

**AN EVALUATION OF LOW INCOME  
HOUSING PROJECT IN DEVELOPING  
COUNTRIES CASE STUDY:  
TRIPOLI-LIBYA**

**BY**

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**In the Name of God**

**Most Gracious, Most Merciful**

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## List of Abbreviations

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NDP	National Development Plan
GNP	Gross National Product
GDP	Gross Domestic Product
LD	Libyan Dinnar
SOP	Secretariat of Planning
REISB	Real Estate Investment and Saving Bank
PHC	Prefabricated Housing Company
GUPC	General Urban Planning Corporation
SHUT	Secretariat of Housing and Utilities in Tripoli city
DPT	Director of Planning in Tripoli City
GSP	General Secretariat of Planning
UNDP	United Nation Development Programme
SOH	Secretary of Housing
PISB	Property Investment and Saving Bank
HCO	Housing Co-operative
NISB	National Investment and Saving Bank
GHC	General Housing Corporation
SHU	Secretariat of Housing and Utilities
NIC	National Investment Company
GISS	General Institute of Social Security
GCC	General Cleaning Company
SOU	Secretariat of Utilities



## Declaration

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I declare that the research contained in this thesis was solely carried out by me. It has not been previously submitted to this or any other institution for the award of a degree or any other qualification.

Partial results of this thesis have been presented and published jointly with the supervisor in the following papers.

- (1) Presented at Cobra Conference 2001, *Housing Policies and Strategies: The Experience of Libya's*, With Les Ruddock, Cobra Conference Glasgow Caledonian University.
- (2) Presented at 2nd International Postgraduate Research Conference 2002, *The Internal and External Influence in Housing Markets*, With Les Ruddock, the second international conference in the built and human environment, 11-12 April 2002 University of Salford.
- (3) Presented at 3rd International Postgraduate Research Conference 2003, *Residents Satisfaction With Public Housing Schemes in Tripoli City Libya*, with Les Ruddock, the 3<sup>rd</sup> international conference in the built and human environment, 3-4 April 2003 Salford University and ESAI – Lisbon 2003.
- (4) Presented 3rd International Postgraduate Research Conference 2003, *Public housing in Tripoli City: An Application of Case Study Methodology*, with Les Ruddock, the 3rd international conference in the built and human environment, 3-4 April 2003 Salford University and ESAI – Lisbon 2003.

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## ABSTRACT

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During the last few decades most developing countries have experienced a rapid growth in population which has resulted in a rapid urbanisation in the form of an expansion of existing towns, coupled with an increasing dependence upon developed countries for implementation of new housing programmes.

The purpose of this study is to point out the problems of public housing, to identify the relationships between the physical elements and conceptual perspectives of housing functions. To resolve the housing problems, the Libyan government introduced a new policy, which recognised housing as a basic human need and provision of housing as the governments' fundamental responsibility.

The aim of the study was to assess the effectiveness of the implementation of the public housing policy in Tripoli, the capital city of Libya. To achieve this aim both secondary and primary data were examined, and the required data was obtained through a questionnaire survey of households living in the three projects. Interviews were also conducted amongst government officials concerned with housing policy and implementation. This study is in general, concerned with the effects of the problems of the new social and physical environments on the residents' level of satisfaction with the housing projects.

This study is mainly concerned with aspects of housing policy which might contribute to better housing satisfaction and which are responsive to changes in people's desires and preferences.

After the evaluation process it is found that the Libyan housing policy has benefited large groups of people, particularly those on low-income. However, it also suggests that the adopted policy has not resolved the housing problems both in terms of quantity and quality. In particular, the dwellings provided have not met the needs of many Libyan families. Furthermore, the study found that there is a lack of housing management. This

evident from some households living in the dwellings without permission in addition, the rate of sharing and occupancy shows that there is still a housing shortage. The study also shows that the dwelling and building construction types affect the resident attitudes to dwellings. Also shows that, most of the residents` prefer new dwellings.

# **CHAPTER ONE**

## **INTRODUCTION AND OBJECTIVES**

# CHAPTER ONE

## INTRODUCTION AND OBJECTIVES

### 1.1 Introduction

In the world at large there is a widening gap between housing supply and demand mostly in the urban areas. This has resulted in a severe housing crisis of unmanageable dimensions. Large numbers of families are homeless and living in conditions of extreme poverty in unhealthy, as well as unsafe, dwellings and neighbourhoods (UNCHS, 1986). Developing countries are urbanising at historically unprecedented rates exerting pressure on already inadequate services (Todaro, 1985; Stren & White, 1989).

Provision of housing has been inadequate due to socio-economic and political factors. Where housing policies exist, they are frequently unclear and poorly implemented. Developing countries, therefore, experience a widening gap between the stated policy and policy outcomes. Housing as both an economic good and a basic need is one of the most challenging aspects of rapid urbanisation taking place in the developing countries.

One of the challenges posed by urbanisation in these developing countries is the provision of shelter and basic service demands of an ever increasing population fuelled by a rural-urban heading rush (UNCHS, 1982), has adversely affected the housing environment of many urban dwellers. The need for urban housing is

generally a consequence of a number of factors, which include high urban population growth rate due to rural-urban migration, natural increase, a lag in development of infrastructure that supports housing development, low purchasing power of the majority of urban households, poor management and the lack of appropriate policies, especially for low-income housing. However, no nation has so far entirely met its housing needs, particularly in the developing countries (Parmer, 1991). This is because housing provided by the public and private sectors is insufficient to meet the requirements of the rapidly growing urban and rural populations.

## **1.2 Statement of the problem**

About one fifth of the world's population is estimated to have inadequate shelter while one million people have no shelter at all. And if the statement that about a million people, mostly children, die daily due to inadequate housing is true (United Nations, 1987), it further indicates the magnitude of the housing problem, which is more pronounced in developing countries where about one third of the population are homeless; and in some cases a greater proportion of the population of some larger cities. In developing countries, housing is one of the major challenges, facing mankind in the last decade of the twentieth century.

