the fourth important factor. “Reduction of professional fees/contributions to government department/agencies” was considered as the least important factor in reducing cost for low-cost development. These factors were further investigated via follow-up interviews with private developers. There were a few additional factors recommended by the respondents, which are set out below:

- “Less expensive sites for low-cost housing development”
- “Increase the density of low-cost housing”
- “Provision of free land from the Government for low-cost housing projects”

5.2.4 Section D: Provision of Incentives to Private Developers

Table 5.5. Response Data of Question D1 (Various Incentives Received by Private Developers in Low-Cost Housing Development)

Incentives	Percentage of Respondents		
	Yes	No	Not Applicable
Faster plan approvals given by			
– State Government	6.7	93.3	0
– Local Government	13.3	86.7	0
Direct/Indirect subsidy provided by the Government			
– Lower land premium	20.0	80.0	0
– Infrastructure cross subsidisation	6.7	93.3	0
– Concession from financial contribution subsidisation	13.3	86.7	0
Relaxations in Uniform Building By-Law			
– Reduction in bedroom size	6.7	93.3	0
– Reduction in car-parking requirements	26.7	73.3	0
– Reduction in width of roads and drainage	33.3	66.7	0
– Relaxation of waste central unit (for waster disposal and recycling purposes) requirements	20.0	60.0	20.0
Relaxations in planning standards			
– Reduction in requirements for community facilities	20.0	80.0	0
– Reduction in open space requirements	13.3	86.7	0
– Increase in residential density	26.7	73.3	0

Table 5.5 shows the results obtained from the questionnaires regarding the various incentives received by the developers responded. In general, the results indicated that majority of the respondents did not receive many incentives, which were claimed to have been given by relevant government agencies. Only 6.7 percent of the respondents received faster plan approvals from the State Governments and 13.3 percent from the Local Governments. In terms of the direct/indirect subsidy claimed by the Government, only 20 percent of the respondents benefited from the reduction of land premium their low-cost

housing projects. A majority of the developers participating in the survey said that they did not receive subsidy for infrastructure cost. Concession from financial contributions to government agencies is identified as one of the important factors to reduce cost in the provision of low-cost housing (see Table 5.4). However, the result shows that 86.7 percent of the respondents did not receive any concession from the government agencies.

In terms of the relaxations in Uniform Building By-Law and Planning Standards, only a small proportion of the respondents received such incentives. About 7 percent received reduction in minimum bedroom size, 27 percent received reduction in car park requirements and 33 percent received reduction in width of roads and drainage. Only 20 percent of the respondents received relaxation in waste central unit requirements. Even though the Government is encouraging increased residential density development over the recent years, less than 30 percent of the developers received such incentive. Only 20 percent of the respondents received reduction in requirements for community facilities and less than 14 percent received reduction in open spaces.

5.2.5 Section E: Partnership Between Government and Private Developers

This section aimed to identify the willingness of private developers to partner with the Government in the provision of housing to the lower-income group. All of the questions (except Question E1a and E1b) were designed in the form of open-ended questions in order to capture the points of view of developers on this aspect.

Question E1(a) and E1(b)

Table 5.6. Response Data of Question E1 (a)

<i>Question E1 (a): Would you consider constructing low-cost units under the partnership structure with the Government if the construction of low-cost housing were made profitable?</i>	Not willing	Possibly	More than willing
Percentage of respondents (%)	13.3	53.3	33.3

Only 13.3 percent of the respondents are not willing to be involved in a partnership structure with the Government when constructing low-cost houses even if the construction were made profitable (see Table 5.6). It seems at this point that public private partnership could be the solution for the housing procurement in the near future. More information is gathered during interviews with selected private developers, which is discussed in the later section of the chapter.

Table 5.7. Response Data of Question E1 (b)

<i>Question E1 (b): How do you define "profitable"? Please indicate the percentage of profit you would like to gain in your low-cost housing development.</i>	Less than 10% of profit	10 – 20% of profit	21 – 30% of profit	31 – 40% of profit	More than 40% of profit
Percentage of respondents (%)	0	60	26.7	13.3	6.7

More than 80 percent of the respondent developers considered a profit ranging from 10 to 30 percent would be attractive in the construction of low-cost units. However out of these, 60 percent of the respondents reported that 10 – 20 percent of profit is acceptable.

Question E2 and Question E3

The questionnaire survey also revealed that provision of free land by the Government is considered as the most attractive incentive for the majority of the respondents to encourage them to consider constructing low-cost units in their project. If the project turn out to be profitable, it is most likely that developers will continue undertaking low-cost housing projects. Other incentives suggested by the respondents including financial subsidy from the Government in terms of project funding, lower land premium, and relaxation in the migration procedures for construction workers.

Question E4

Question E4 asked for opinions on how the Government can partner with private developers in the housing provision to low-income people. The following comments are stated in the questionnaires received:

- “Government officials will be responsible for settling the land issues as well as applications to government bodies for the project. The developers will be able to focus less on the paperwork and red tape procedures and go right ahead with the construction”.
- “Partnership between the Government and private developer in the form of letting out the low-cost units to the poor.”

Question E5

This question asked about perceptions of the management and finance structure that the developer prefer in undertaking low-cost housing projects when in partnerships with the Government. The comments received were:

- “A Government representative who has extensive experiences in the construction industry is appointed to act as co-consultant along with the private consultant. He/she is given the authority to make decisions in meetings and will assist in ensuring all relevant applications with the Government are quick. He/she will also ensure that the houses as well as the infrastructure plans are designed up to the required standard.”
- “Government provides guarantee that a certain percentage of houses will be sold by preparing a ready pool of buyers for the houses in order to ease the developer’s case flow. Otherwise the Government would have to buy up those units from the developer either for sales or for rent to the targeted group later in the process.”

5.2.6 Section F: Community Participation in Affordable Housing Delivery

This section dealt with community participation in the provision of affordable housing. Question F1, F2 and F5 were asked in the form of open-ended while Question F3 and F4 were in close-ended format.

Question F1 and Question F2

The questionnaire survey reported that most of the workers on site have not been provided with any kind of training. The availability of manpower is mainly semi-skilled or unskilled. They are mostly immigrants from countries like Bangladesh and Indonesia who normally get lower wages. If the presence of many unskilled workers remains unresolved, Malaysia’s goal of becoming an industrialised country by 2020 may be threatened.

Question F3

Table 5.8. Response Data of Question F3

<i>Question F3: Are you interested in partnering with the local community in constructing affordable houses for themselves?</i>	Not willing	Possibly	More than willing
Percentage of respondents (%)	40	53.3	6.7

Respondents were asked to indicate their willingness to partner with local community in constructing houses for themselves. The results revealed that 53.3 percent of the respondents expressed an interest in partnering with local community in the housing provision while 6.7 percent was more than willing to get involved (see Table 5.8).

Question F4

Table 5.9. Response Data of Question F4

<i>Question F4: "By involving the local community in the planning process would help to strengthen a sense of collective community ownership and responsibility for the implementation of affordable housing strategies and programmes".</i>	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Percentage of respondents (%)	26.7	40.0	20.0	13.3	0.0

66.7 percent of the developers agreed that involvement of local community in the planning process would help to strengthen a sense of collective community ownership and responsibility for the implementation of affordable housing strategies and programmes (see Table 5.9). 13.3 percent of the respondents disagreed with this statement while the remaining 20 percent remained neutral.

Question F5

Question F5 asked about opinions on community engagement in the provision of housing. Developers suggested that education, and technical and planning skills need to be provided to local community so that acceptable solutions to provide affordable housing can be implemented. They need to be encouraged to attend council meetings. A community-based organisation can be formed as project initiators to encourage an active, innovative, and self-sustained community. The community organisation will be responsible to manage and maintain the housing area such as maintaining the common playing ground to help create a sense of homeownerships.

5.2.7 Section G: Borrowing Capacity of Low-Income Group

This section used the ranking scale to identify the most serious problem faced by private developers when dealing with low-cost buyers. It also asked about the idea of letting the low-cost houses to those who do not have the financial capability to purchase the unit.

Question G1

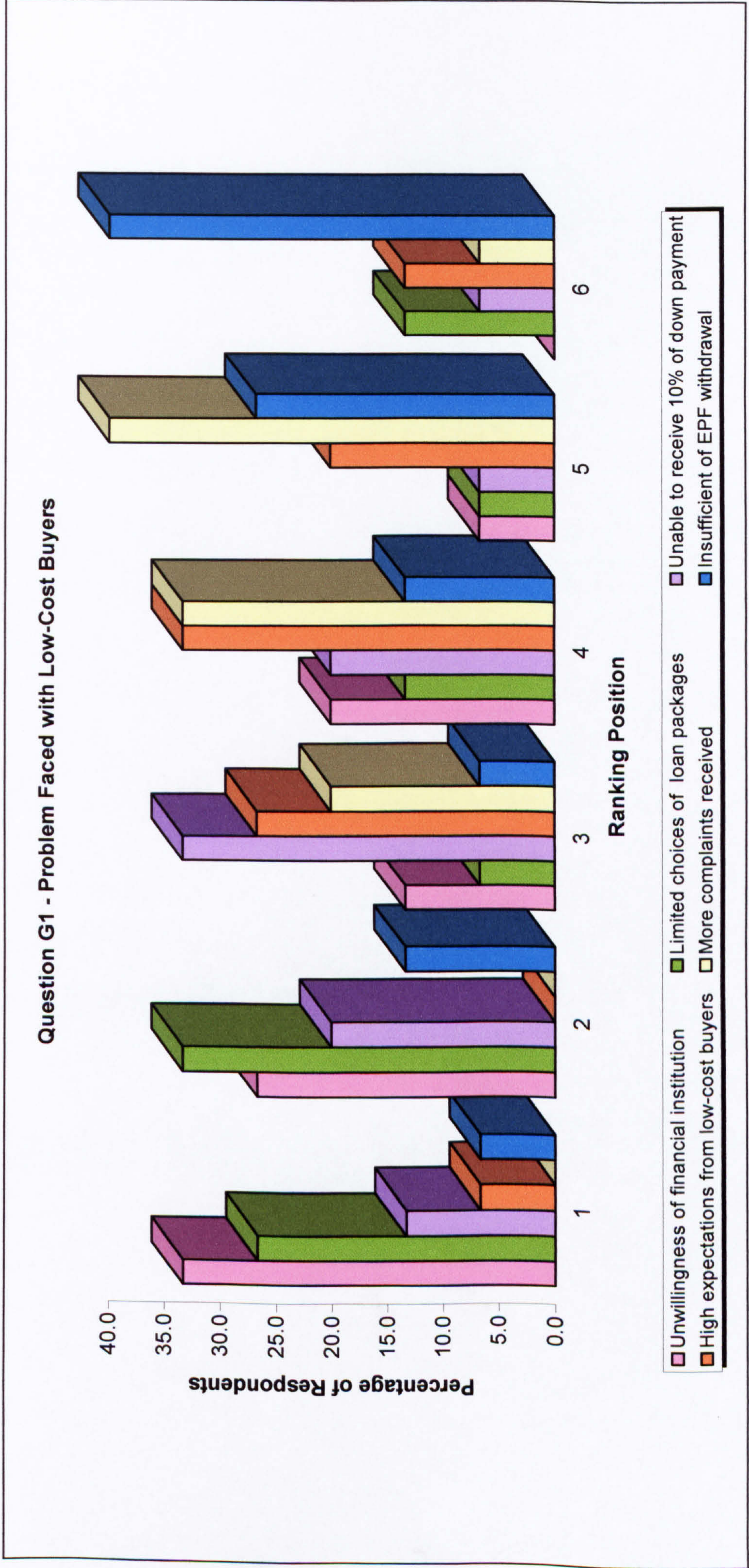
Table 5.10. Mean Value and Ranking Position of Problems faced when Dealing with Low-Cost Buyers

Main Problems/Issues faced when dealing with low-cost buyers	Mean	Ranking Position
Unwillingness of financial institution to provide housing loan	2.4	1
Limited choices of flexible loan packages	2.8	2
Unable to receive 10% of down payment	3.1	3
High expectations from low-cost buyers	4.0	4
More complaints received	4.3	5
Withdrawal of EPF contribution is insufficient to purchase low-cost house	4.8	6

The six problems that might be faced by the developers when dealing with low-cost buyers were identified earlier in the literature study. The most serious problem identified by the respondents is the unwillingness of financial institutions to provide housing loan to those who have a lower income. "Limited choices of flexible loan packages" is ranked at second position. The loan packages available in the market are very limited and inflexible in terms of high interest rates, and fixed mortgage structure. The third serious problem faced by the developers is that low-cost house buyers are unable to pay the 10 percent up front as down payment upon signing the Sale and Purchase Agreement (SPA) for the house purchased.

Developers also said that more complaints were received from low-cost buyers due to their high expectations in terms of the quality and design standards of low-cost houses. These two problems were ranked at the fourth and the fifth position. The Employees Provident Fund (EPF) withdrawal scheme for the purpose of purchasing houses has promoted higher homeownerships, which not surprisingly is ranked as the least serious problem.

Figure 5.5. Response Data of Question G1



Question G2

Table 5.11. Response Data of Question G2

<i>Question G2: What do you think of the idea of letting the low-cost houses to the poor who do not have sufficient money to purchase low-cost houses?</i>	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Percentage of respondents (%)	20.0	53.3	13.3	13.3	0

More than 70 percent of the respondents agreed with the idea of letting out the low-cost units to people who do not have sufficient money to purchase their low-cost houses. As indicated in Question E4, the promotion of new relationships between the Government, the private developer and the local community in the property letting sector could be an alternative way of providing shelter to the poor in the near future.

5.2.8 Section H: Sustainability and Land Acquisition

This section dealt with issues of sustainability and land acquisition. Respondents were asked about perceptions on high-density development in low-cost housing, and the main problems encountered in this form of construction.

Question H1

Table 5.12. Response Data of Question H1

<i>Question H1: Do you normally choose high-density development in low-cost housing category to achieve economies of scale and to reduce amount of land needed?</i>	0 – 20%	21 – 40%	41 – 60%	61 – 80%	81 – 100%
Percentage of respondents (%)	0	13.3	13.3	26.7	46.7

Table 5.12 shows the results of Question H1. In order to achieve economies of scale and to reduce the amount of land used for low-cost houses, a majority of the respondents said that they usually choose high-density developments such as flats in their low-cost housing projects. Almost half the respondents replied that 81 – 100 percent of their low-cost housing projects were constructed in the form of high-density development.

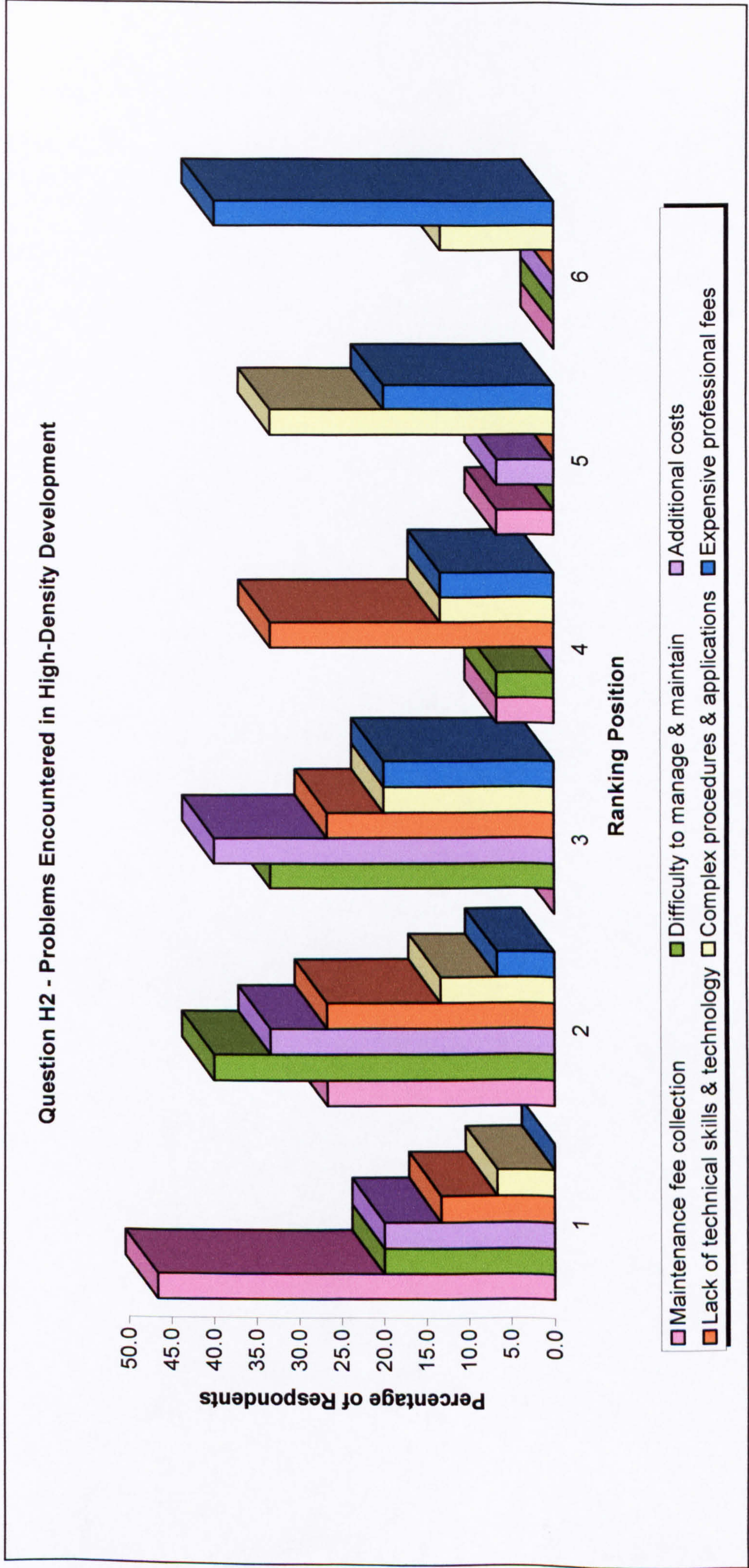
Question H2

Table 5.13. Mean Value and Ranking Position for Problems encountered in High-Density Development

Main Problems/Issues	Mean	Ranking Position
Difficult to manage and maintain the housing project	2.00	1
Difficult to collect maintenance fee from community	2.27	2
Additional cost for lifts and fire fighting equipments and system	2.40	3
Lack of technical skills and technology	2.80	4
Complex planning procedures and relevant applications	3.93	5
Expensive professional fees	4.67	6

One of the major problems with high-rise buildings is their management and maintenance. This was ranked as the most serious problem among all problems identified in the literature review of the study (See Table 5.13). “Difficulty to collect maintenance fee” was ranked as the second serious problem associated with this type of construction. Also “additional cost for lifts and fire fighting equipment and system” required for buildings above five storeys was ranked at third position, according to the survey. The fourth problem is “lack of technical skills and technology” followed by “complex planning procedures and relevant applications”. Again, “expensive professional fees” was considered as the least significant problem encountered in high-density development for low-cost dwellings. Figure 5.6 shows the response data of Question H2.