Development planning in Libya is faced with problems of rapid population growth and industrialisation, which have resulted in overcrowding in the largest cities and a housing shortage. During the past two decades the Libyan government has witnessed massive urban growth in all aspects of life, particularly in urban housing. The growth of urban areas during this short time

has exceeded all expectations. It has also resulted in many problems and negative effects. One of the major problems is the great increase in demand for housing which remains unsatisfied. Since 1969, the new government has recognised housing as a basic human need and the provision of housing as one of its fundamental responsibilities. (El Fortea, 1989) wrote:

*“Housing is essential, it is a basic human need and central component in our daily lives. For most groups in our culture the dwelling is very central.... Most time is spent in it; it is one’s most valuable possession. It has highest effective meaning and it is increasingly the locus of much recreation previously occurring elsewhere”.*

One decade after independence, the provision of housing in Libya was highly inappropriate in quality and quantity. A large part of the population was living in huts, tents and caves, lacking even the simplest conveniences for human life. The housing problem in Libya, particularly housing for low-income groups, received little attention from the government until the Revolution took place on 1st September 1969. Since then, planning has become modern and comprehensive. All levels of government housing have been coordinated to implement a housing policy designed to provide the best solution to the housing problem. A unified plan was adopted, as well as a long-range housing programme, based on a study of existing conditions. A vast amount of data were collected, i.e., the type and quality of the houses, the funds available and the means of financing the programme, and the type of people to be housed.

Since 1969 government policy seeks to provide adequate housing for every family, regardless of economic status or ability to pay for such housing and to improve the living conditions of the poor people. It was determined that the poor



should be provided with safe, healthy and liveable homes. In addition, a high priority given to meeting the needs of the low-income groups who are desperate for suitable accommodation. This concern led the government to create a new project, the “urgent housing project”, in the early 1970.

Libya suffers from a severe housing shortage, particularly in urban areas, where housing programmes are mostly dominated by the public sector. The housing sector does not perform well when measured against economic growth. This situation is due to a combination of malfunctioning housing market and policy constraints impacting housing supply and demand. On the demand side, effective demand for housing is suppressed by lack of access to a finance mortgage market and the absence of long-term investment. The rapid pace of population growth, the even faster rates of urbanisation, coupled with relatively low levels of housing production created housing shortages in the country.

The main objective of the public housing projects is to provide effective housing for low-income groups in terms of quantity and quality. The importance of the housing sector is given in the National Development Plans (NDP) 1973-75; 1976-80; 1981-86. After that, the Libyan government found that the previous plans did not completely achieve their objectives. Therefore, it decided to continue to pursue the same objectives by establishing a yearly plan until 1994, when the government introduced the 1995-97 plans. The government built a large number of dwellings through the Secretariat of Housing and its public agencies and the private sector. This was mainly for people living in the squatter areas and groups in need of housing. Since 1969, the housing sector has

experienced a rapid growth and the public housing agencies have produced, 382450 units between 1970 and 1996 (Secretariat of Planning 1997).

Despite the government efforts in housing, the policies adopted do not seem to have resolved problems in either quantitative or qualitative terms. For example:

- More than one family living in one dwelling
- Many people delay their marriage due to unavailability of dwelling units
- Many people are looking for a better accommodation

Beside the failure in meeting housing needs in quantity terms there is a question about the quality of the implemented units. In fact, the public housing schemes were built without any links to the traditional built environment or with local building materials. The operators of public housing projects were mainly multi-national corporations producing an industrial form of housing and using modern Western technology. However, the housing problem in Libya is not just concerned with increasing the number of new dwellings. Other matters need to be given a higher priority in seeking solutions. Solutions should recognise qualitative and quantitative factors. At the same time, it is important to look at every possible way of improving the efficiency of housing finance, administration and management.

A major problem in the study of housing effectiveness is how to measure that effectiveness. A review of the literature indicates that the concept of satisfaction is a measurable concept. This is because housing satisfaction is related to the

fulfilment of needs, whereby satisfaction results from the fulfilment of needs, and dissatisfaction exists when needs remain unfulfilled (McCary and Day, 1977). In the present study the three public housing projects being studied were implemented under a wide range of different standards. Therefore, the responses of the residents will be used to measure the level of satisfaction.

A study of the existing situation will facilitate a better understanding of the problem and factors, which have been affected by the implementation of the housing policy. In addition, no attempt has been made to examine whether or not the government is successful in implementing its public policy. Therefore, this study is an attempt to fill this gap and to consider all of the above unclear issues. It is hoped to make a contribution by addressing these issues.

### **1.3 Aims and objectives**

The main aim of this research, therefore, is to investigate the effectiveness of the implementation of low-income public housing schemes provided by public housing in the capital city of Libya, survey low-income housing problems and understand what is necessary to increase the supply of appropriate housing by the public sector in order that future projects will benefit from the lessons learned.

This study intends to achieve the following objectives:

- To determine whether the public sector in its housing provision role has been able to satisfy needs in Tripoli city and identify ways in which the public housing policy can be improved.

- To analyse the socio-economic and demographic characteristics of the population in relation to the housing conditions in Libya.
- To analyse the level of satisfaction of the households of the three public housing schemes.
- To estimate the current quantitative housing needs of low-income groups in Tripoli city.
- To determine the level of public housing schemes provided by the public sector in relation to several variables including physical structure and the community services.
- To identify the factors that may have an impact on housing and evaluate their implications for future low-income housing policies, programmes and research with the object of providing more public housing for low-income families.

#### **1.4 Research design and methodology**

A major feature of the research involves data acquisition. The research design covers planning and preparation for both the data collection method and the data analysis. Research is usually designed to examine a problem or a series of questions; something, which needs describing, explaining or improving or about which more information is needed. According to Sekaran (1992), research can be defined as:

*“Organised, systematic, data based, critical scientific inquiry or investigation into a specific problem, undertaken with the objective of finding answers or solutions to it”*

Research involves the collection of primary or secondary data or both. In this respect Piel (1982) stated that:

*Designing a research project involves organising the collection and analysis of data to fulfil the purpose of the research, to provide the information, which is sought.*

This study adopted the survey approach, whereby interview techniques were used for data collection. A specific interview questionnaire was formulated for the purpose of this study. Data used in this study were from both primary and secondary sources. The primary data were obtained from interviews with the occupants of the three selected housing projects. Besides the primary data, secondary information was obtained from other source, including articles, working papers, reports, unpublished PhD theses and various government agencies.

#### **1.4.1 Data processing**

The data collected through the questionnaire were, processed by computer using the Statistical Package for the Social Sciences (SPSS) programme.

#### **1.5 Research questions**

Any study is best pursued when expressed through a series of questions, (Heinrich, 1964). The stated objectives of this research will therefore, be pursued through seeking answers to the following questions:

- Are the policies that have been adopted in the past appropriate for housing low-income families and what has been achieved? To investigate the appropriateness some questions need to be asked relating to affordability, building system, type of building and dwelling conditions.
- Is it sensible and sustainable to continue existing policies and programmes?
- How adequate is the housing in the public sector? (Rate of sharing, physical infrastructure and service utilities).
- Do the residents of public housing projects like to stay or intend to leave?
- What implications do the research findings hold for policy directions, political actions and further research?

### **1.6 Research hypothesis**

The analysis was undertaken based on three research hypotheses. In trying to analyse the cause and reasons for effectiveness with public low-income housing schemes, it was proposed that:

- The basic hypothesis is that inappropriate housing policies are the major cause of Tripoli's inability to provide shelter for the low-income families.
- The housing environment of public low-income housing is unsuitable and unsatisfactory to the occupants. It is, therefore, important to establish whether or not the satisfaction level of the existing housing environment

differs from one housing scheme to another and, if so, what factors are causing the differences.

- The level of effectiveness of the three housing projects is not the same. Therefore, to justify future housing policy proposals based on effectiveness, it is necessary to establish which factors are more important.

### **1.7 Limitation of the study**

Housing and its provision cover a wide range of the entire housing package. Land policy, housing finance, planning and design, construction, occupancy and management all provide complex issues for housing policy. All these issues are equally essential when discussing housing policy. In a study of this nature, however, it is an impossible task to tackle all the areas mentioned above.

Therefore, the major limitation is that it only investigates the implementation of the public housing policy in Tripoli city and it does not represent any other group or area. The housing survey, which has formed the basic information source, deals with a wide range of housing problems, which contribute to the dissatisfaction and deficiencies in the environment of housing.

However, the results of the survey are generally applicable to any other public housing areas within the urban centres of Libya. This is because the dwelling construction, infrastructure and service utilities are almost similar to that in other areas of the country.

## **1.8 Structure of the thesis**

This thesis is divided into nine chapters. A summary of the contents of each chapter is given below (see Figure 1.1).

**Chapter One.** This chapter starts by stating the research problem. Aims and objectives, research design and methodology, research question, limitation and data processing are outlined. The chapter ends with an outline of the structure of the study.

**Chapter Two.** This chapter examines the operations of housing provision, needs and programmes in developing countries. It comprises the role of housing demand and supply in economic development and housing programmes in developing countries.

**Chapter Three.** This chapter concern about housing policies, programmes, urban development in Libya and housing provision in Tripoli city

**Chapter Four.** This chapter outlines the research methodology, variables and the analysis technique.

**Chapter Five.** This chapter concern about building a research model

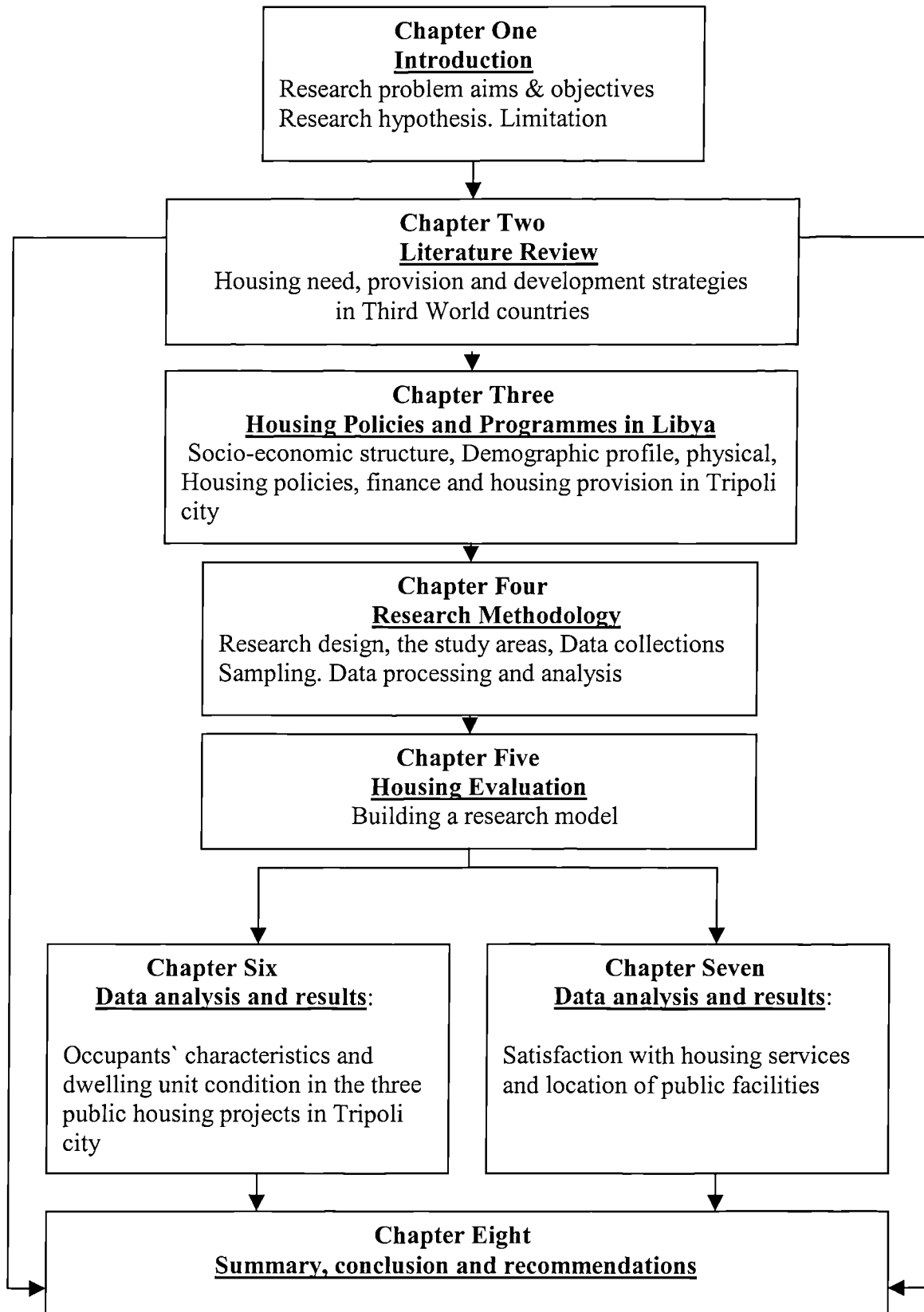
**Chapter Six.** This chapter discusses the analysis of the primary data, which was collected from the households of the three projects. It comprises socio-economic, household income and expenditure. It is also investigates the