Figure 5.6. Response Data of Question H2



Question H3

Table 5.14. Response Data of Question H3

<p><i>Question H3: "A maintenance contract between the Government and the private developer is appropriate when constructing low-cost houses in the form of high-rise building. This is to ensure that buildings and common facilities as well as other amenities are well maintained, clean and safe".</i></p>	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
	20.0	73.3	6.7	0	0
Percentage of respondents (%)					

More than 90 percent of the developers participated in the survey agreed with the statement stated Question H3 (see Table 5.12). Similar comment was also made in Question F5 in which community organisation will be responsible for management and maintenance of the residential area when partner with private developer.

5.2.9 Section I: Role of Private Developer in the Provision of Low-Cost Housing

This section has the purpose to gather opinions of private developers on their role and responsibilities in the provision of low-cost housing. Respondents were asked to indicate their level of agreement or disagreement about the statements under Question I1. Figure 5.7 and Table 5.15 show the response data of Question I1.

Figure 5.7. Response Data of Question I1

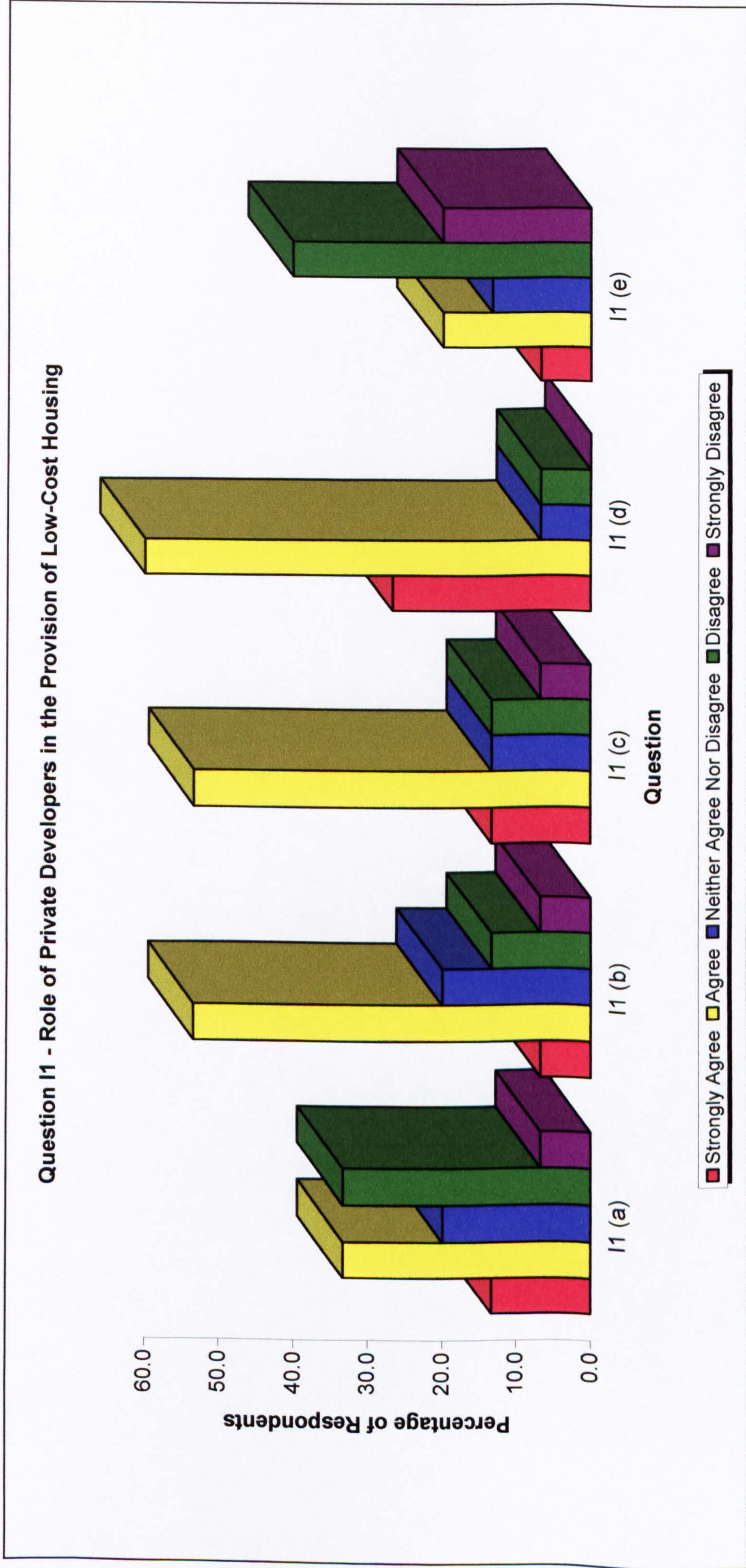


Table 5.15. Response Data of Question I1

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
<i>Question I1 (a):</i> Private housing developers have a major responsibility to build low-cost houses.	13.3	33.3	20.0	33.3	6.7
<i>Question I1 (b):</i> Government is solely responsible for the provision of housing for the poor.	6.7	53.3	20.0	13.3	6.7
<i>Question I1 (c):</i> Provision of low-cost housing should be mandatory for all housing projects above certain development size.	13.3	53.3	13.3	13.3	6.7
<i>Question I1 (d):</i> Voluntary to construct low-cost houses if it is profitable.	26.7	60.0	6.7	6.7	0.0
<i>Question I1 (e):</i> Provision of low-cost housing should be left to market forces without government interference.	6.7	20.0	13.3	40.0	20.0

This section has the purpose to gather opinions of private developers on their role and responsibilities in the provision of low-cost housing. Almost 50 percent of the respondents felt (“strongly agree” and “agree”) that they should have the major responsibility to provide low-cost housing to the poor while 40 percent disagreed on this proposition. 60 percent of the respondents agreed that provision of low-cost houses should be the sole responsibility of the Government. Almost 67 percent of the developers agreed that construction of low-cost units should be made mandatory for housing developments reaching certain size (see Question B1 (a)). 87 percent indicated their willingness to construct low-cost houses voluntarily if the project is made profitable. 60 percent of the respondents showed their disagreement regarding the proposal on building low-cost houses should be left to market forces without government interference.

5.3 Interviews Survey

5.3.1 Interview – Results, Analysis and Discussion

This section presents and discusses the results gathered from semi-structured interviews with selected private developers.

Section A: Private Developers' Perspectives on Low-Cost Housing Provision

Most respondents replied that they would prefer not to build any low-cost houses at all if no low-cost quota is required by the local or state governments. According to developers, the profits gained from low-cost units are barely sufficient, typically being 5 percent or less in low-cost housing. Some even said that no profit is gained from their low-cost housing projects. If a free hand is given, a profit of at least 15 percent would be required to consider constructing such type of houses.

Different opinions were obtained regarding whether the Government or the private sector should be responsible for the provision of housing to the low-income people. Some believed that the housing industry should fulfil its legal and social obligations in making low-cost units available for the poor. There is also a contrary point of view where some viewed low-cost housing as the province of the Government; the private sector should only be responsible for constructing other housing categories in the country. It is important to revise the National Housing Policy in order to address the need to better match demand for and development of various types of residential properties, especially with regards to low-cost category as home ownership patterns are changing over time.

Section B: Components of Development Cost for Low-Cost Housing

The total development cost of low-cost houses consists of four types of cost, namely land cost, construction cost, professional fees, and contributions to government agencies. This section is to determine which components of the development cost are critical to making low-cost housing construction viable. The factors affecting the cost components are also identified.

a) Land Cost

From the interview survey, majority of the respondents reported that land cost for their low-cost housing schemes was around 25 percent of the total development cost. About the same percentage of land-cost for non low-cost housing was reported. However, it was the actual monetary value assigned to the land for different types of housing development that concerned. There was only a small proportion that said that land cost accounts for 50 percent or more for low-cost housing project.

The availability of non-Malay reserve land is getting scarce especially in urban areas. The profit made in other categories of houses was insufficient to cross-subsidise the losses for the low-cost housing due to the higher land cost in urban areas, according to most of the developers participated in the survey. Therefore by making land available, many more residential units may be built to meet the demand and this will in turn help to keep down the housing price. In Malaysia, no Malay reserved land can be alienated to non-Malays. A period leasing of Malay reserve land to non-Malays for purposes of housing development is proposed by some of the developers. To this end, the future of Malay reserve land lies in the hands of both the owners themselves and the authorities. Landowners must learn to adapt to changing society and act accordingly. On the other hand, the authorities must set a vision for the future of the Malay reserve land, identify its potential for developments and implement appropriate strategies to achieve the vision.

In order to encourage private developers to build more low-cost houses, Government should provide attractive incentives rather than criticise them from failing to build low-cost houses as part of their social responsibility. The survey revealed that provision of free land by the Government is considered as the most attractive incentive for majority of the respondents. Additionally, there must be elements of subsidies on the land premium and the fees on the transfer of land to be developed for low cost houses.

As land is a matter for State Governments, there are many problems faced by private developers such as procedures involving in land acquisition, land conversion, and planning approvals. The author suggests that uniform law, which could be used nationwide, would enable the authorities to implement land-related programmes in a more effective way. Federal housing policies must be evaluated and integrated with state and local policies where appropriate.

b) Construction Cost

The most important cost component is the construction cost, which takes up between 70 – 80 percent of the total development cost. The construction cost alone ranges from RM20,000 to RM35,000 depending on types of houses built (terraced or flats) and location (whether it is urban or rural area). There were also cases, which reported very low or very high construction cost, but these are owing to instances where land cost is assigned at very high or very low value. In general, labour and construction materials contribute most towards the construction cost. Material cost alone takes up to 45 – 50 percent of the construction cost while labour cost constitute about 20 percent. Therefore a reduction in these two major cost components of construction cost could be crucial in the economics of low-cost housing development.

In terms of material cost, respondents identified that one of the problems faced was the escalating price of building materials causing cost overruns. (It was also identified as the second most serious problems encountered in low-cost housing schemes). Developers claimed that the escalating cost of building materials has severely reduced their profits, especially since a fixed price is being set in certain states. Even though the Malaysian Government has been playing a role in controlling the fluctuation of prices of construction material for years, a tighter policy to alleviate supply constriction in terms of controlled pricing as well as tax incentives would help to regulate the manufacturing cost and the material prices. One of the solutions to effectively break up any cartel or price fixing practices among suppliers and manufacturers is for the Government to form a venture between related organisations to ensure reliable and constant supply of construction materials in terms of high quality and standards at a reasonable price.

The survey also reported that another problem faced by the housing industry was the acute shortage of labour quantitatively and qualitatively. The shortage of skilled labour was identified as the third most serious problems faced in the constructing of low-cost houses. According to the questionnaire results, most of the construction workers are mainly semi-skilled or unskilled who are illegal immigrants with low wages. The survey reported that employers favoured Indonesians because of a shared language and culture. Additionally, they adapt more easily to the harsh equatorial heat and tough conditions on construction sites. By shortening the approval process for immigrant workers and widening the source of intake to include Vietnam, Burma and Nepal the labour shortage in the country would be solved. Another long-term alternative solution to improve the labour supply in the country would be to improve manufacturing productivity by providing proper training, utilisation of manpower and advanced technology.

c) Professional fees and contributions to government agencies

From the survey, professional fees and/or contribution to government agencies are generally taking up 20 percent of the total development cost for both low-cost and non-low cost housing. However, some amendments made to Housing

Developers (Control and Licensing) Act 1966 have caused some key concerns to many developers. For example, new requirements for payment of a RM200,000 deposit for each developer's licence; the power of the Ministry to conduct investigations, with or without a search warrant; the chances of being saddled with criminal liability.

The majority of the developers claimed that the new requirement of a RM200,000 deposit would place stress on their housing projects, especially for small-size development companies undertaking limited units. Even big companies with several projects needing individual licences would also be burdened. The author feels that the amount of deposit should be determined based on project size and developer's reputation and past experiences (i.e. no record of complaints from house buyers or abandoned projects). Overall, the new Act (now known as the Housing Development Act) overhauls the standards in the whole housing delivery process and brings developers to higher levels in terms of quality control, professionalism, business ethics and contractual compliance. Developers will be delivering the product as it should be, the number of complaints from buyers will come down and the negative perceptions about the industry will be lessened.

d) Financing Cost

From the survey, developers responded that they would obtain their financing on short-term nature from commercial banks for their housing projects. Due to long gestation period of the housing development process in Malaysia, the mismatch between financing and investment undertaken would lead to serious cash flow difficulties. If things take a turn for the worse, no returns on investment may occur.

According to the respondents, the loan approved by the bank is based on the numbers of houses sold in the housing project as well as the past experiences and capability of the developer in other housing projects. The bridging finance is the most common type of loan provided by the commercial banks (i.e. the bridging financiers) that charges a high interest rate. Individual titles of houses developed will be charged to the bridging financier, and loan will be repaid

through redemption of the individual units. Although the financing cost is charged directly to the developers, the cost is eventually borne by the purchasers. As the banking system continues to be flushed with liquidity, the banking sector is therefore in the position to provide loans at lower interest rates to private developers for their low-cost housing project.

In response to the “build then sell” concept, developers explained that financial institutions would not provide loans to finance the construction of houses that have not been sold, and therefore this concept is not viable. There are only a few developers in Malaysia who can implement the “build then sell” concept. However, even they can only afford to implement this concept in a limited quantity of 100 units per year.

The author suggests that implementation of such system should be look at in greater detail, and if it were to be implemented, laws must be amended that banks will be willing to fund developers who adopt this concept. In addition, in order for this concept to work, buyers would have to pay a larger percentage of deposit/down payment for the property.

Section C: Government Guidelines for Low-Cost Housing

This section asked about the perceptions of developers regarding the several guidelines set by the Ministry of Housing and Local Government, which the author hopes to explore these issues in depth.

a) 30 percent low-cost quota

The survey showed that the threshold or minimum development size, which must construct a certain percentage of low-cost houses, varies from state to state. The low-cost quota required is also different from one state to another taking into account of the demand, and the availability of land in major towns. For example, in Selangor, the law requires no less than 30 percent of all units in housing projects to be in the low- cost category. In Johor, it is 20 percent.

From the literature review undertaken, developers are expected to make up the shortfall in low-cost houses through some form of cross-subsidisation for other housing categories. From the survey, it was reported that the majority of the developers depend on cross-subsidy to make up the losses in low-cost category. However, in reality, it was actually the non-low cost buyer who subsidises the poor. It is therefore important to find out what is the profit that developers are willing to accept and the contribution that the developer is prepared to forgo as their social responsibility. In this study, developers defined “profitable” as a profit of at least 15 percent.

A recent proposal from the Government identified that a certain percentage of low-medium cost houses are to be imposed in the future housing projects due to increasing demand for such houses. Developers responded that if such quota was to be imposed, low-cost quota should be reviewed before establishing another quota, which would be burdensome for them.

b) Selling price of RM25,000 – RM42,000

Again, the controlled price for low-cost unit requires some form of cross-subsidies. Should the demand and supply of higher cost houses become limited when the property market is suffering because of the difficulty of obtaining finance by buyers or developers, there will be much less motivation for developers to build low-cost houses at the controlled price.

With response to these guidelines, the following recommendations are made:

- For rural areas and depressed urban centres, low-cost units could be priced at selling price between RM25,000 and RM42,000 per unit.
- For developed urban centres, where people are earning a higher level of income, a quota of low-medium cost housing priced at between RM45,000 and RM70,000 each could be imposed to avoid the creation of urban slums. However, the provision of low-cost housing should be exempted.
- For luxurious and expensive areas, the exemption for low and low-medium cost housing should remain.