residents' opinion about their dwelling conditions and the rate of sharing occupancy.

**Chapter Seven** This chapter also discusses the analysis of primary data, which was collected from the households of the three projects. It comprises resident satisfaction with housing services and location of public facilities.

**Chapter Eight.** . Conclusions drawn from the findings of the research are outlined followed by relevant recommendations.



**Figure 1.1: Chapter outline and thesis structure**

**CHAPTER TWO**  
**HOUSING PROVISION AND DEVELOPMENT**  
**IN THIRD WORLD COUNTRIES**  
**A LITERATURE REVIEW**

# **CHAPTER TWO**

## **HOUSING PROVISION AND DEVELOPMENT IN THIRD WORLD COUNTRIES**

### **A LITERATURE REVIEW**

#### **2.1 Introduction**

Rapid increase in population and urbanisation and changing socio-economic patterns in developing countries over the last few decades have resulted in a rapid increase in the demand for housing (Sivam, 2002). Associated with this is the need for land, infrastructure and services for residential development. The demand for affordable low-income housing and basic services in many Third World cities has intensified the search for strategies useful for meeting this need (Otiso, 2003).

The provision of housing and the necessary infrastructure, services and utilities to accommodate the rapid growth in urban population became a major challenge facing mankind in the last decades of the twentieth century (Tipple, 1991). In order to cope with the problems of the housing sector, planners and policy makers in the third world countries need to understand the needs of their people and to implement realistic strategies to deal with housing problems in such countries.

Housing is one area of urban services that has drawn interest from several scholars with diverse backgrounds. Therefore, in order to be able to understand housing in

Libya, especially in Tripoli city, an understanding of various key concepts, such as the policies and programmes in developing countries, which have been advanced in relation to housing is necessary. It is, therefore, the purpose of this chapter to identify the main issues surrounding the debate on housing policies and programmes in developing countries.

## **2.2 The Concept of housing**

Housing is an important policy issue around the world because it is closely related to the quality of people's life and because people value it. In addition, housing problems are common as social policy issues around the world. Serious problems take the form of squatters, housing shortages, soaring housing prices and deteriorated housing conditions. Lesser problems include decreasing market access for home ownership. These housing problems may be attributed to the occurrence of wars, natural disasters, economic depression, massive migrations and urbanisation.

A basic need of the citizen is an adequate shelter. This is a major indicator of the living standards as it contributes directly to his prosperity and indirectly to his health and productivity (Al-Nuaim, 2000). In this sense, owning a house in Libya context does not only relate to economic or commercial interpretation but to the individual's status. Hence in Libya, it is the ambition of everyone or every household to own a house as a source of identity either inherited or purchased. On the other hand, the government in most developing countries tends to regard housing more as a social service or basic need rather than as a productive investment (Malpezzi, 1988).

Housing is also fixed in terms of mobility. It usually cannot be moved from one site to another for consumption. Thus, the availability of housing varies by area. The feature of immobility makes housing issues sensitive to the density of population in an area. The competition for housing in cities is generally higher than that in rural areas. Thus, housing problems mostly take place in cities (Huang, 2000). This indicates that housing policy for urban areas may be different from that for non-urban areas. Because housing cannot be transported, policy for housing development should be made locally. It has to match the demand and features of the locality. Therefore, the local government plays a crucial role in housing development (Rothenberg et al, 1991).

The nature of housing, in all its dimensions, renders it uniquely amenable to taking on a range of psychological, symbolic, and productive roles. It is no wonder, then, that housing policy should be so important in the development agenda of any country. It is also no wonder that the full reality of the role of housing policy in development is still not fully understood. Although, it has routinely been recognised that housing policy rarely has as its “sole or even chief objective” the solution of the housing problem (Van Vliet, 1990). The efficiency of any housing policy depends largely on the effectiveness of the housing delivery system. The entire process of housing can only function adequately if efficient and effective institutions are set up.

On the level of the market, housing is a commodity, but a commodity whose complexity renders it like no other commodity. Housing is “peculiar” because it is complex (Quigley, 1991), it is fixed in space (which means housing is a package including location, services, work, status), it is expensive to produce, it is heterogeneous, it has a long lifetime, and it is a necessity for any individual (Quigley,

1991). The special features of housing that make the housing market unique. Housing is a durable, heterogeneous and expensive. These features together have created special situations in the housing market which, in turn affect not only the preference of housing for the buyers but also policy decisions regarding housing supply and demand (Huang, 2000). Housing is also recognised as a sector, which has important forward and backward linkages and thus is important to the vitality of the urban economy in general. Thus, labour markets, the construction industry, utilities, transportation, and the materials industry, are all interdependent with the housing sector. Housing is thus an important macroeconomic tool, as is apparent in its significant role in economic adjustment in developing countries.

### **2.3 Demographic changes and housing problems**

Housing issues are closely related to demographic factors since housing is a crucial part of people's lives. Changes in population size, population distribution, and family structure have profoundly affected housing demand and supply. For the influence of population size Easterlin (1980) proposes a hypothesis, which asserts that the size of a generation is an essential determinant of individuals, welfare and living arrangements. Alonso (1983) in his study concerning demographic factors and housing proposed three influential factors in housing, which include family, age and migration factors

The distribution of population in a country is largely influenced by economic development. In an oil-dominated economy, the population is not equally distributed among areas in the country. In an agricultural-dominated economy, the population is

more equally distributed among areas in the country. More and more people move to urban areas for jobs and better education. Alperovich (1992) stated that:

*At the initial phase of development, economic growth of a country leads to population concentration in a few core cities where growth can best be realised, and this is followed by the second phase of development when economic growth leads to population dispersal*

## **2.4 Economic development and housing problems**

The impact of economic factors on housing demand and supply have been observed and discussed by many scholars. On the demand side, previous studies have emphasized how economic factors affect housing demand and consumption. They have utilized the Gross National Product (GNP), household income, and consumer prices to analyse the association between the housing market and its economic context. In addition, GNP, household income, housing loans and subsidies, and the ratio of housing expense to income are also used to measure the purchasing power of households and housing consumption. They find that higher income, lower housing prices, lower interest rates, and available housing finance are positive factors, which increase demand for new housing. Conversely, lower income, higher housing prices, and higher interest rates hinder housing purchases (Seik, 1992).

Huang (2000) stated that:

*Economic factors deeply affect housing demand and supply. A nation-wide economic growth and an increase in personal income are favourable factors in promoting housing demand and economic growth stimulates housing demand and supply through the development of the financial market, which provides capital to finance both construction and purchasing.*



Government are more able to finance housing construction and subsidise home ownership because public finance is better off under economic growth. In general, economic development exerts positive impacts on the housing market. Based on these findings, it is apparent that economic situations exert great influence on personal financial ability and the pattern of housing selection. This then affects the demand for housing.

The literature regarding economic factors and housing policy will be important in guiding this study because Libya has experienced a dramatic economic transition since the 1960s. During the same period of time, the housing situation in Tripoli has also undergone a large change. There may be a relationship between economic growth and housing development.

It can be argued that the housing sector can provide visible and invisible benefits. The invisible benefits, among others are the provision of employment opportunities in construction and in materials manufacture. This will increase the materials market. The visible benefits are the provision of shelters for the population and thereafter, improving living conditions and health. Therefore, it can be argued that housing sector is seen as vital to increasing economic growth, which properly led to economic development. This mean that the housing sector should ranked among the important sectors in the country. Moreover, investment in the housing sector generates employment, both directly in construction, which provides a large number of skilled and non-skilled jobs, and indirectly, in associated industries. At the same time, it provides a location for economic activities.

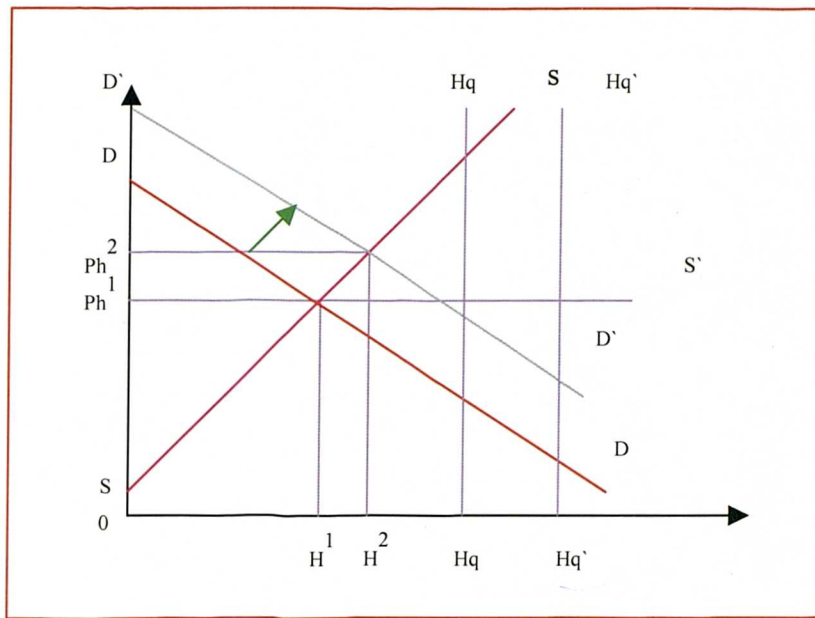
## 2.5. Government capacity and housing supply

Besides housing finance, economic development also strengthens government capacity to provide housing services. Under an improving economic situation, government tax revenues increase. With more financial resources, governments are able to provide more public services of higher quality.

Land development for housing provides a good example of the benefits of improved public housing. In general, private developers prefer to build housing on developed land in order to avoid additional costs, shorten construction time, and sell their housing easily. A growing economy makes governments more capable of providing necessary infrastructures for land development, such as electricity, water, sewer systems and transportation networks. This, in turn, facilitates housing development and stimulates the supply of housing (Kamara, 1987). Land development is only one example to illustrate the benefits of improved government finance in housing. A better off government is also able to provide more and better housing services. This can be observed in some Asian countries, such as Singapore and Hong Kong (Huang, 2000).