The author feels that the selling price of a low-cost house should not be arbitrarily fixed and the developers must be allowed to make a reasonable profit from their low-cost housing projects. The price should be revised accordingly taking into account the different locations as well as the minimum design standard and quality of low-cost units.

c) Income purchasing control

Developers admitted that the major concern of the fixed income eligibility to purchase low-cost houses is the main difficulty in obtaining housing loans from commercial banks. This problem was identified as the most serious problem faced when dealing with low-cost buyers from the questionnaire results. The unwillingness of financial institutions to provide housing loans to low-income people has also caused problems to developers such as difficulty in selling low-cost units, which incurs additional costs.

d) Minimum design standard

The minimum design standard for low-cost housing varies from state to state. Respondents agreed with the minimum standard that related to safety for low-cost housing. For developers who chose high-density development for their low-cost housing project, they confirmed that there would be a steep escalation in unit cost for buildings above five storeys due to requirements of lifts and fire fighting equipment and other systems. The author feels that the design standards and quality set should realistically reflect the price level. Otherwise, developers would have to bear the additional costs resulting from the unrealistic design standards and higher expectations of the government authorities and low-cost buyers. In addition, alternative way of "low-rise but high-density" housing development could be developed. As stated in Martin and March (1972), such design is possible by rearranging the relationship between the land, construction form and road system.

e) Special Privileges for Bumiputera

The majority of the developers in both the questionnaire and the interview survey agreed with this guideline. However, it is the costly advertisement in newspapers and the long delay in the release of Bumiputeras units that are the main problems. According to respondents, the holding cost incurred as the consequences of the delays in local authorities is extremely high. It is eventually the non-Bumiputera buyers who suffer because the developers have no choice but to increase the price of the units concerned to pay back the profit lost. While it is acceptable that such quota be imposed to encourage Bumiputera homeownerships, at the same time when units are not taken up within a fixed time frame, the quota should be automatically released (for example six months from the official date of launching) so that developers will not be burdened financially. Some developers also suggested that the Government to buy up those Bumiputeras units from the developer; either for sales or for rent to the targeted group.

Also, the author feels that a review should be undertaken with regards to the policy of discount price for Bumiputera to ensure that privileges are given only to deserving groups. For instance, discount is only available for properties

within certain price range because buyers of high-cost houses would have earned a certain level of income and therefore special price discounts are not required.

f) Provision of Incentives

See Section D.

Section D: Provision of Incentives In Low-Cost Housing Development

From the literature and questionnaire survey, it was found that the targets set in five-year Malaysia plan for low-cost housing can be fully achieved by the private sector through the provision of greater incentives and supports from the Government. Provision of free land and lower land premium were identified as some of the most attractive incentives to encourage developers to build more low-cost units. It is expensive for developers to purchase housing land in urban areas. This is understandable because if the land cost is higher, developers would have to borrow much more from the banks to buy it, which will require additional interest charges and this will be passed on to the public in the form of higher house prices. Thus, fewer people will be able to afford the high-cost houses and eventually there will be fewer houses built in the city. It is recommended that the Government should acquire vacant lands in strategic areas in towns and cities for low-cost housing provision.

“Faster plan approvals from government agencies” was identified as the most serious problem faced by the developers in low-cost housing development. Although faster plan approval has been acknowledged as the most important factor to reduce overall development cost, yet interviews undertaken showed that developers still facing delays in obtaining approvals. The long gestation period from the day of purchasing a piece of land until obtaining all approvals from relevant authorities may take up to several years.

The bureaucracy arising from numerous legislations administered independently by the federal, state, and local government agencies indirectly affect the development cost for low-cost housing. The majority of the respondents participating in the interview claimed that application of approvals is very time consuming and delays in obtaining all approvals have incurred additional costs to them.

Corruption was also acknowledged during the interviews undertaken due to lack of enforcement in the housing market in Malaysia. Corruption in the property industry maybe more rampant than in other industries due to numerous levels of applications and approvals required in order to undertake the housing development. At every stage, it involves different Government authorities to approve applications before one is allowed to move on to the next stage.

From the interviews undertaken, private developers also mentioned that delays often caused by two-tier checking required by the local authority, which lead to delays in issuance of the certificate of fitness for occupation (CFO). Although developers have their own professional consultants to carry out the inspections at site, the local authority insists on another physical inspection by their own personnel (i.e. seven technical departments) of the housing project to ensure that all prerequisites have been conformed before the issuance of the CFOs. Developers believed that such inspections would only take a few days instead of the two weeks that the local authority required. In order to expedite the housing delivery process to purchasers, it is recommended that a one-tier checking system be adopted with private professionals (third party) on behalf of local authority. Any potential for abuse can be checked and deterred with the introduction of a stiffer penalty.

Thorough review needs to be taken to reduce the time scale in the processing and approving of applications for housing projects in order to lower development costs. It is proposed that Government should reduce unnecessary steps involved in processing and approving project applications. In order to encourage developers to build more low-cost houses, the Government authorities both at state and local levels should reduce on the bureaucracy attached to the application and the approval process as delays contribute to additional costs to developers. A one-stop agency should be set up throughout the country to achieve uniformity in technical and planning standards and most importantly to speed up the whole development process.

Section E: Distribution of Low-Cost Housing to Targeted Group

The issue of allocating low-cost houses to target group is central in the housing delivery system. According to the literature review, there has been a lack of transparency in the allocation system as in low-cost units are being allocated and eventually bought or inhabited by ineligible buyers who have not qualified by the income criteria.

It is therefore critical to strengthen the selection system and procedures to ensure proper distribution of low-cost units to the target groups. A national computerised system should be set up to improve the transparency and accountability of the allocation of low-cost units in both private and public developments. It is important that the system should be kept up to date to identify eligible buyers and at the same time to weed out those potential buyers who have already purchased houses. As the list of buyers eligible to purchase low-cost units is prepared internally by the Government, it is proposed that low-cost buyers should be selected through “drawing” method, which is witnessed by the public. A pre-registration of eligible buyers is suggested in order to allow the Government to monitor the sale of low-cost houses to check abuse. There must be strict control on the distribution system and the resale price of the low-cost units. The authors also suggest that any vacant low-cost units should be sold back to the state government by the original owners to ensure that units are then reallocated to other eligible buyers approved by the state government. The state government should also adjust the resale price accordingly. Last but not the least, there must be regulations that requires low-cost house buyers should occupy the units themselves.

Section F: Partnership Between The Government and Private Developers

From the survey, when asked about what “partnering” meant, the answers provided by respondents may be summarised as “a contractual arrangement between public and private partners of working together as a team to achieve common objectives and shared benefits”. Of the survey respondents, the vast majority of the private developers have been involving in some kind of partnering arrangements with their suppliers and contractors. This has created continuity in relationship between partners to secure a stable income stream and also improved their own business planning. However, they have never been in a partnering arrangement with the Malaysian Government.

The majority of the developers are concerned about the complex procedures that may involved when partnering with the Government. However, as long as the project is made profitable, they are willing to partner with the Government in low-cost housing provision. Guarantee/support such as a simplified application process; ready pool of low-cost buyers; financial subsidy such as loans were suggested by developers participating in the survey. Guarantees must be provided for political and currency risk.

Strict development control will not only slow down the supply of affordable housing but also reduce development potential and raises anxiety in private investors. An equitable and clear legal and regulatory system for this type of investment should be developed to minimise disputes and conflicts.

On a proposal to set up a central fund to construct low-cost houses independently, the majority of the respondents agreed with this proposal. This should be made mandatory for private developers who are not required to construct low-cost houses in order to meet the planned target and to reduce the amount of cross-subsidy needed.

Section G: Community Participation in Affordable Housing Provision

From the survey, respondents were willing to partner with any organisation/person (including local community) involved in the housing chain as long as a stable and attractive income stream can be generated. Even though Bangladesh's Grameen Methodology was introduced in Malaysia in 1986, many of the respondents are still unaware of its establishment. Consultation with the local community should be held to enable them to be better informed and to play a participatory role in housing provision. Proposal such as advertisements in the newspapers to inform local residents of proposed changes in housing density; land use etc should be practiced.

Section H: Sources of Finance

Access to financing is another issue for house buyers when attempt to own his/her own home. There are three sources of finance when purchasing a house: (a) obtaining loan from commercial banks or finance companies or the Ministry of Treasury for government servants; (b) private savings; and (c) contributions in the Employees Provident Fund (EPF).

The Housing Loan Division under the Ministry of Treasury is the biggest financier providing housing loans to public sector employees at a subsidised rate, which is normally lower than commercial banks. It is a 100 percent housing loan. Table 5.16 shows the housing loan eligibility according to the monthly income of the applicant.

Table 5.16. Government Housing Loan With Accordance to Monthly Income

Category	Monthly Income (RM)	Eligible Amount
A	3500 and above	300,000
B	3000 to 3499	250,000
C	2500 to 2999	220,000
D	2000 to 2499	200,000
E	1500 to 1999	160,000
F	1200 to 1499	130,000
G	1000 to 1199	100,000
H	800 to 999	80,000
I	600 to 799	60,000
J	599 and below	40,000

Some of the respondents reported that there have been bureaucratic delays in loan processing and approvals. These have caused developers to prefer selling houses to non-government employees. This is particularly serious in states like Kelantan and Terengannu where potential buyers are mainly from the Government sector. Respondents also complained that they delay in loan disbursements has resulted in cash-flow problems.

For private sector employees, commercial banks and other financial institutions have different packages of housing loan to assist them in their purchase. The

interest rates will be based on the Base Lending Rate (BLR) plus a spread, which can end up an unpredictable figure in monthly loan repayment. The current commercial bank's BLR is at 6.4 percent per annum, while finance company's BLR is at 7.45 percent per annual. Besides, standard banking practice dictates that the monthly repayment of a housing loan should not be more than one-third of the borrower's income. The amount of loans approved depends on the applicant's current employment, personal/ household income, age, project location as well as the price of the property that he/she intended to purchase.

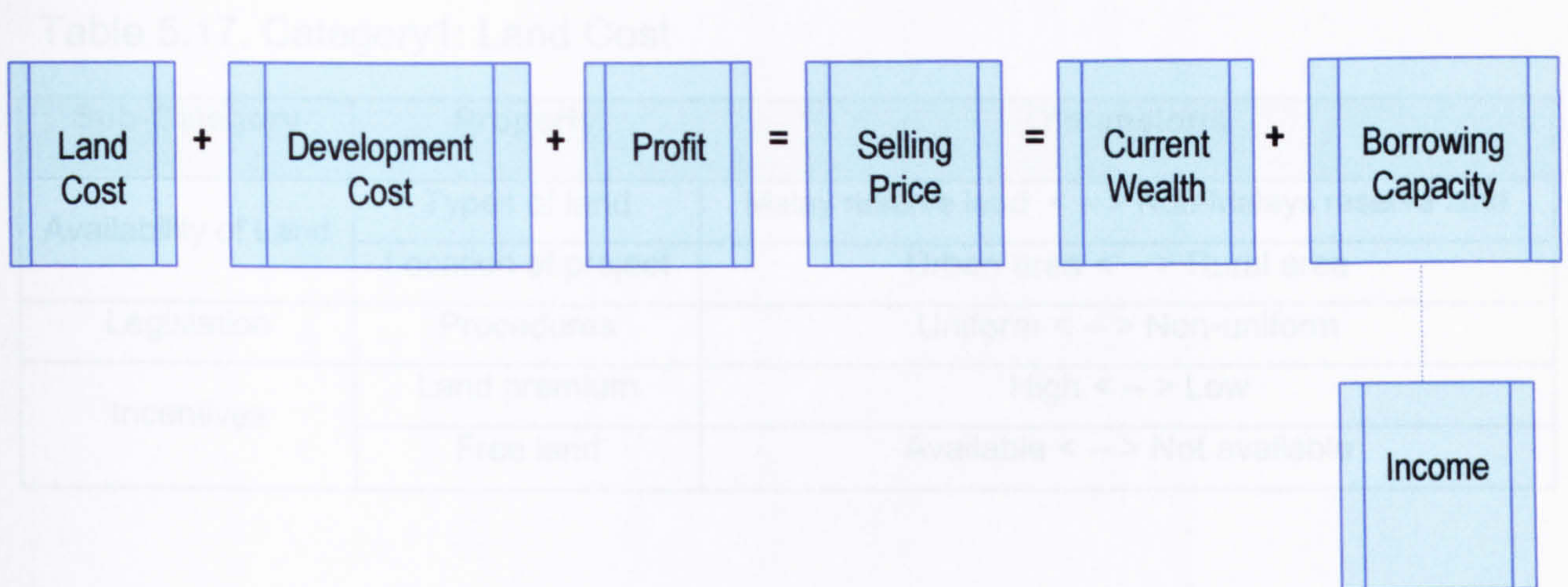
As discussed earlier, many low-income earners are facing the difficulties in obtaining housing loans due to their type of employment, family size and other expenses that differ from one household to another. Withdrawal of mainstream financial institutions has caused many low-income earners even more difficulty in purchasing their homes. Also, the study revealed that the ultimate sum of payment made by the purchaser for a housing loan could be as high as two hundred percent of the selling price of the house due to high interest rate of borrowing (Wan Srihani, 2001). Thus, it is proposed that alternative financing such as subsidised mortgages should be introduced to cater for the targeted group. Financial institutions should make housing loans available and accessible to house buyers. For example, by carefully designing the structure of the mortgage rather than subsidising interest rates when house price is high can improve affordability to house buyers.

The majority of the respondents agreed that the new EPF schemes have assisted in promoting a higher homeownership in the country. However if employees were allowed to make a bigger withdrawal or borrow against future contributions for house purchase, this will promote even higher homeownership.

5.3.2 Presentation of Sub-Categories, Properties and Dimensions

dimensions as seen in the following tables.

Figure 5.8. Basic Prepositional Model of Housing Market



The basic prepositional model of housing market is presented in Figure 5.8. Semi-structured interviews were undertaken with a sample of private developers identified from the questionnaire survey. The interviews were conducted in Chinese and Bahasa Malaysia and main points were noted and analysed using a grounded theory style of analysis.

From the interview findings, the main theme is determined and expressed as “Selling Price of Affordable Housing”, with five categories named “Land Cost”, “Development Cost”, “Profit”, “Current Wealth” and “Borrowing Capacity”. Sub-categories of each category emerged through the process of data collection and analysis from the interviews. It is then able to put them into related category. Findings from interviews were checked with the participants in order to develop the models of public private partnership in affordable housing provision.

Each of these categories that affect the selling price of affordable housing is presented in Figure 5.9 along with its sub-categories. Each sub-category has differing properties that are described through their attendant dimensions. For example, “Land Cost” of a housing project would affect the “Selling Price of Affordable Housing”. One of the sub-categories of “Land Cost” is “Availability of

land”, which has properties and each of which can be expressed in terms of dimensions as seen in the following tables.

Table 5.17. Category1: Land Cost

Sub-Category	Property	Dimensions
Availability of Land	Types of land	Malay reserve land < -- > Non-Malays reserve land
	Location of project	Urban area < -- > Rural area
Legislation	Procedures	Uniform < -- > Non-uniform
Incentives	Land premium	High < -- > Low
	Free land	Available < -- > Not available

Figure 5.9. Model of Existing Low-Cost Housing Market in Malaysia

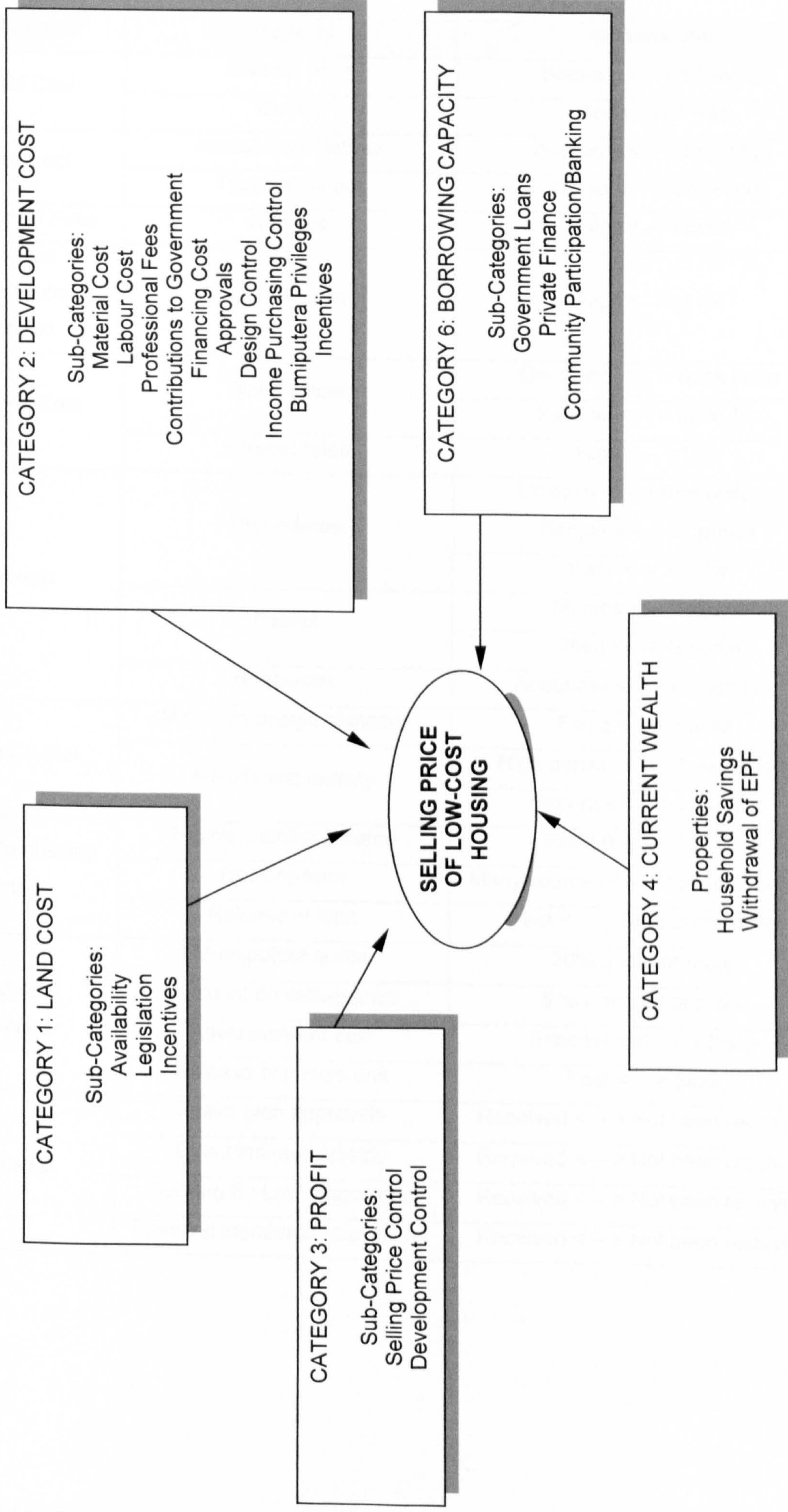


Table 5.18. Category 2: Development Cost

Sub-Category	Property	Dimensions
Material Cost	Material price	Stable < -- > Escalating
	Quality	Good < -- > Bad
Labour Cost	Availability of labour	Available < -- > Shortage
	Types of labour	Skilled < -- > Unskilled
Professional Fees	Charges	High < -- > Low
Contribution to Government Agencies	Contribution	High < -- > Low
Financing Cost	Types of loan	Own fund < -- > Bank Loan
		Flexible < -- > Inflexible
	Interest rates	High < -- > Low
Approvals	Procedures	Uniform < -- > Non-uniform
		Simple < -- > Complex
		Fast < -- > Slow
	Delays	Months < -- > Years
		Often < -- > Seldom
Resources	Adequate < -- > Inadequate	
Design Control	Minimum design standard	Fixed < -- > Varies
	Residential density	High density < -- > Low density
		High-rise < -- > Low-rise
Income Purchasing Control	Eligible monthly income	RM500 < -- > RM750
	Housing loan	Many sources < -- > Limited sources
	Release of loan	Fast < -- > Time-consuming
Bumiputera Privileges	Bumiputera quota	30% quota or more
	Discount on selling price	5 % discount or more
	Advertisement cost	Expensive < -- > Cheap
	Release of unsold unit	Fast < -- > Slow
Incentives	Faster plan approvals	Received < -- > Not been received
	Direct/indirect subsidy	Received < -- > Not been received
	Building By-Law relaxations	Received < -- > Not been received
	Planning standards relaxations	Received < -- > Not been received

Table 5.19. Category 3: Profit

Sub-Category	Property	Dimensions
Selling Price Control	Selling Price	RM25,000 < -- > RM42,000
	Location of project	Urban area < -- > Rural area
	Cross-subsidisation	High < -- > Low
Development Control	Low-cost quota	Fixed < -- > Varies
	Development size	Fixed < -- > Varies
	Demand of low-cost units	High < -- > Low
	Cross-subsidisation	High < -- > Low

Table 5.20. Category 4: Current Wealth

Property	Dimensions
Household Savings	High < -- > Low
	Large family size < -- > Small family size
Withdrawal of EPF	Sufficient < -- > Insufficient
	Flexible < -- > Inflexible

Table 5.21. Category 5: Borrowing Capacity

Sub-Category	Property	Dimensions
Government Loans	Eligibility	Loan of RM40,000 < -- > RM300,000 according to monthly income
		Working period 2 years < -- > more
	Interest rates	High < -- > Low
Private Finance	Willingness of bank	Willing < -- > Unwilling
	Types of Loan	Many choices < -- > Limited choices
		Flexible < -- > Inflexible
	Monthly repayment	Not more than 1/3 of monthly income
Interest rates	High < -- > Low	
Community Participation/Banking	Availability	Existent < -- > Non-existent
		Well-established < -- > Not well-established
	Education and Skills Developments	Well-developed < -- > Not developed
	Subsidisations	Minimal < -- > Not provided

5.4 Summary and Conclusions

Overall, low cost housing is still considered as a money-losing proposition for many developers participated in the study. It is obvious that a higher profit margin is gained for non low-cost housing projects when compared to low-cost components. It is important to revise the government guidelines for low-cost housing in order to address the need to better matches the demand for and development of low-cost category. Developers must be allowed to make a reasonable profit from their low-cost housing projects. From this study, a profit of 15 percent is considered acceptable.

From the survey, the major problems encountered in constructing low-cost houses are delays in obtaining necessary planning approvals, escalating price of construction materials, and shortage of skilled construction labour. Less important problems are difficulties in obtaining financing loans (both developers and house buyers) and low-cost units are more difficult to sell. These have resulted in undersupply of affordable housing in the country. Developers have to bear the burden of subsidising the costs of low-cost housing. This is still viable when demand for higher-end housing categories is high. However, should the property market slow down, cross-subsidisation will be badly affected and thus fewer affordable houses will be built.

The majority of the respondents claimed that they did not received many of the incentives promised by the Government. Provision of free land and faster plans approvals from the Government were identified as some of the most attractive incentives in low-cost housing provision. The incentives or guarantees provided by the Government must be attractive and sufficient enough to provide evidence to the private sectors that they will get a better return from public-private partnership arrangement than in other investment opportunities.

More than half of the respondents expressed an interest in partnering with the local community in affordable housing provision. It is important that support be given to the low-income population to encourage access to housing through forming self-help groups such as co-operatives. Networking should also be

encouraged among local community, non-government organisations (NGOs), financial institutions and the Government. A comprehensive framework on empowerment, active involvement and partnerships need to be carefully set up if the engagement of community in the promotion of community-based housing delivery is to be implemented in Malaysia.

It is important to formulate guidelines in order to establish a sound, healthy, viable and efficient housing finance system to cater to all segments of the population. Banking sector should be encouraged to provide loans, which are affordable and accessible to low-income groups. It is also essential to determine the possibility of establishing transparent housing subsidy mechanisms to benefit low-income households.

6.0 MODELS OF PUBLIC PRIVATE PARTNERSHIP FOR AFFORDABLE HOUSING

6.1 Introduction

The literature review and the subsequent surveys undertaken have revealed that the failure of the provision of low-cost housing was mainly due to the following factors:

- Low-profit margin, which did not meet the level of profit, desired by private developers;
- Delays in obtaining planning approvals from government authorities;
- Insufficient incentives/guarantees, either directly or indirectly, provided by the Government for low-cost housing development;
- Unwillingness of financial institutions to provide financing facilities/housing loan to either the developers and low-income buyers;
- Expensive urban lands;
- Escalation of material price;
- Shortage of semi-skilled or skilled construction workers;
- Difficulty in selling low-cost units;
- Unrealistic government guidelines for the low-cost housing development.

As seen from the basic propositional model of the housing market, a reduction in development cost and land cost will subsequently reduce the selling price of a house. This will allow the raising of the profit margin and produce a more attractive profit to the developers. In addition to that, if the borrowing capacity of the low-cost buyers is increased, and coupled with sufficient savings, a balance can be achieved to create a more acceptable selling price for both parties. However, this scheme can only succeed with the support of the Government and banking sector by providing incentive and guarantees to developers and low-income people. This therefore creates a viable working partnership in an effort to make affordable housing schemes a success.

This study also revealed that there are insufficient resources both in terms of finance and expertise in the Government's departments. However, the private sector has access to staff with the most experience and highest technical skills. It is here where public-private partnerships will be most beneficial and effective when the Government requires specialised skills. Unlike traditional forms of contracts, partnership will create a greater turnover with a predictable flow of work and profit for the private sector. For the Government with limited resources, partnership will raise the quality of workmanship thus producing houses of higher standards. This will therefore reduce maintenance costs, and increase the possibility of producing more affordable homes for the targeted group.

In this chapter, three models of public private partnership developed from the study for affordable housing scheme in Malaysia will be presented. This is followed by a discussion of the evaluation of the models and the most appropriate model for affordable housing is presented with relevant arguments supporting the decision.

6.2 Development of Proposed Models

All proposed models involve different forms of partnering, but with the common objective where public private partnerships are not primarily about raising funds *per se* but are about obtaining value for money through a shared risk venture in a project. It is important to emphasise that none of the proposed models will suit all projects or all organisations.

The models were formulated based on the findings from extensive literature review and interviews undertaken in Phase II of the research as well as the author's own analysis of the current housing situation in Malaysia. All the models take into account issues of development cost, land cost, borrowing capacity and current wealth of buyers that were identified as the major factors that influence the profit margin of developers and therefore the selling price of the house (see Figure 6.4).

Model 1 was developed based on the concept of BOOT concession contract, which involve long-term relationship between both parties. Model 2 and 3 are capital-based partnership approach, which involve the use of private finance as a source of capital investments during the project implementation. These two models are designed with different characteristics with regards to the buyers' borrowing capacity, income eligibility, types of housing category, and incentives/guarantees for each model.

The models were formulated with the aim to achieve a win-win-win situation. This means the private developer will be able to make a reasonable profit from the housing project while the Government can achieve its objective in providing "adequate and affordable" shelter to the population. This in turn provides the lower income people with easier access to homeownership. These three models were formulated with the following assumptions:

- Provision of free or subsidised land from the Government
- Government undertakes all planning applications for the housing projects
- Other incentives include relaxation in infrastructure requirements, Uniform Building By-Law and planning standards will be considered if necessary.
- The Government will take up any unsold bumiputera units after a maximum period of 6 months
- Commercial banks are willing to provide housing loans at reasonable interest rates to low-income buyers

6.2.1 Model 1

Model 1 is a typical BOOT approach where the private developers build, own and operate the whole housing project at its own risks, and transfer the housing estate back to the Government at the end of the concession period. The developer generates returns from collecting rental income throughout the concession period, while the Government allocates the land for the housing project development and is responsible for all planning approvals. The provision of free land from the Government will have a great impact on the scheme, as

the reduction in land cost will increase the supply of housing provision. This helps to expedite the whole process of housing development and hence reduce a significant amount of costs for the developer. The private housing developer will be responsible for the construction and management of the housing project during the concession period of x years, depending on the size of the project. The developer may sub-contract the work to his contractors.

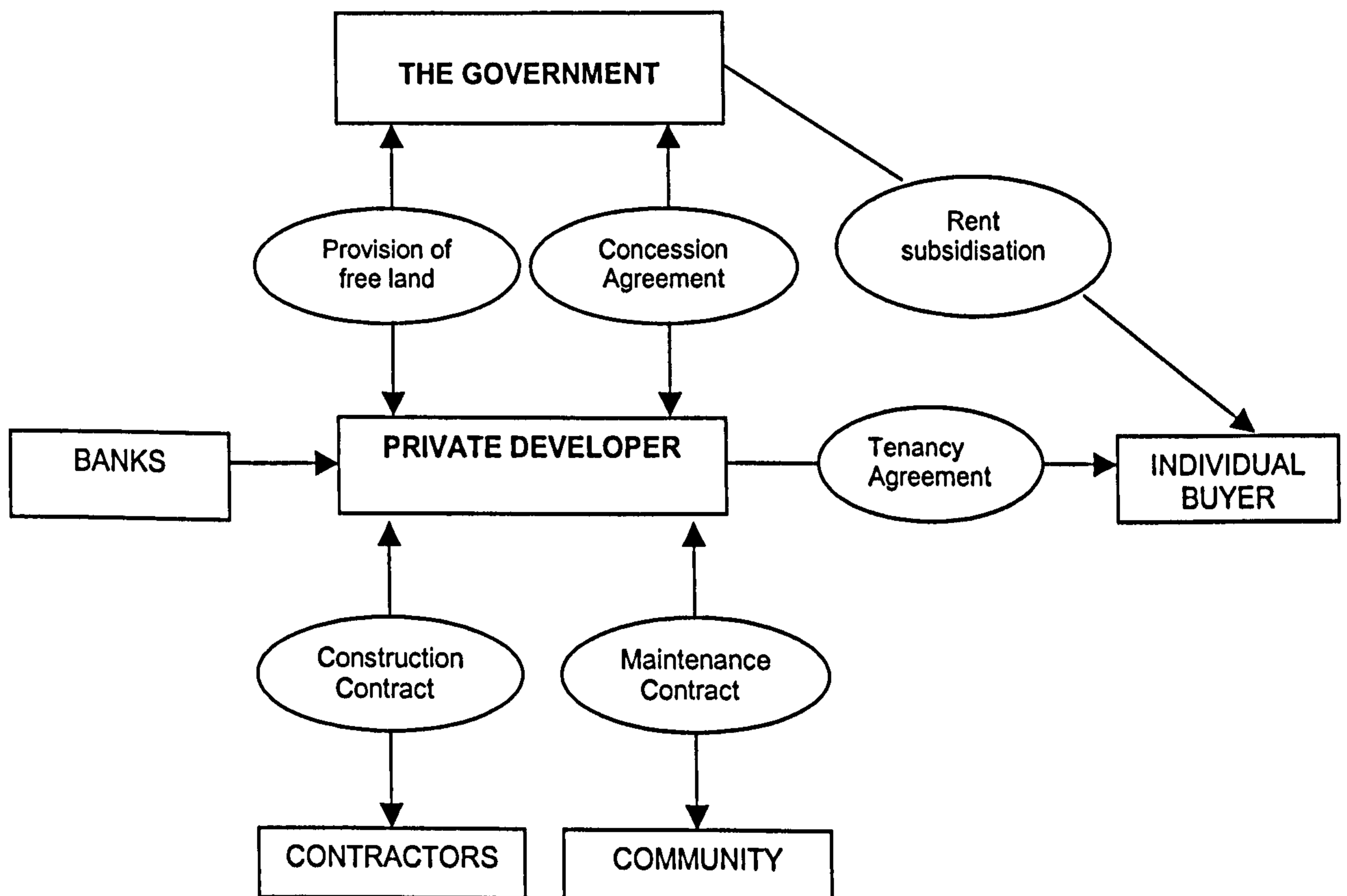
Low and low-medium cost houses will be built on the allocated land in the same housing project to meet the increasing demand on low-medium cost housing for lower-wage earners. This also help creating a mixed community, i.e. the community will involve people with different levels of income and different occupation backgrounds. The housing delivered can be in any form such as terraced houses or flats. Design requirements will be set realistically for quality houses while at the same time allowing developer to gain his desired profit. The allocation of the houses will mainly depend on the level of income of the applicants for the houses. The appropriate state agencies allocate houses by assessing the eligibility of the applicants based on specific criterion. The successful applicants must then occupy the house they applied for. A list of qualified tenants will be provided to the developer.

Throughout the concession period, the private developer will collect the rent as a whole from the community organisation, which is formed voluntarily by the community itself. The Government will subsidise 20 percent of the rent for the community throughout the concession period. This subsidisation on rent will increase the financial capability of the lower income people, and therefore increase the demand of housing. A maintenance contract is drawn up between the developer and the community organisation. This contract shall stipulate that a lump sum will be paid to the community organisation that will be responsible for the management and maintenance of the housing area. Their duties will involve collecting rents from individual households, and maintaining the common playing ground to help create a sense of ownership.

The private developer will then transfer the whole project back to the Government at the end of the concession period. By this time, the private

developer would have gained the targeted profit through collecting rents during the term of the concession while the Government achieves its objective of providing affordable housing to its population. Tenants can then buy the houses from the Government thereafter. Should the tenants wish to upgrade their house (i.e. to buy a better house), they must (a) sell the house back to Government in order to allow the Government to monitor the resale prices and reallocate the houses to other targeted people; or if the tenants wish to personally handle the sale of the house, (b) the Government should set a law in which a certain percentage of tax is to be imposed on the profit made to control the selling price or prevent it from being set too high. Figure 6.1 shows the typical project structure for Model 1.