The housing situation can be explained by, Figure 1 where the price of housing ( $P_h$ ) is on the vertical axis and housing services ( $H$ ) are on the horizontal axis.  $DD$  represents the demand for housing,  $SS$  represents the supply of housing, and the vertical line  $H_q$  represents housing requirements. In Figure 1 the market quantity of housing ( $H_1$ ) is not as large as housing requirements ( $H_q$ ), which results in a housing shortage.

The word shortage is used to refer to an excess of housing requirements over the market quantity of housing rather than to refer to an excess of quantity demanded over the quantity supplied resulting from a price of housing lower than the equilibrium price. In graphical terms the word shortage (as used here) refers to the quantity  $H_1 - H_q$ .



**Figure 1. Housing supply, demand for housing and housing requirements**

(Sources: Shernanna, 1976 A comparative evaluation of the public housing Programme in Libya)

Due to many factors, both the demand for housing and housing requirements increased. Some of these factors have increased demand more than requirements, others have increased requirements more than demand, and still others have increased both demand and requirements by an equal amount. The effects of an increase in demand and an increase in requirements on the price of housing and the housing shortage depend on the elasticity of the long run supply of housing. Suppose the demand for housing increased as shown in Figure 1 by the upward shift in the

demand curve from DD to D'D', and housing requirements increased from OHq to OHq'. What effects will these increases have on the price of housing and housing shortage? As indicated above, the effects depend on the elasticity of the supply of housing. If the supply of housing is infinitely elastic as can be represented by the horizontal line (Ph<sub>1</sub> S') in Figure 1, then these increases in demand and requirements will have no effect on the price of housing, and will reduce the shortage from H<sub>1</sub>Hq to HqHq'. If the supply of housing is less than infinitely elastic as can be represented by SS in Figure 1, then the price of housing will go up from Ph<sub>1</sub> to ph<sub>2</sub>, and the shortage of housing will increase from H<sub>1</sub>Hq to H<sub>2</sub>Hq'.

Empirical studies have shown that the production of government-built housing has dramatically increased the amount of housing supply to lower-income people. In Singapore, for example, 87 percent of housing units are, supplied by the government. The large-scale public housing construction supported by a growing economy not only raises housing supply but also improves the living situation of lower-income people. In addition, government-built housing enables the government to maintain the stability of the housing market in Singapore (Chua, 1991; Tan and Phang, 1991).

## **2.6 Housing need and effective demand: Definitional issues**

Due to the importance of need and demand in housing studies, housing need, demand and affordability will be discussed in this section.

### **2.6.1 Housing need**

The definition of this concept was given by (Abelti et al, 2001) who states, that:

*The concept of needs refers to the inherent duality of dwelling – that is, it is both an economic good, subject to the market laws as well as a good or social service whose fulfilment depends on the support of the public operator and his resources. In the second meaning it seems plausible to reason in term of need*

The concept of need is very widely used in social policy and yet no consensus exists as to the definition; neither does it seem to have a coherent meaning. Housing need refers to a gap or mismatch between a set of measurable housing standards, or objectives, and an existing situation. In one sense, according to McGough (1980), housing need is a measure of the ultimate potential of each individual to live independently, and the volume of housing stock needed to gratify that ultimate potential. Since not every adult person will wish to live alone, he continued, actual housing need must measure the propensity or preference to live alone or in combination with other individuals, while simultaneously assessing the capacity of the existing stock and of the housing production industry to provide the units over time. Accordingly, housing need can be considered in terms of the extent to which the supply of adequate housing falls short of the demand of households in terms of their physiological needs ((Keivani and Werna, 2001).

However, (Williams, 1978) stated that the level of need in which a consensus has to exist will vary, especially as the planners have to answer the following questions:

- Is the household lacking housing supply?
- Is the household in need of housing?
- Does the household demand public housing?

The need for scaling up housing production in developing countries through all possible means is now accepted and acknowledged by all policy makers in this field (UNCHS, 1996a). This has been largely due to the inadequacy of project-based approaches such as sites and services and settlement upgrading programmes for low-income housing provision in these countries (Keivani and Werna, 2001). It is estimated that in the 10 yr period of 1972-1981, for example, the combined output of such project-based programmes was only 10% of the actual requirement in developing countries (Burgess, 1992)

The United Nations World Housing Survey, (1974) defined housing need to include demographic, replacement and vacancy elements. The first comprises the number of dwellings required to accommodate new households formed during the plan period as a result of natural increase, in-migration and changing household composition. The second includes dwelling units required to replace those demolished during the plan period, mostly in response to obsolescence, according to some definition of an “adequate” dwelling unit, and related to the standard of accommodation desired, quality of construction, and anticipated life of a building.

The United Nations employed what it terms ‘the concept of a new and comparative entity for estimating housing needs’ (UN, 1973). The entity is conceived in terms of what is required to accommodate a household under varying standards. The measure is designed as (D). The value of (D) required can be derived from the United Nations’ formula for estimating need:

$$D = \frac{1}{K} \times \frac{P}{h}$$

Where:

**D** = housing units

**P** = population

**H** = average household size

**K** = number of households in a single housing unit.

According to Roberts (1980) the estimate of quantity of housing needs is generally based on the total sum of three components, which are:

- The need to house the estimated increase in the number of households.
- The need to replace the losses of dwelling units from the housing stock through obsolescence or demolition.
- The need to provide additional shelter to relieve overcrowding or eliminate shortage.

Future housing needs arise from two demographic components: the natural one and the social one. In order to evaluate the increased need due to natural demographic movement, one is supposed to calculate the increase of households due to the formation of new entities net of termination (Abelti et al, 2001). The assessment of

the social demographic movement concerns the estimate of migration flows, either international or domestic (rural-urban and urban-rural migration).