Figure 6.1. Typical Project Structure for Model 1



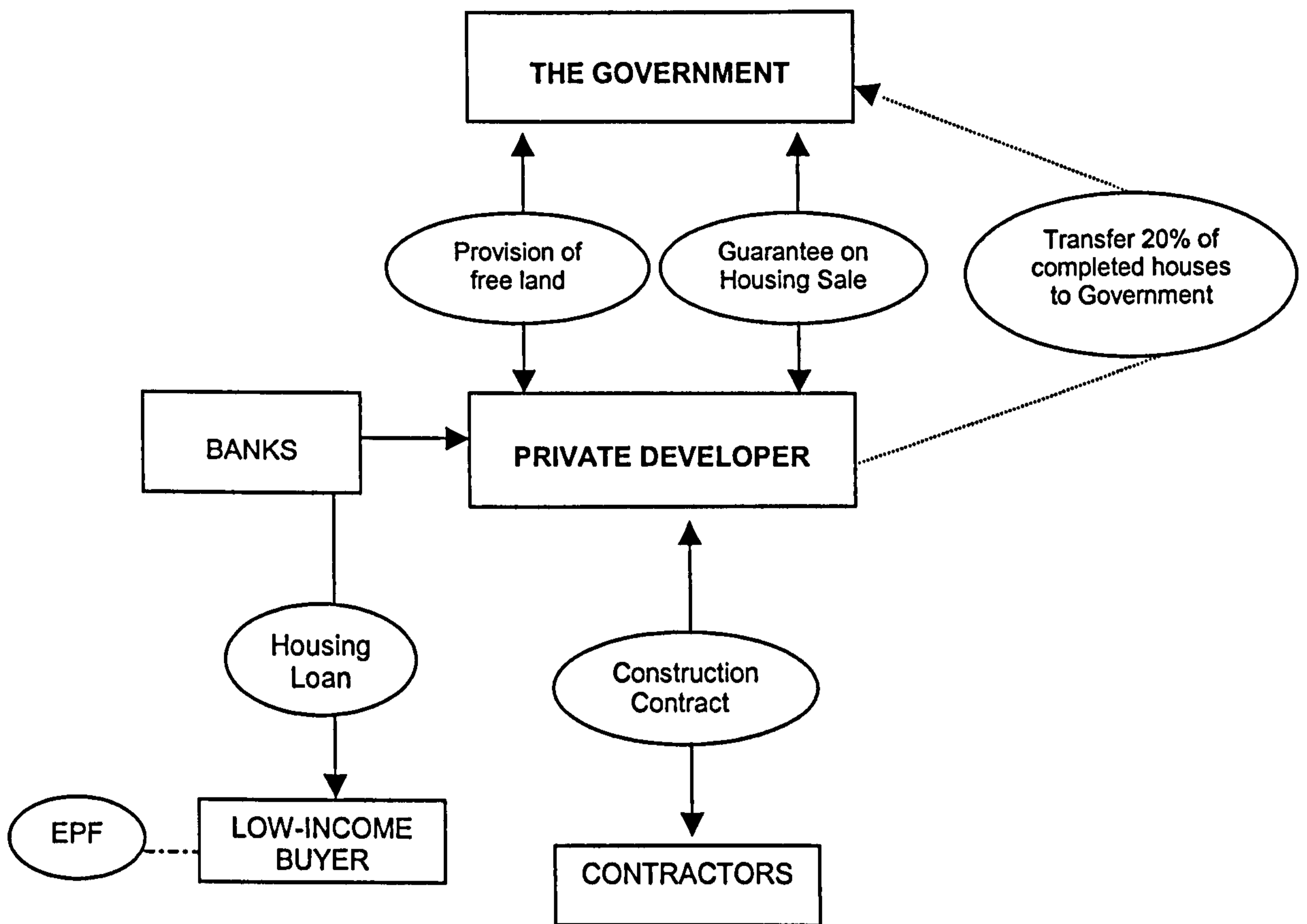
6.2.2 Model 2

Under this model, the Government plays the role of providing free land for the housing development and is responsible for the processing of relevant applications for approvals and licences from government authorities. The provision of free land will have a positive impact on the housing supply. The private developer commits to the financing and construction aspect of the project for a fixed price and absorbs the construction risk of meeting that price commitment. The housing standard requirements will be in accordance with specific design standards and criteria agreed to between the Government and the private developer. The developer may sub-contract the works to his contractors.

This model will be a development of a different category of houses of which at least 30 percent of the total housing must be low-cost units. The Government will fix the selling prices, which will be lower than the selling prices in the housing market. However, the Government will be responsible in finding buyers for the houses in this particular housing project by providing a guarantee that at least 50 percent of total units built will be sold in order to ease the developer's cash flow as a whole. Otherwise the Government would have to purchase those units from the developer either to sell or rent to the targeted group later in the process.

Upon completion, the private developer will transfer 20 percent of the total units to the Government for sale, while the remaining 80 percent will belong to the private developer. If withdrawal of Employee Provident Fund (EPF) for house purchase is insufficient, a flexible housing loan at lower interest rates will be provided to lower income buyers, in which Government acts as the guarantor. This will increase borrowing capacity of house buyers, which increase the demand of housing. Figure 6.2 shows the typical project structure for Model 2.

Figure 6.2. Typical Project Structure for Model 2



6.2.3 Model 3

Under this model, the Government plays the role in providing free land for the private developer and deals with all planning and licensing applications, as discussed in Model 1 and Model 2. The private developer will undertake the construction and management of the housing project, which would comprise of 100 percent low-cost units for sale. The Government will provide financing loan to the developer at 0 percent interest rates for the construction of the housing project. The development can be in any form of construction such as flats, terraced houses or high-density low-rise housing. The selling price of the house will depend on the design standard and the location of the project as well as the profit agreed between both parties. 20 percent of the completed houses will be transferred to the Government. The developer may sub-contract the works to his contractors.

A joint venture will be formed between the Government and related suppliers to ensure constant supply of building materials such as cement and steel at a reduced price for the project. Developer will then reimburse the Government for the materials. The constant supply of lower priced building materials will help to reduce the overall development cost, and therefore increase the supply of affordable housing provision in the country.

From the study it is reported that low-income buyers have been facing difficulties in obtaining affordable housing loan from financial institution as they are being considered as "non-bankable". The sale of houses is therefore applicable to all Malaysian whose monthly income falls into the category of RM800 and below. Non-government servants are eligible to withdraw their Employee Provident Fund (EPF) monthly to pay for the housing instalments. This will enable the low-cost house buyers to repay their monthly housing instalment without much financial difficulties (refer to Table 2.19 in Chapter 2), and hence increase greatly on the demand of housing. Alternatively, housing loan with lower interest rates will be provided by the commercial banks in which the Government acts as the guarantor. For government servants, as they are eligible for a 100% housing loan, this will not be a problem. The amount of loan

that a government servant is qualified for is determined by his/her monthly income as seen in Table 6.16 in Chapter 6. The eligible income of RM800 and below would entitle a government servant to receive a loan of between RM80,000 and RM40,000, which is sufficient to finance a low-cost house in Malaysia. Figure 6.3 shows the typical project structure for Model 3.

Figure 6.3. Typical Project Structure for Model 3

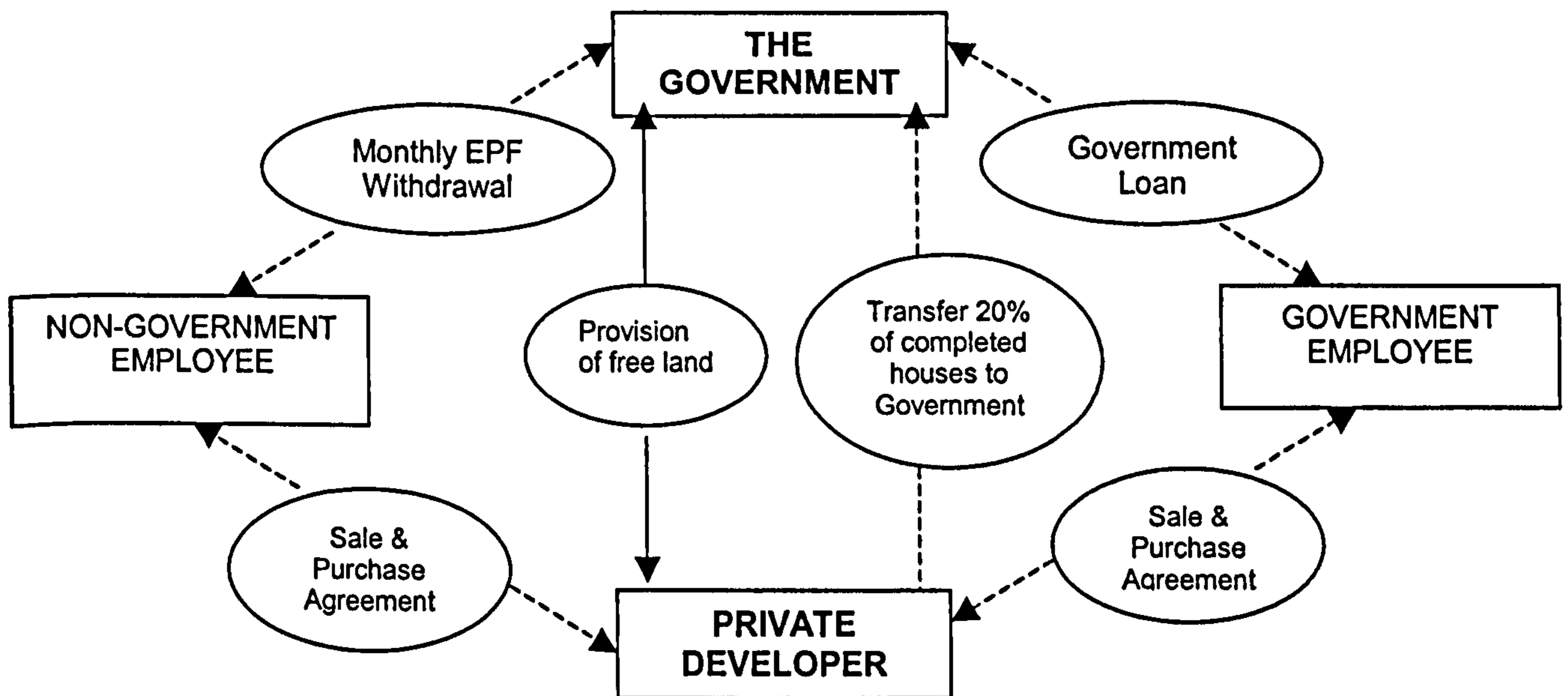
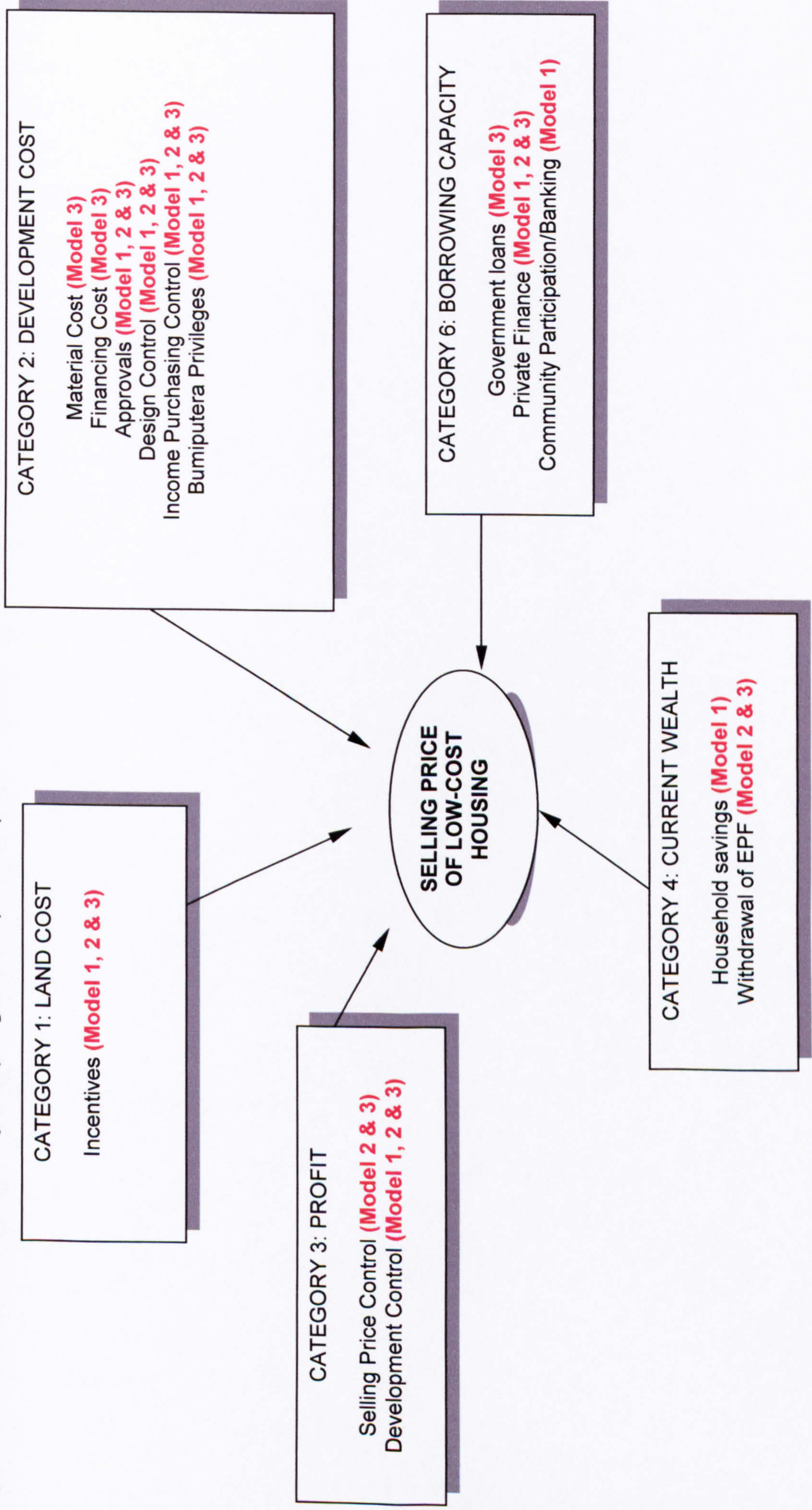


Table 6.1. Characteristics of Models Developed

Proposed Model	Characteristics of Model
Model 1	<ul style="list-style-type: none"> • Provision of free land from the Government • Government undertakes all relevant applications for the housing project • Low-cost and low-medium cost houses will be constructed • Developer finance, construct and manage the housing project during concession period of x year depending on project size • Maintenance contract between developer and community organisation • The Government will subsidise 20 percent of the rent for the community throughout the concession period • Developer collects rent as a whole from community organisation • Transfer the whole housing estate back to the Government. Tenants may buy their houses thereafter
Model 2	<ul style="list-style-type: none"> • Provision of free land from the Government • Government undertakes all relevant applications for the housing project • Developer finance and construct the housing project • Different categories of houses will be constructed at a fixed price, which is lower than market price • At least 30% should be low-cost houses • Guaranteed sales of at least 50% of the total houses from the Government • Transfer 20% of the completed houses to the Government
Model 3	<ul style="list-style-type: none"> • Provision of free land from the Government • Government undertakes all relevant applications for the housing project • Constant supply of building materials at reduced price • 0% interest of financing loan to developer • Developer finance and construct the housing project • 100% low-cost houses to be built • Selling price depends on design standards and location • Transfer 20% of the completed houses to the Government • Can only be sold to buyers with monthly income of RM800 and below • Monthly withdrawal of EPF for repayment of housing loan

Figure 6.4 shows the interventions made by adopting Model (1, 2 & 3) on the five categories developed that affect the selling price of low-cost unit in Malaysia.

Figure 6.4. Interventions Made by Adopting Model (1, 2 & 3)



6.3 Evaluation of Models

Evaluation of the three models developed was carried out by interviews with the same sample of developers during the semi-structured interviews in Phase II investigation. This was because the study was focused on the developers' point of view, and therefore judgements from developers on the proposed models are considered appropriate. In addition, the group of developers appear to have a good knowledge in the area of public private partnerships. The evaluation aimed to assess the effectiveness of all models and identify which model is most preferred by the private developers in Malaysia. A set of statements was formulated based on the main factors identified, which caused the unsatisfactory performance in low-cost housing provision in Malaysia. Developers were asked to indicate their level of agreement or disagreement about the following statements for each model:

- A) By adopting Model (1, 2 or 3), the land cost will be significantly reduced.
- B) By adopting Model (1, 2 or 3), faster plan approvals will be obtained, and therefore expedite the housing development process.
- C) By adopting Model (1, 2 or 3), the financing cost of developer will be significantly reduced.
- D) By adopting Model (1, 2 or 3), current wealth of house buyers will be significantly increased.
- E) By adopting Model (1, 2 or 3), the borrowing capacity of house buyers will be significantly improved.
- F) By adopting Model (1, 2 or 3), there will be constant supply of building materials.
- G) By adopting Model (1, 2 or 3), there will be constant supply of construction workers.
- H) Design standards and development requirements under Model (1, 2 or 3) were considered acceptable.
- I) Incentives/guarantees given in Model (1, 2 or 3) were considered sufficient and attractive to get involve in this type of partnership-based housing project.

- J) By adopting Model (1, 2 or 3), the overall development cost will be significantly reduced.
- K) By adopting Model (1, 2 or 3), the profit level will be significantly increased.

6.3.1 Preferred Model of Public-Private Partnership for Affordable Housing

Table 6.2, Table 6.3 and Table 6.4 show the response data for the evaluation of Model 1, Model 2 and Model 3 respectively.

Table 6.2. Response Data for Model 1

MODEL 1	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Not Applicable (0)
Statement A: By adopting Model 1, the land cost will be significantly reduced.	100	0	0	0	0
Statement B: By adopting Model 1, faster plan approvals will be obtained, and therefore expedite the housing development process.	100	0	0	0	0
Statement C: By adopting Model 1, the financing cost of developer will be significantly reduced.	0	0	0	0	100
Statement D: By adopting Model 1, current wealth of house buyers will be significantly increased.	50	50	0	0	0
Statement E: By adopting Model 1, the borrowing capacity of house buyers will be significantly improved.	0	0	0	0	100
Statement F: By adopting Model 1, there will be constant supply of building materials.	0	0	0	0	100
Statement G: By adopting Model 1, there will be constant supply of construction workers.	0	0	0	0	100
Statement H: Design standards and development requirements under Model 1 were considered acceptable.	10	60	30	0	0
Statement I: Incentives/guarantees given in Model 1 were considered sufficient and attractive to involve in this type of partnership-based housing project.	0	60	30	10	0
Statement J: By adopting Model 1, the overall development cost will be significantly reduced.	0	50	50	0	0
Statement K: By adopting Model 1, the profit level will be significantly increased.	20	50	20	10	0

Table 6.3. Response Data for Model 2

MODEL 2	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Not Applicable (0)
Statement A: By adopting Model 2, the land cost will be significantly reduced.	100	0	0	0	0
Statement B: By adopting Model 2, faster plan approvals will be obtained, and therefore expedite the housing development process.	100	0	0	0	0
Statement C: By adopting Model 2, the financing cost of developer will be significantly reduced.	0	0	0	0	100
Statement D: By adopting Model 2, current wealth of house buyers will be significantly increased.	20	40	40	0	0
Statement E: By adopting Model 2, the borrowing capacity of house buyers will be significantly improved.	60	40	0	0	0
Statement F: By adopting Model 2, there will be constant supply of building materials.	0	0	0	0	100
Statement G: By adopting Model 2, there will be constant supply of construction workers.	0	0	0	0	100
Statement H: Design standards and development requirements under Model 2 were considered acceptable.	40	60	0	0	0
Statement I: Incentives/guarantees given in Model 2 were considered sufficient and attractive to involve in this type of partnership-based housing project.	80	20	0	0	0
Statement J: By adopting Model 2, the overall development cost will be significantly reduced.	30	70	0	0	0
Statement K: By adopting Model 2, the profit level will be significantly increased.	50	50	0	0	0

Table 6.4. Response Data for Model 3

MODEL 3	Strongly Agree (1)	Agree (2)	Disagree (3)	Strongly Disagree (4)	Not Applicable (0)
Statement A: By adopting Model 3, the land cost will be significantly reduced.	100	0	0	0	0
Statement B: By adopting Model 3, faster plan approvals will be obtained, and therefore expedite the housing development process.	100	0	0	0	0
Statement C: By adopting Model 3, the financing cost of developer will be significantly reduced.	90	10	0	0	0
Statement D: By adopting Model 3, current wealth of house buyers will be significantly increased.	70	30	0	0	0
Statement E: By adopting Model 3, the borrowing capacity of house buyers will be significantly improved.	60	40	0	0	0
Statement F: By adopting Model 3, there will be constant supply of building materials.	80	20	0	0	0
Statement G: By adopting Model 3, there will be constant supply of construction workers.	0	0	0	0	100
Statement H: Design standards and development requirements under Model 3 were considered acceptable.	80	20	0	0	0
Statement I: Incentives/guarantees given in Model 3 were considered sufficient and attractive to involve in this type of partnership-based housing project.	90	10	0	0	0
Statement J: By adopting Model 3, the overall development cost will be significantly reduced.	50	50	0	0	0
Statement K: By adopting Model 1, the profit level will be significantly increased.	60	40	0	0	0

With response to Statement A, all the respondents strongly agreed that these three models will significantly reduce the land cost from the free land given by the Government. Similarly, all the respondents strongly agreed that faster plan approvals will be obtained, which help to save time and money when the Government carries out all planning applications for the housing projects. In Statement C, respondents were asked to indicate their level of agreement or disagreement on the reduction in financing cost when adopting each model. 100 percent of the respondents replied “not applicable” for Model 1 and Model 2, as no special financing facilities will be available. For Model 3, 90 percent of the respondents strongly agreed with the statement with remaining 10 percent agreed with it due to the provision of financing loan at 0 percent interest to developer during implementation of the housing project.

Statement D asked whether Model 1, 2 or 3 will increase the current wealth of house buyers. For Model 1, 50 percent of the respondents strongly agreed and agreed with this statement respectively mainly because of the subsidised rent that will be provided to the lower-income community throughout the concession period. Model 2 is based on the current Malaysian’s EPF withdrawal scheme where house buyers are allowed to withdraw their EPF contribution in Account II for house purchase (see Section 2.11 for more details). 20 percent strongly agreed and 40 percent agreed with this statement, with the remaining 40 percent disagreed for Model 2. All respondents agreed for Model 3 (with 70% of those strongly agreed) due to the proposal on monthly withdrawal of EPF for the repayment of housing loan, as currently implemented in Singapore.

In response to Statement E, all the respondents answered “not applicable” for Model 1 because Model 1 is a rental – liaison approach. For Model 2 and Model 3, 60 percent strongly agreed that borrowing capacity of house buyer will be significantly improved and 40 percent agreed with it based on the assumption that commercial banks are willing to provide housing loans at reasonable interest rates.

Constant supply of building materials at lower price from the Government is proposed only for Model 3. 80 percent of the respondents strongly agreed with

this statement and 20 percent agreed. Similarly, supply of construction workers is not available for all three models; therefore all respondents replied “not applicable” for Statement G (see Section 5.3 for recommendations).

Statement H asked about the design standards and development requirements for each model. Results indicated that 70 percent agreed (i.e. strongly agreed and agreed) with this statement while 30 percent disagreed with it for Model 1. In Model 2, even though the selling price is fixed, which is lower than the market price, the Government provides a guarantee of at least 50 percent sales. As a result, 40 percent strongly agreed and 60 percent agreed for Model 2. On the other hand, a greater percentage of “strongly agree” was reported for Model 3 because the selling price will base on the location and design standard for quality house. 80 percent strongly agreed and 20 percent agreed for Model 3.

Statement I aimed to find out whether the incentives/guarantees provided by the Government under each model are sufficient and attractive enough. It is reported that 60 percent agreed with this statement while 30 percent disagreed and 10 percent strongly disagreed for Model 1. The 40 percent of the developers who disagreed, felt that the incentives provided were insufficient (i.e. free land and faster plan approvals), unless adjustments on design standards are made. For Model 2, 80 percent strongly agreed and 20 percent agreed. For Model 3, 90 percent strongly agreed and 10 percent agreed with this statement based on the incentives/guarantees proposed.

The response was equally split between agree and disagree when the respondents were asked, “By adopting Model 1, the overall development cost will be significantly reduced”. It was not surprising to obtain such results due to the insufficient incentives claimed by the developers. On the other hand, all respondents agreed with adopting Models 2 and 3, with 30% and 50% of those strongly agreed respectively.

Lastly, Statement J asked about the increment of profit margin by adopting each model. For Model 1, 20 percent of the respondents strongly agreed and 50 percent agreed with the statement while other 20 percent disagreed and 10

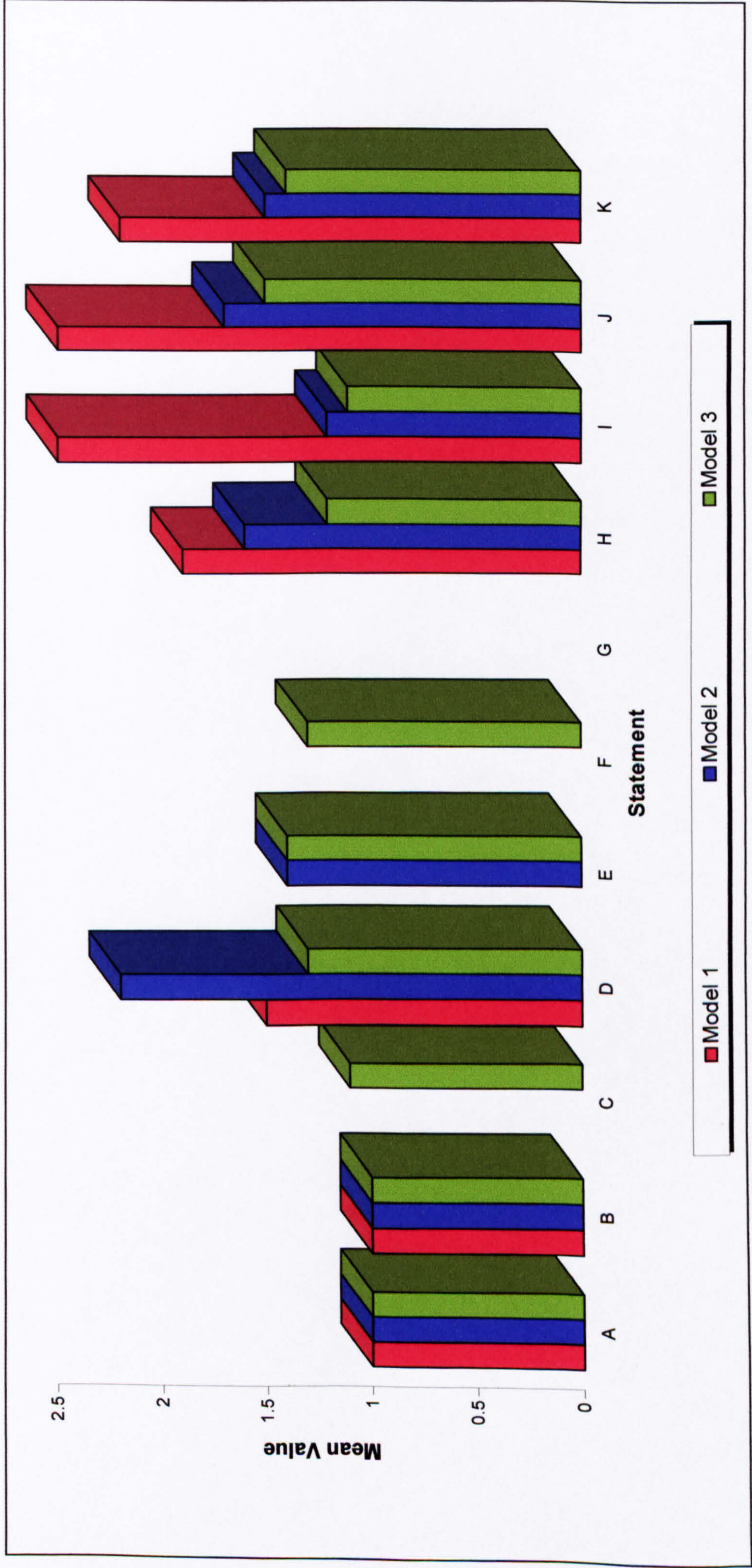
percent strongly disagreed with it. The 30 percent (i.e. disagreed and strongly disagreed) of developers responded that the return of revenue is slower for housing project under a concession contract. Unlike infrastructure projects, the host government will provide a guarantee of revenues such as minimum of traffic passing everyday for highway projects. In addition, they were also concerned about the change of attitude and culture towards this type of long-term partnership approach. Respondents in general agreed with the statement regarding Model 1 and Model 2. Responses were equally split for the adoption of model 2, with strongly agreed and agreed each obtaining 50 percent of the votes. 60 percent strongly agreed with Model 3 while the remaining 40 percent merely agreed with the statement

Average responses from ten developers were calculated for each statement. Following that, for each model (1, 2, 3), the mean of the 11 statements pertaining to each respective model was determined. As lower values to the statements refer to the most positive response, the model with the lowest mean from the 11 statements is the most effective model as a result of the average opinions/views from all developers responded. The results from the telephone interviews with developers indicate that on average Model 3 is the most preferred model. Table 6.5 shows the average mean value for the three models proposed.

Table 6.5. Average Mean of Model (1, 2, 3)

Statement	Mean Value		
	Model 1	Model 2	Model 3
A	1	1	1
B	1	1	1
C	-	-	1.1
D	1.5	2.2	1.3
E	-	1.4	1.4
F	-	-	1.3
G	-	-	-
H	1.9	1.6	1.2
I	2.5	1.2	1.1
J	2.5	1.7	1.5
K	2.2	1.5	1.4
Average Mean	1.80	1.45	1.23

Figure 6.5. Mean Value of Each Statement for Model (1, 2, 3)



6.4 Discussions and Conclusions

Model 1 is the least preferable among the three models proposed due to the concern raised upon its concept of BOOT or the so-called United Kingdom's style of Private Finance Initiative (PFI). The private developer will bear the financial risk throughout the concession period if the project has a cost overrun. According to the developers, Model 1 would be a more viable way of procurement for affordable housing if guarantee of revenues was provided or some kind of annual charges were paid back to the developer. Besides this, another developers had a concern regarding this type of long-term partnership approach, in the change of attitude and culture necessary in adopting this model.

Model 2 is on average more preferable to Model 1 based on the response from developers. Both Model 2 and Model 3 involve private finance as the source of capital investment during the project implementation. The major characteristics that make Model 3 the most preferable model applicable in the context of Malaysia are:

- The proposal on the monthly withdrawal of EPF contribution for housing loan repayment help to promote higher homeownership;
- The 100 percent of low-cost category to built on the project will reduce the hassle to survey the market;
- Provision of 0 percent interest financing loan to developer and constant supply of building materials at a reduced priced will indirectly reduce the overall development cost.

In conclusion, each model has different characteristics which all offer a certain degree of potential improvements for the low-cost housing situation in Malaysia. Public private partnership with genuine innovation plus greater incentives will provide better value for money to complete housing projects on time and within budget. A positive and practical attitude to change and innovation are of paramount importance for projects procured under public private partnership.

7.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

7.1 Summary of Research

The First Malaysia Plan was implemented in 1966, which aimed to provide housing as a component of social services. It was then that formal and structured housing programmes were first undertaken to provide low-cost housing to meet the needs of the lower-income group. Emphasis has been given to low-cost housing in the following Malaysia Plans due to the high population growth especially in urban centres. However, even with the numerous housing programmes implemented in the country, Malaysia is still facing some critical housing shortages, and the problem is getting worse everyday. The Malaysian Government and the private sector need to reassess the way the country is approaching the issue of providing adequate and affordable housing for an expanding population. Additionally, the scarcity of expensive urban land and the escalating material price as well as the shortage of labour have plagued low-cost housing delivery.

This research aimed to develop a new model of public private partnership for affordable housing in Malaysia. The research was divided into Phase I and Phase II investigations. Findings from Phase I investigations were gathered from two main areas of literature review: (a) housing market and policies in Malaysia with special emphasis on low-cost housing; (b) private finance and public private partnership for infrastructure projects or related services to determine if the process is applicable in the implementation of affordable housing. Phase I investigations provided the foundation for the subsequent surveys conducted during Phase II investigations of this research.

The findings in Phase I investigations confirmed that there is still a shortage of affordable and quality housing for the poor in Malaysia. Moreover, there has been a major shift in the current Eighth Malaysia Plan (2001 – 2005) in which the Government is committed to build more than 60 percent of the low-cost

housing for the population. Unlike previous plans, the burden was transferred to private developers. In Malaysia, while partnering is successful in the construction industry, mainly in infrastructure projects, it has not been adopted successfully by the housing sector to the same extent. The literature also revealed that community participation in housing is of paramount importance, as it helps create a greater sense of ownership.

Based on the findings obtained in the literature review, further investigations that consist of two surveys were carried out, namely questionnaire and semi-structured interviews with a sample of private developers in Malaysia. Questionnaire survey aimed to confirm and justify the findings found in Phase I investigations from a wider sample of population at the same time to identify potential developers for follow up interviews. Semi-structured interviews were used to explore the views and opinions of private developers about issues identified in detail. The survey provided richness of data, which represents the “real” experience of respondents, especially in terms of problems encountered, incentives and desired profit. The findings from interviews were revised and checked with the same sample of developers to develop the existing model of low-cost housing market in Malaysia (see Figure 5.9). The main theme is expressed as “Selling Price of Affordable Housing”, with five categories named “Land Cost”, “Development Cost”, “Profit”, “Current Wealth” and “Borrowing Capacity”. Each major category identified from the interviews will affect the selling price of affordable housing.

On the whole, main findings from the surveys undertaken can be summarised as below:

- Majority of the respondents (more than 80 percent) are more than willing to partner with the Government in the low-cost housing provision if the project was made profitable. A profit of at least 15 percent or more is considered reasonable.
- Developers are at constant risk of being subjected to delays in obtaining various approvals from relevant government departments. Such problems

could be minimised by either reducing unnecessary steps in the application procedures, or set up of one-stop agency to speed up the whole development process.

- Many incentives claimed to have been given by the Government to the developers involved in low-cost housing schemes were not being received. Provision of free land was identified as one of the incentives, which make low-cost housing involvement more attractive to private developers.
- On the demand side, inability of low-income communities to pay the 10 percent down payments in advance has makes homeownership far to reach for many low-income earners. Financial institutions are expected to play an equally important role in terms of providing housing loan, which are to be accessible and affordable to low-income group to meet their credit needs.
- More than half of the respondents expressed an interest in partnering with local community in affordable housing provision.

Using a hybrid of grounded theory approach, sub-categories of each category emerged, which has differing properties and attendant dimensions. Information found was then used to develop three possible models of public private partnership for the implementation of affordable housing scheme applicable in Malaysia. The models were formulated based on the findings from extensive literature review and interviews undertaken in Phase II investigation as well as the author's own analysis of the current housing situation in Malaysia. All the models take into account issues all major categories and subcategories that have restricted and continue to restrict the performance of private sector in low-cost housing provision (See Figure 6.4). The model developed is preliminary and is to be tested further for future research.

7.1.1 Limitations of the Research

This research is focused on the promotion of effective partnership between the Malaysian Government and private developer for the implementation of affordable housing scheme, from the developers' point of view. The study was confined to the views of developers as access to government agencies to obtain their views was denied. Another research limitation of this study is the restricted access to resources covering topics on affordable housing in Malaysia. This is due to the research being carried out mainly from United Kingdom and the limited availability of Malaysian relevant materials in the public domain.