Whatever method is used for measuring housing need it will not in itself change the huge shortage of housing, especially in developing countries of which Libya is not exception.

Housing need, therefore, is an all-encompassing term covering those who will acquire adequate housing units (effective demand), and those who are households living in inadequate housing units and who would wish to acquire adequate housing but do not have the capability to do so (unrealised demand).

Therefore, the concept of housing need incorporates the total requirement for shelter without regard to the ability of households to pay for it and can be expressed as the difference between the total number of urban households and the number of dwellings deemed habitable. The standards, which determine habitability are generally subjective and arbitrary and may be set officially. Therefore, planners, in calculating the numbers of dwelling units needed by the population in a given area, should bear in mind these points:

- Existing need, which is the difference between the numbers of households and the existing numbers of suitable or adequate dwellings.
- Estimates of urban population as basic inputs into the preparation of population/housing ratio upon which needs, can be based.



- Evidence from a survey of urban housing as the starting point for suggesting the direction of change in urban housing in the future as result of natural increase, immigration, and changing household composition.
- Replacement need, which is the number of demolished dwellings during the plan period, according to the quality of construction and anticipated life of building

Gray and Richardson (1985) observe that a critical component in the formulation of any national housing policy is an understanding precisely what is needed in terms of housing accommodation. Attempts have been made by various analysts to evolve a specific methodology for the assessment of exact needs in housing, See for example; (Merrett, 1984; USAID, 1984; Adeokun, 1990). It is agreed that needs may be assessed by an account of the existing scale and nature of housing poverty, and by the projection of demographic trends.

Rakodi (1992) stated that the main deficiency in the use of simple estimates of housing need in housing policy formulation, she argues, is that they do not take into account resource availability at rather the national or individual level. In most cases, to define housing needs in terms of normative planning standards unrelated to the cost of housing means that, at both national and city levels, the supply of acceptable units can never be sufficient in volume to satisfy total estimated needs, while at the individual level, many urban households cannot afford to pay for the housing units provided.

### **2.6.2 Effective demand and affordability**

Demand is a measure of what people want and need, and have the ability and are willing to pay for at the going price in relation to their incomes. It is also affected by prices and availability of alternative goods and services (Culyer, 1980). It is generally believed that goods and services can be assessed and measured in some ways and that quantity can be varied. The demand for affordable low-income housing and basic services in many Third World cities has intensified the search for strategies useful for meeting this need (Otiso, 2003). A very crucial issue in demand is its dependence on both willingness and ability to pay. Demand is normally expressed not as a single value but as a relationship with another variable, especially price, holding other factors such as income constant (Gordon, 1984)

Housing demand can be defined as the number of households that are able and willing to pay a certain price for a particular housing and services project (Mukhtar, 1997). Thus, a desire for housing is supported by an economic ability to satisfy this desire.

Moreover, in societies such as Libya where the separation takes place usually after marriage, which in most cases is after the age 28 years, the demand for housing will be for multifamily houses. In societies where the separation occurs at a relatively young age, the demand is for small couple houses. Hence, the age at which the person is considered as independent and the culture are critical issues in assessing housing needs and demand.

Affordability, according to Malpezzi et al (1982), is essentially a behavioural concept. To establish what a household is able and willing to pay, they argue, it is necessary to have a thorough understanding of the life style of the target group, since apart from the total earnings of the household, affordability is affected by several other factors including security of the principal and other secondary sources of income, savings, spending pattern, place of housing on the household's priority list, etc. Affordability, may therefore, not be a very useful concept for housing planners outside a strictly academic context. Rodell (1990) observed that a large number of housing experts seriously doubt the applicability of housing affordability theory and only use it because there is no less dubious technique available.

The fundamental problem of shelter for the poor is the existence of a large group of people in the large cities who cannot afford to help themselves with improved shelter even with outside support (Sivam, 2002). For example, in Delhi, housing constructed for the lower-income group is eventually, occupied by the middle-income group, because the low-income target group cannot afford it. Therefore, the target group sold their houses for a premium. This is a very common phenomenon in other large cities in developing countries, For example, Jakarta and Bangkok (Sivam, 2002). development is fully or partly recovered. At the same time, most projects are designed in a way that they tend to ensure that the target population are not prevented from spending what they can afford on housing (Lee, 1985).

Consequently, the appropriateness of a housing project to low-income households depends on whether or not the project is affordable. Thus the concept of affordability is important for urban development projects because of some these basic issues.

Housing projects for the low-income groups should be generally accessible to a large proportion of the low-income households. These can only be possible if the complex issue of affordability is properly understood and housing policies formulated and projects designed accordingly.

The author believes that this cannot totally solve the problems of affordability in third world countries as a whole, because it depends on the cost of housing units. Hence, if the cost is too high, monthly amount for recovering the cost will in some cases be more than 15% or 20% of people's monthly income, which means that it cannot be afforded by these groups.

Rakodi (1992) argued that the difference between the cost per dwelling unit to an adequate standard in construction and services and the ability of urban residents to pay may be met by public subsidy. This may be possible in the wealthy countries. Other developing countries, are not in a position to offer large-scale subsidies for an indefinite period (Rahman, 1994). This means that the reliance on subsidy is something that cannot be sustained.

How then can affordability for housing products be increased? England and Alnwick (1982) identified two directions that can be taken to bring housing more within the reach of poor households, apart from massive subsidization. The first is to increase effective income through the subletting of rooms (means of generating income by the plot owner household). The second strategy for bringing housing more within the reach of poorer households is that of significantly reducing the costs of house

construction in terms of land costs, design specifications for the final product and the infrastructure.

In addition to that, other approaches have also been implemented to increase affordability. These are site and services, self-help and upgrading of existing areas. These approaches have been criticised by some researchers such as, Choguill (1985) who argued that self-help housing costs more than organised housing. In addition, the planning standard of the infrastructure is sometimes too high. Hence, it cannot be afforded by the poorest. Moreover, subsidy, which is used by many countries as a tool of public policy to provide affordable housing for poor households, is seen as less effective in many developing countries because their resources are too limited.