In addition, the small sample of private developers for questionnaire survey (150 forms) may not be representative. However the 10 percent response rate is considered acceptable based on the purpose of the questionnaire of the study and the level of consensus of the data obtained. The data obtained were very supportive of certain viewpoints and areas especially in terms of problems encountered in low-cost development and desired incentives and profit. For the interview, a bigger sample size of developers would have given a better and more accurate representation of housing developers in Malaysia to prove the effectiveness of model developed from the study. A more robust evaluation of the models needs to be undertaken due to the lack of experience of private developers in terms of partnership arrangement with the Government for affordable housing provision.

7.2 Conclusions

The research concludes that effective partnership between the Government and private developers will provide tangible benefits to the provision of access to affordable housing in Malaysia. Each model has different characteristics which all offer a certain degree of potential improvements for the low-cost housing situation in Malaysia. The study revealed that on average, Model 1 is the least preferable model while Model 3 is the most preferable model from the developers' response.

The research indicated that greater Government participation in the production of affordable housing in terms of allocation of free land and planning applications has proved to be crucial in order to achieve the housing needs of the country. Incentives or guarantees provided by the Government - legislatives, administrative, financial assistance must be attractive and sufficient enough for the private sectors that a better return will be gained from public-private partnership arrangement than in other investment opportunities.

In addition to this, willingness of commercial banks to provide housing loan, which is accessible and affordable to lower income group is another prerequisite for the success. They can also play a role by providing loans to developers who are involved in low-cost housing projects. The Employee Provident Fund (EPF) can play a bigger role in the provision of housing finance by allowing its members to withdraw a larger proportion of contribution to service the mortgage payments or by providing fixed rate funds either directly or through financial institutions.

Urgent measures need to be taken to solve problems such as the escalating price of building materials and labour cost owing to a shortage in labour and inflationary trends. A tighter policy to alleviate supply constriction in terms of controlled pricing as well as tax incentives would help to regulate the manufacturing cost and the material prices. Joint ventures can be formed between the Government and related suppliers/manufacturers to ensure constant supply of building materials at reasonable prices. In order to resolve

the labour shortage, it is important that the Government reduces the unnecessary steps in the approval process for immigrant workers and at the same time widening the source of intake such as Vietnam, Burma and Nepal. Utilisation of advanced technology and provision of training and skills development would be another long-term solution to this problem.

In conclusion, a successful partnership depends largely on the nature of the project, the commitment of the partners involved, the ability to communicate and a willingness to trust. There has been a growing market around the world using private finance through innovative public private partnership for infrastructure/services-related projects. If this long-term relationship between the public sector and the private sector is dealt efficiently and effectively with the right attitude, there is no doubt that this approach will provide better value for money. The future of realising the dream of homeownership for the poor is dependent on four main players – the Government, the private developers, the financial institutions and the local community itself. They now have the option of taking up this difficult but rewarding challenge.

7.3 Recommendations for Future Research

Due to the wide scope of the area in providing adequate, quality and affordable housing to the Malaysia population, it was not possible to cover all areas in the course of this research. Therefore, the following issues are recommended for further research:

- Thorough and proper investigations of the three partnership-based models developed in this research to provide benefits in the provision of and access to affordable housing in Malaysia. In particular, how can such model be formed as part of new urban governance better able to resolve the housing problems?
- Formulation of a comprehensive housing policy to ensure sustainable housing developments. Currently, the policies related to housing development are outlined in the various five-year Malaysia Plans and Outline Perspective Plans. Therefore formulation of a uniform national housing policy would enable the authorities implement housing programmes efficiently and effectively.
- Financial aspects in the development of affordable housing. For the financial aspect, issues such as financial out-lay, sources of financing for the house buyers, and taxes, subsidies and incentives to be given to general public and the private sector should be investigated in the development of affordable housing.
- Promotion of community participation in self-help housing in Malaysia. How can community participation assist in affordable and sustainable housing? Lessons learned from Grameen Bank would be worth looking into as an alternative financing solution for the lower income group in Malaysia.
- Education and training development are areas of concern. All players involved should fully understand the concept and importance of public private partnerships. In addition, it is important to improve the quality of

construction labour by providing proper training and technical skills. The industry should target for less reliance on labour for construction activities in the future.

- Promotion of linkages between research institutions, the private sector and the Government agencies in housing. It allows communication between players involved in the construction industry that knowledge is shared to enable better provision of housing.

A number of considerations, worthy of further investigation, have also emerged in relation to provision of affordable housing in Malaysia:

- Legal issues in affordable housing in Malaysia. There are many problems encountered in the implementation of rules and regulations. For example imbalance of demand and supply of housing due to inappropriate location and design, poor quality but high house price, and administrative constraints. How can the legal mechanism assist in meeting the demand with the supply? And most importantly how can it help in the process of housing delivery in Malaysia?
- Architectural and environmental aspects such as health and safety, indoor air quality.
- Analysis of Information Technology developments in the construction industry. What are the impacts of IT technologies on efficiency and productivity for the construction industry? How can the adoption of IT developments provide “added value” to clients of the construction industry?
- To conduct Research and Developments on innovative design for affordable housing especially research related to alternative building materials and technologies, modular co-ordination, thermal comfort and so on. For example, implementation of Industrialised Building System (IBS) to

meet the increasing demands of housing and at the same time to improve quality and minimise dependence on human resources.

- Research on how to improve the knowledge in managing housing refurbishment projects in Malaysia. Many buildings built in the early 70s in Malaysia are functionally obsolete. Unfortunately, skills and knowledge in refurbishment in this country are still scarce. Planning and control, health and safety, education and training, procurement system and design process of refurbishment work are some areas to be researched.
- Social issues in affordable housing in Malaysia.

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<http://www.statistics.gov.my>

Department of Statistics, Malaysia. The main functions of the Department, as provided for in the Statistics Act 1965 (Revised - 1989), are the collection, interpretation and dissemination of statistics for the purpose of formulating policies for national development planning and administration.

<http://www.kwsp.gov.my>

The Employees Provident Fund is a National Social Security Organisation operating through a Provident Fund in Malaysia. The EPF is a scheme, which provides retirement benefits for members through management of their savings in an efficient and reliable manner. The EPF also provides a convenient framework for employers to meet their statutory and moral obligations to their employees.

<http://www.rehda.com>

Real Estate & Housing Developers' Association (REHDA) plays a pivotal role in ensuring that developers' views are heard by the relevant authorities and government agencies. REHDA's guiding principle is to provide responsible leadership to all property developers in building quality housing and real estate for the nation.

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National House Buyers Association of Malaysia (HBA) is a voluntary non-governmental, non-profit and non-political organization. It aims to revolve around sheer humanitarian principles and ethics for a balanced, fair and equitable treatment for house buyers in their dealings with housing developers.

<http://www.4ps.co.uk>.

The Public Private Partnership Programme – the 4Ps is a local government's own agency of United Kingdom. It was set up with cross party support and is financed by and accountable to local government through a Board appointed by the LGA's.

<http://www.pfi-online.com>

PFI online is dedicated to providing news, data, contracts and background information on all aspects of the UK Government's Private Finance Initiative. It is the one-stop information service for anyone with involvement in PFI.

<http://www.communitybuilders.nsw.gov.au/stories/>

Extracted from a series of stories posted on the website. These stories share ideas for action. They tell what people are doing and what's working, what communities have learned from their experience and how it made a difference. They provide inspiration and show what's possible.

<http://www.communitycapital.org/>

Extracted from US information concerning Community Development Financial Institutions or CDFIs, which are financial institutions, that have community development as their primary mission and that develop a range of strategies to address that mission.

<http://www.grameen-info.org/>

The official website for Grameen Bank.

http://www.capacity.org/index_en.html

A website dedicated to advancing the policy and practice of capacity building in international development cooperation

<http://www.unchs.org/>

UNCHS (Habitat), established in October 1978, is the lead agency within the United Nations system for the implementation of the Habitat Agenda – the global plan of action adopted by the international community at the Habitat II Conference in Istanbul, Turkey in June 1996.

<http://nrm.massey.ac.nz/changelinks/capacity.html>

The contemporary view of capacity-building goes beyond the conventional perception of training. The central concerns of environmental management - to manage change, to resolve conflict, to manage institutional pluralism, to enhance coordination, to foster communication, and to ensure that data and information are shared - require a broad and holistic view of capacity development. This definition covers both institutional and community-based capacity-building.

APPENDIX I

QUESTIONNAIRE SURVEY (PILOT STUDY)

SURVEY OF PRIVATE HOUSING DEVELOPERS (PILOT STUDY)

Conducted by:

Han Ching ONG
University of Salford, United Kingdom

Aim of Research:

To develop a housing model for the implementation of sustainable and affordable housing schemes capable of being applied throughout Asia and in particular Malaysia.

Anonymity:

The information or data collected will be analysed and be presented in aggregate format. Participants will not be identified in any part of the thesis unless special permission is requested from the individual.

Thank you very much for your participation. Your comments are very much appreciated.

A. LOW-COST/AFFORDABLE HOUSING

1. In your opinion, how do you define low-income?

2. In your opinion, how do you define low-cost housing?

3. What do you think of the current situation of low-cost housing in Malaysia?

4. What do you think of the guidelines set by The Ministry of Housing and Local Government for low-cost housing category based on the following issues?

- Development size required /Percentage of low-cost housing component required

- 30% low-cost quota

- Selling price

- Monthly household income

- Minimum design standard

- Special privileges for Bumiputeras

5. In your experience, what are the main problems encountered in constructing a low-cost housing scheme? (Please rank in order of their seriousness, i.e. 1 for the "most serious problem faced and 6 "the least seriousness")

- Delays in obtaining necessary approvals from government departments/agencies
- Escalating price of construction materials
- Difficulty in selling the low-cost units
- Less profitable when compared to other types of houses
- Difficulty in obtaining loans from commercial banks
- Expensive professional fees

If you have experienced any other problems, please state below:

B. PARTNERSHIP BETWEEN GOVERNMENT AND PRIVATE DEVELOPER

1. In your opinion, how can the Government partner with private developers to provide housing to low-income group?

2. What do you think about the incentives that have been promised or given by the Government so far?

- Faster plan approval

- State Government

- Local Government

- Direct/Indirect subsidy provided by the Government

- Lower land premium

- Infrastructure cross subsidisation

- Relaxations in By-Law
 - Reduction in bedroom size

 - Reduction in car-parking requirements

 - Reduction in width of roads and drains

 - Relaxation of central unit requirements

- Relaxations in standards
 - Reduction in requirements for community facilities

 - Reduction in open space requirements

 - Increase in residential density

3. What are the incentives or concession (not necessary the same as above) that you consider would make attractive your involvement in building low-cost housing?

4. What type of finance structure would you prefer in undertaking low-cost housing when in partnership with the Government? Please describe.

5. What type of management structure would you prefer in undertaking low-cost housing when in partnership with the Government? Please describe.

6. What do you think of the proposal in which the Government plays the role of providing free land to developers that undertake low-cost housing?

7. Would you voluntarily construct low-cost units in your development project if the construction of low-cost housing were made profitable? How do you define "profitable"?

C. COMMUNITY INVOLVEMENT

1. Are any training schemes being provided in your company? If yes, what are they? If not, why?

2. What are the skills and training available to local communities?

3. Are you interested in partnering with the local community in constructing affordable houses for themselves?

4. In your opinion, how can the community assist in the provision of housing?

5. How do you feel about getting the community itself involved in the planning process in order to strengthen a sense of collective community ownership and responsibility for the implementation of affordable housing strategies and programmes? Please give examples.

D. COMMUNITY FINANCE

1. What are the problems you normally face while dealing with low-cost buyers?

2. What do you think of the idea of letting the low-cost houses to the poor whom do not have sufficient money to purchase low-cost houses?

E. SUSTAINABILITY AND LAND ACQUISITION

1. Do you normally choose high-density development in low-cost housing category to achieve economies of scale and to reduce amount of land needed? If you have never chosen this form of construction before, would you consider it in your future development projects?

2. What are the major problems in choosing this form of construction?

3. What do you think of forming a maintenance contract with the Government for high-rise buildings in the low-cost category to ensure that buildings and common facilities as well as other amenities are well maintained, clean and safe?

4. What do you think of the current policies of constructing a central unit for waste disposal and recycling purposes for projects exceeding 30 units and more?

5. What do you think of the idea of a uniform planning standards for low-cost housing across the country?

F. ROLE OF STAKEHOLDERS IN HOUSING INDUSTRY

1. Who do you think should be responsible for the provision of low-cost housing to the low-income communities? (Please rank according to its degree of agreement)

- i.e.
- 1 for "strongly agree"
 - 2 for "agree"
 - 3 for "uncertain"
 - 4 for "disagree"
 - 5 for "strongly disagree"

Private housing developers have a major responsibility to build low-cost houses

Government is solely responsible for the provision of housing for the poor

Provision of low-cost housing should be mandatory for all housing projects above certain development size

Voluntary to construct low-cost houses if it is profitable

Provision of low-cost housing should be left to market forces without government interference.

If you have any other comments, please state below:

APPENDIX II

QUESTIONNAIRE SURVEY

SURVEY OF PRIVATE HOUSING DEVELOPERS

Name of Company:

Housing Development Size (number of units constructed):

Location of Housing Scheme (State):

Conducted by

Han Ching ONG

University of Salford, United Kingdom

Aim of Research

To develop a new housing model of public private partnership for the implementation of low-cost/affordable housing schemes in Malaysia.

Aim of Questionnaire Survey

To understand the views and perceptions of private developers involved in the housing industry with regards to the promotion of low-cost housing development in Peninsular Malaysia.

Anonymity

The information or data collected will be analysed and be presented in aggregate format. Individual forms will be kept strictly confidential. Participants will not be identified in any part of the thesis unless special permission is requested from the individual.

Thank you very much for your participation. Your comments are very much appreciated.

SECTION A: DEFINITION OF LOW-INCOME, LOW-COST HOUSING AND HOUSING SITUATION IN MALAYSIA

Question A1:

Please indicate the level of agreement or disagreement with the following statements regarding the low-cost housing in Malaysia. Circle the appropriate number based on the five-point scale below:

- 1 Strongly agree
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Strongly disagree

<i>Question A1 (a):</i> Low-income is classified as under the monthly income range of RM500 – RM750 per household.	1	2	3	4	5
<i>Question A1 (b):</i> Low-cost housing should be sold at selling price according to location and standard requirements for quality houses.	1	2	3	4	5
<i>Question A1 (c):</i> The property market is recovering from the Asian Financial Crisis that began in mid 1997.	1	2	3	4	5
<i>Question A1 (d):</i> There has been an increasing demand for low-cost and low-medium cost houses in the past 5 years.	1	2	3	4	5
<i>Question A1 (e):</i> There has been an oversupply of low-cost houses in the past 5 years.	1	2	3	4	5

SECTION B: GOVERNMENT GUIDELINES FOR LOW-COST HOUSING**Question B1:**

Please indicate the level of agreement or disagreement with the following guidelines set by The Ministry of Housing and Local Government for low-cost housing. Circle the appropriate number based on the five-point scale below:

- 1 Strongly agree
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Strongly disagree

<i>Question B1 (a):</i> Guideline 1: 30% low-cost quota is required for private housing scheme reaching a certain development size.	1	2	3	4	5
<i>Question B1 (b):</i> Guideline 2: The selling price for low-cost houses should be fixed at a price range between RM25,000 and RM42,000 per unit.	1	2	3	4	5
<i>Question B1 (c):</i> Guideline 3: Minimum design standard of low-cost housing required in your state.	1	2	3	4	5
<i>Question B1 (d):</i> Guideline 4: Low-cost units can only be sold to household with monthly income of not exceeding RM750.	1	2	3	4	5
<i>Question B1 (e):</i> Guideline 5: A minimum quota of 30% of the housing units has to be withheld by the private developers for sales to Bumiputeras at a discount of at least 5% off the selling price.	1	2	3	4	5
<i>Question B1 (f):</i> Guideline 6: Various incentives promised by the Government to encourage private developers to construct low-cost houses are sufficient.	1	2	3	4	5

SECTION C: ISSUES AND PROBLEMS ENCOUNTERED IN LOW-COST HOUSING

Question C1:

In your experience, what are the main problems encountered in constructing a low-cost housing scheme? Please rank in order of their seriousness (i.e. 1 for the "most serious problem faced and 7 "the least seriousness").

- Delays in obtaining necessary approvals from Government departments/agencies
- Escalating price of construction materials
- Shortage of construction labour
- Difficulty in selling the low-cost units
- Less profitable when compared to other types of houses
- Difficulty in obtaining financing loans from commercial banks
- Expensive professional fees or contributions to Government department/agencies

If you have experienced any other problems, please state below:

Question C2:

Please rank the following possible factors in order of their importance in reducing costs for low-cost housing development. (i.e. 1 for the "most important factor" and 12 "the least important factor")

- Faster plan approvals from Government departments/agencies
- Set up of a one-stop agency to speed up the application process
- Ready pool of buyers eligible to purchase low-cost units
- Direct financial subsidy from the Government
- Lower land premium
- Reduction of professional fees/contributions to Government department/agencies for low-cost housing scheme
- By-Laws relaxation for low-cost housing scheme
- Relaxation in design standards for low-cost units
- Concessions/price reduction in building materials
- Available of semi-skilled and skilled labour
- Capability and past experience of contractor to avoid time overrun, which incurred additional cost.
- Cross-subsidy from other housing categories

SECTION D: PROVISION OF INCENTIVES TO PRIVATE DEVELOPERS**Question D1:**

This question is aimed to find out whether the various incentives promised or given by the Government has been received by private developers involved in low-cost housing development. Please tick the appropriate box.

	Yes	No	Not Applicable
<i>Question D1 (a):</i>			
Faster plan approvals given by			
– State Government			
– Local Government			
<i>Question D1 (b):</i>			
Direct/Indirect subsidy provided by the Government			
– Lower land premium			
– Infrastructure cross subsidisation			
– Concession from financial contribution to government departments			
<i>Question D1 (c):</i>			
Relaxations in Uniform Building By-Law			
– Reduction in bedroom size			
– Reduction in car-parking requirements			
– Reduction in width of roads and drainage			
– Relaxation of waste central unit (for waster disposal and recycling purposes) requirements			
<i>Question D1 (d):</i>			
Relaxations in planning standards			
– Reduction in requirements for community facilities			
– Reduction in open space requirements			
– Increase in residential density			

SECTION E: PARTNERSHIP BETWEEN GOVERNMENT AND PRIVATE DEVELOPERS

Question E1 (a):

Would you consider constructing low-cost units under the partnership structure with the Government if the construction of low-cost housing were made profitable? Indicate your level of willingness by circling the appropriate number:

- 1 not willing
- 2 possibly
- 3 more than willing

Question E1 (b):

How do you define "profitable"? Please indicate the percentage of profit you would like to gain in your low-cost housing development by circling the appropriate number according to the five-point scale below:

- 1 less than 10% of profit
- 2 10 – 20% of profit
- 3 21 – 30% of profit
- 4 31 – 40% of profit
- 5 more than 40% of profit

Question E2:

What are the incentives or concession (not necessary the same as stated in Question D1) that you consider would make attractive your involvement in building low-cost housing?

Question E3:

What do you think of the proposal in which the Government plays the role of providing free land to developers that undertake low-cost housing?

Question E4:

In your opinion, how can the Government partner with private developers to provide housing to low-income group?

Question E5:

What type of finance and management structures would you prefer in undertaking low-cost housing when in partnership with the Government? Please describe.

SECTION F: COMMUNITY PARTICIPATION IN AFFORDABLE HOUSING DELIVERY

Question F1:

Are any training schemes being provided to your employees (including construction workers)? If yes, what are they? If not, why?

Question F2:

What are the skills and training available to local communities?

Question F3:

Are you interested in partnering with the local community in constructing affordable houses for themselves? Indicate your level of willingness by circling the appropriate number:

- 1 not willing
- 2 possibly
- 3 more than willing

Question F4:

Please indicate your level of agreement of disagreement of the following statement by circling the appropriate number below:

“By involving the local community in the planning process would help to strengthen a sense of collective community ownership and responsibility for the implementation of affordable housing strategies and programmes”.

- 1 Strongly agree
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Strongly disagree

Question F5:

In your opinion, how can the community assist in the provision of housing?

SECTION G: BORROWING CAPACITY OF LOW-INCOME GROUP

Question G1:

In your experience, what are the problems you normally face while dealing with low-cost buyers? Please rank the following statements in order of their seriousness (i.e. 1 for the "most serious problem faced and 6 "the least seriousness").

- Unable to receive 10% of down payment from the buyer when signing the Sales and Purchase Agreement

- Unwillingness of financial institution to provide housing loan to low-income buyers

- Limited choices of flexible loan packages offered by the financial institutions

- High expectations from buyers for low-cost houses

- Withdrawal of EPF contribution is insufficient to purchase low-cost house

- More complaints received compared with non-low-cost buyers

If you have experienced any other problems, please state below:

Question G2:

What do you think of the idea of letting the low-cost houses to the poor whom do not have sufficient money to purchase low-cost houses? Please indicate your level of agreement or disagreement by circling the appropriate number below:

- 1 Strongly agree
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Strongly disagree

SECTION H: SUSTAINABILITY AND LAND ACQUISITION**Question H1:**

Do you normally choose high-density development in low-cost housing category to achieve economies of scale and to reduce amount of land needed? Please indicate the percentage of total low-cost housing projects that you have chosen to construct under this form of construction by circling the appropriate number below:

1. 0 – 20% of low-cost housing projects
2. 21 – 40% of low-cost housing projects
3. 41 – 60% of low-cost housing projects
4. 61 – 80% of low-cost housing projects
5. 81 – 100% of low-cost housing projects

Question H2:

What are the major problems in choosing this form of construction? Please rank the following statements in order of their seriousness (i.e. 1 for the “most serious problem faced and 6 “the least seriousness”).

- Difficult to manage and maintain the housing project
- Difficult to collect maintenance fee from community
- Additional cost for lifts and fire fighting equipment and system for buildings above five storeys
- Lack of technical skills and technology
- Expensive professional fees
- Complex planning procedures and relevant applications

Continue Question H2,

If you have experienced any other problems, please state below:

Question H3:

Please indicate your level of agreement or disagreement of the following statement by circling the appropriate number below:

“A maintenance contract between the Government and the private developer is appropriate when constructing low-cost houses in the form of high-rise building. This is to ensure that buildings and common facilities as well as other amenities are well maintained, clean and safe”.

- 1 Strongly agree
- 2 Agree
- 3 Neither Agree nor disagree
- 4 Disagree
- 5 Strongly disagree

SECTION I: ROLE OF PRIVATE DEVELOPERS IN THE PROVISION OF LOW-COST HOUSING

Question I1:

Who do you think should be responsible for the provision of low-cost housing to the low-income communities? Indicate your level of agreement or disagreement of the following statements by circling the appropriate number based on the five-point scale below:

- 1 Strongly agree
- 2 Agree
- 3 Neither agree nor disagree
- 4 Disagree
- 5 Strongly disagree

<i>Question I1 (a):</i> Private housing developers have a major responsibility to build low-cost houses.	1	2	3	4	5
<i>Question I1 (b):</i> Government is solely responsible for the provision of housing for the poor.	1	2	3	4	5
<i>Question I1 (c):</i> Provision of low-cost housing should be mandatory for all housing projects above certain development size.	1	2	3	4	5
<i>Question I1 (d):</i> Voluntary to construct low-cost houses if it is profitable.	1	2	3	4	5
<i>Question I1 (e):</i> Provision of low-cost housing should be left to market forces without government interference.	1	2	3	4	5

If you have any other comments, please state below:

APPENDIX III

INTERVIEW SCHEDULE (PILOT STUDY)

INTERVIEW SCHEDULE (PILOT STUDY)

SECTION A: LOW-COST HOUSING DEVELOPMENT IN MALAYSIA

Question 1: In your opinion, how do you define low-cost housing?

Probe: Do you think low-cost houses should only be sold to low-income people?

Probe: How do you define low-income?

Question 2: What do you think of the current situation of low-cost housing in Malaysia?

Probe: Do you think there is a demand for low-cost housing?

Probe: What do you think of the performance of private developers in the provision of low-cost housing?

Probe: What do you think of the effectiveness of the various housing programmes implemented by the Government?

Probe: What actions/measures do you think the Government can undertake to improve the current situation?

Question 3: Do you normally build low-cost houses in your housing project?

Probe: How often do you build low-cost houses? What's the percentage in terms of the total houses built per year?

Probe: What is your profit gained for a low-cost house?

Probe: What is the percentage of profit do you think is sufficient

SECTION B: COMPONENTS OF DEVELOPMENT COST FOR LOW-COST HOUSING

Question 1: How does the following components of development cost affect your profit when constructing low-cost houses?

a) Land Cost

Probe: What is the proportion of land cost to the total development cost for low-cost house? What about for non low-cost housing?

Probe: Is land available for low-cost construction?

Probe: How does location of project affect the land cost?

Probe: What incentives would you like to receive from the Government in association with land? (Lower land premium)

b) Construction Cost (material cost and labour cost)

Probe: What kind of problems do you face when come to material price and labour force? (Price escalation; material standard, availability of materials/labour; types of houses built; inflation)

c) Professional Fees

Probe: What is the percentage of professional fees paid for low-cost house? What about for non low-cost housing?

d) Fees/Contributions to Government Departments

SECTION C: GOVERNMENT GUIDELINES FOR LOW-COST HOUSING

Question 1: What do you think of the several guidelines set by The Ministry of Housing and Local Government for low-cost housing category based on the following issues?

- Development size required /Percentage of low-cost housing component required

Probe: what is the mandatory requirement on the minimum size of development, which requires you to provide low-cost houses?

Probe: what is the percentage of low-cost unit required in your housing scheme?

- 30% low-cost quota

Probe: What effects does it have on your profit?

Probe: How do you deal with it? Is there any cross-subsidisation from other housing categories needed?

- Selling price

Probe: Do you require cross-subsidisation from other housing categories in order to cross-subsidise the losses made in low-cost housing?

- Monthly household income

Probe: what are the problems associated?

Probe: how often do you face with these problems?

Probe: What do you think of the delivery system for the distribution of low-cost units to the targeted people? What can be done to improve the system?

- Minimum design standard

Probe: What is the minimum design standard required for low-cost houses in your state?

Probe: What kind of construction do you chose? And why?

Probe: What are the problems encountered with this form of construction?

- Special privileges for Bumiputera

Probe: What are the problems with this guideline?

- Provision of Incentives

SECTION D: PROVISION OF INCENTIVES IN LOW-COST HOUSING DEVELOPMENT

Question 1: Do you think faster plan approvals can definitely help to reduce the development cost?

Probe: How long does it take to obtain all relevant approvals before commencing your housing project?

Probe: How often do you encounter such delay?

Probe: What do you think of the current planning application process? (Complicated; time-consuming; repeated)

Probe: How can it be improved in order to speed up the application process?

Probe: What do you think of the idea of setting up one-stop agency to expedite the application process?

Question 2: What other incentives or concession that you consider attractive to build low-cost units in your housing projects?

Probe: What do you think of the proposal in which the Government plays the role of providing free land to developers that undertake low-cost housing?

SECTION E: PARTNERSHIP BETWEEN GOVERNMENT AND PRIVATE DEVELOPERS

Question 1: How do you define “partnership”?

Probe: How much do you know about partnership?

Probe: Have you ever involve in any kind of partnership with the Government in your housing project?

Question 2: How can the private developer partner with the Government in the provision of low-cost housing?

Probe: would you partner with the Government if land were provided?

Question 3: What do you think of the proposal of setting up a central fund to undertake low-cost housing project independently?

Probe: Who do you think should contribute to the central fund?

SECTION F: COMMUNITY PARTICIPATION IN THE HOUSING PROVISION

Question 1: In your opinion, how can the community assist in the provision of housing?

Question 2: Have you heard of community banking such as the Bangladesh's Grameen Bank?

Probe: What types of community-based schemes did you come across?

Probe: Does it work? How does it work?

SECTION G: SOURCES OF FINANCE

Question 1: In your experiences, what are the major problems when dealing with low-cost buyers?

Probe: Do they normally have personal savings to settle the 10 percent down payment and other necessary costs?

Probe: Do you help your low-cost buyers to arrange for a housing loan?

Question 2: Are your low-cost buyers working as government employees or non-government employees?

Probe: What are the difference between government housing loan and normal housing loan?

Probe: Does majority of the commercial banks willing to provide housing loan to low-income earner?

Probe: What types of housing loan are available? (Interest rate, repayment period, and flexibility).

Question 3: How can the EPF withdrawal assists in homeownerships?

Question 4: What do you think can be done to improve the accessibility of finance to low-income people?

APPENDIX IV

INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

SECTION A: DEVELOPERS' PERSPECTIVES ON LOW-COST HOUSING PROVISION

Question 1: Do you normally build low-cost houses in your housing project?

Probe: How often do you build low-cost houses? What's the percentage in terms of the total houses built per year?

Probe: What is your profit gained for a low-cost house?

Probe: What is the percentage of profit do you think is sufficient?

Question 2: Who do you think should be responsible for the provision of housing to low-income group?

Probe: Do you think the Government should bear more than a fair share than any other players involved in housing industry?

Probe: Should the private developers bear the burden of providing affordable housing to the poor?

SECTION B: COMPONENTS OF DEVELOPMENT COST AND FACTORS AFFECTING THE COSTS FOR LOW-COST HOUSING

Question 1: How does the following components of development cost affect your profit when constructing low-cost houses?

a) Land Cost

Probe: What is the proportion of land cost to the total development cost for low-cost house? What about for non low-cost housing?

Probe: How does location of project affect the land cost?

Probe: Is land available for low-cost construction? (Malay reserve land etc)

Probe: What incentives would you like to receive from the Government in association with land? (Lower land premium)

Probe: What are the problems associated with land issue?

b) Construction Cost (material cost and labour cost)

Probe: What kind of problems do you face when come to material price and labour force? (Price escalation; material standard, availability of materials/labour; types of houses built; inflation).

Probe: In your opinion, what are the solutions to handle these problems?

c) Professional Fees

Probe: What is the percentage of professional fees paid for low-cost house? What about for non low-cost housing?

d) Fees/Contributions to Government Departments

Question 2: Do you face any financial difficulties in your low-cost housing projects?

Probe: What are the problems?

Probe: What do you think the commercial bank should play its role in this aspect?

Probe: What do you think of the proposed "build then sell" concept?

SECTION C: GOVERNMENT GUIDELINES FOR LOW-COST HOUSING

Question 1: What do you think of the several guidelines set by The Ministry of Housing and Local Government for low-cost housing category based on the following issues?

a) 30% low-cost quota

Probe: what is the mandatory requirement on the minimum size of development, which requires you to provide low-cost houses?

Probe: what is the percentage of low-cost unit required in your housing scheme?

Probe: What effects does it have on your profit?

Probe: How do you deal with it? Is there any cross-subsidisation from other housing categories needed?

Probe: What do you think of the proposed quota for low-medium cost houses in future projects?

b) Selling price

Probe: Do you require cross-subsidisation from other housing categories in order to cross-subsidise the losses made in low-cost housing?

c) Minimum design standard

Probe: What is the minimum design standard required for low-cost houses in your state?

Probe: What kind of construction do you chose? And why?

Probe: What are the problems encountered with this form of construction?

d) Monthly household income

Probe: what are the problems associated?

Probe: how often do you face with these problems?

e) Special privileges for Bumiputera

Probe: What are the problems with this guideline?

f) Provision of Incentives

Probe: Do you think the Government has implemented the incentives effectively?

SECTION D: PROVISION OF INCENTIVES IN LOW-COST HOUSING DEVELOPMENT

Question 1: Do you think faster plan approvals can definitely help to reduce the development cost?

Probe: How long does it take to obtain all relevant approvals before commencing your housing project?

Probe: How often do you encounter such delay?

Probe: What do you think of the current planning application process? (Complicated; time-consuming; repeated)

Probe: How can it be improved in order to speed up the application process?

Probe: What do you think of the idea of setting up one-stop agency to expedite the application process?

Question 2: What other incentives or concession that you consider attractive to build low-cost units in your housing projects?

Probe: What do you think of the proposal in which the Government plays the role of providing free land to developers that undertake low-cost housing?

SECTION E: DISTRIBUTION OF LOW-COST HOUSING TO TARGETED GROUP

Question 1: What do you think of the delivery system for the distribution of low-cost units to the targeted people?

Probe: How can the delivery system be improved to ensure that low-cost units are distributed to target group?

Probe: What do you think of the idea of setting up a national computerised system to improve transparency?

Question 2: In your opinions, what should the Government do with the resale price of low-cost houses when owner decided to upgrade his/her house?

SECTION F: PARTNERSHIP BETWEEN GOVERNMENT AND PRIVATE DEVELOPERS

Question 1: How do you define “partnership”?

Probe: How much do you know about partnership?

Probe: Have you ever involve in any kind of partnership with the Government in your housing project?

Probe: Have you heard of Build-Own-Operate-Transfer (BOOT) concession contract? What do you think of it?

Question 2: How can the private developer partner with the Government in the provision of low-cost housing?

Probe: What is your main concern in partnering with the Government?

Probe: Would you partner with the Government if land were provided?

Probe: Would you partner with the Government if the low-cost units constructed were for rent?

Probe: Do you prefer 100 percent low-cost development or mixed housing development?

Question 3: Do you think support/guarantees from government are important for housing project procured under partnership arrangement?

Probe: What kind of government support/guarantees would you prefer throughout the project implementation?

Question 4: What do you think of the proposal of setting up a central fund to undertake low-cost housing project independently?

Probe: Who do you think should contribute to the central fund?

SECTION G: COMMUNITY PARTICIPATION IN AFFORDABLE HOUSING PROVISION

Question 1: How can the community assist in the provision of “self-help” affordable housing for themselves?

Probe: What are the role and responsibilities of stakeholders including the Government, private developers, and commercial banks in making community-based housing scheme successful? (direct subsidiaries, etc)

Question 2: Have you heard of community banking such as the Bangladesh's Grameen Bank?

Probe: What types of community-based schemes are available?

Probe: Does it work? How does it work?

SECTION H: SOURCES OF FINANCE

Question 1: In your experiences, what are the major problems when dealing with low-cost buyers?

Probe: Do they normally have personal savings to settle the 10 percent down payment and other necessary costs?

Probe: Do you help your low-cost buyers to arrange for a housing loan?

Question 2: Are your low-cost buyers working as government employees or non-government employees?

Probe: What are the difference between government housing loan and normal housing loan?

Probe: Does majority of the commercial banks willing to provide housing loan to low-income earner?

Probe: What types of housing loan are available? (Interest rate, repayment period, and flexibility).

Question 3: What do you think can be done to improve the accessibility of finance to low-income people?

Question 4: How can the EPF withdrawal assists in homeownerships?