Accordingly, policy makers should understand the target groups according to the geographical locations, their culture norms and their economic conditions, as a basis for designing housing projects at a modest standard that are affordable.

## **2.7 Housing finance system**

Finance is a major constraint of housing supply and this is particularly the case with low-income groups. The purpose of a housing finance system is to provide the funds, which house buyers need to purchase their homes. In most of the developing countries finance for consumers and developers are not well developed. Kim (1997) observes that mortgage financing is severely limited in developing countries. The formal sector finances only a small portion, (less than 20 per cent) of home purchases in many cities of developing countries (Sivam, 2002). In developed countries the mortgage system enables most families to acquire land or houses with a reasonable

down payment and monthly re-payments over 20-45 years. The lack of a mortgage finance system makes it difficult for many people to buy plots/houses. A recent study in India on the housing finance needs of potential homeowners brings out the fact that low-income informal sector households do not have significant access to the formal system of housing finance (Sivam, 2002).

In the Third World there is a shortage of financial resources both for individuals and governments. In the case of governments, the unavailability of financial resources may be due to the economic situation of the country or to the mis-management of resources. In most developing countries, the problem of housing finance for individual households is made worse by poverty, irregular incomes, and the low savings capacity of a large proportion of the population.

### **2.7.1 Sources of housing finance:**

Suppliers of housing finance can be divided into two categories: formal (conventional) and informal (unconventional).

#### **2.7.1.1 Formal sector:**

This means any system that is legally instituted, registered and recognised by the public authorities. It comprises all the known and visible entities and enterprises, which could be public or private. Formal housing finance systems in the developing countries cater for only 5 to 20 per cent of the total housing development (World Bank, 1988). The institutions, which are involved, are building societies, mortgage societies, banks savings and loans association, home development mutual funds and commercial banks. However, the most common systems, which are found, are those

of deposit taking and mortgage banking system. One thing in common in these institutions is that in order to provide the loans they retain the houses as collateral. Okpala (1992) argues that the people who benefit the most from the formal methods are those who earn in the 20 per cent of the population.

Public sector organisations range from government subsidies to full-services. Batly (1988) reported that some of these organisations successfully mobilised savings but many of them largely failed to reach the poorer population. Christian (1991b) stated that existing organisations could become a major source of housing finance in the developing countries. The commercial banks can do this because they are already integrated into the national financial system. Commercial banks by investing in mortgages, may, therefore, become a significant part of the housing finance network.

In many developing countries there is a formal housing market, but the house prices are too high for most urban households. According to Wegener (1982) the housing finance that exists in the developing countries are unsuitable for the particular needs of many groups because of their inadequacies and administrative requirements.

Wegener (1982) and UNCHS (1989) summarised the reasons for this:

- Problem in collecting the loan able funds leading to a shortage of capital.
- Problems of access for low-income groups due to cultural, informational, and spatial barriers.
- Inadequate finance terms.

### **2.7.1.2 Informal sources of housing finance:**

In most developing countries there exists only elementary finance systems and there is a relation between the financial institutions and the level of development of that particular country. According to Okpala (1992) 70 to 80 per cent of housing finance in developing countries is raised through informal sources, whereas only 20 per cent is lent by the formal sector. In 1978, it was estimated that over 98 per cent of the households had to put in cash from their own income and savings in Tanzania (Kalabamu, 1994).

Boleat and Coles (1987) also states that less than 20 per cent of housing investments are financed by the formal sector, and in some cases even less than 10 per cent. It is suggested in a report by the Asian Development Bank in 1993 that government should intervene in the creation of a supportive environment for the informal sector through effective policies related to finance for housing (Asian Development Bank, 1993). Different countries have created various types of institutions, such as National Home Mortgage Finance Corporation in the Philippines or the House Building Finance Corporation in Pakistan, funded by the state banks of the respective countries.

The finances are arranged through the sources, which are listed below:

- **Self financing**

Individuals and families save from their personal incomes and these accumulated savings are used for house purchase. Mumtaz (1991) points out in a study of Bangkok that in a low-income area it took between four to twelve years to complete



a house. Christian (1981) explains that in some situations the head of the family has more than one source of income as he is doing multiple jobs.

- **Relatives and friends**

In developing countries another method commonly used is the loan from relatives and friends where the duration of the loan is not clearly defined. Interest rates are not normally charged and in most cases the people are socially obliged. Financial help from relatives and personal savings contribute toward the purchase of a house.

- **Rotating credit societies**

There are various informal groups who administer this form of finance. Different countries have different names for the same method, for example, Tanda in Mexico, San in Dominican Republic, Syndicate in Belize, Gamaiyah in Libya and Egypt, Isusu in Nigeria, Hagbad in Somalia, Chit Fund in India and Sri Lanka, Committees in Pakistan (Malik, 1994). These associations require their members to contribute a set amount of money to the pool of funds on a regular basis. Every member of the association has a right to use the funds under the agreed conditions.

- **Loans from employers**

Where an established company employs a person and they have job security they are able to apply for a loan from their employers for house purchase. Interest is charged on the amount borrowed, and the repayments are taken directly from the salary source.

- **Private money lenders**

In most of the developing countries, private money, lenders play a role in the lending of finance to potential purchasers of property (Malik, 1994). This is due to the fact that formal systems either cannot provide the necessary finances to all potential buyers or the finances it does offer are insufficient for the needs of the purchaser.

Country like Libya faced with a severe shortage of housing and a weak system of housing finance need improvements in the formal system. To suggest improvements and changes it is, however, necessary to consider the formal system of housing finance currently existing in Libya in order to be able to fully assess the system.

However, in some wealthy countries in the Third World the formal housing finance system plays a greater role in financing the housing sector for both public and private housing. In Libya, like many other developing countries, there are problems with the formal housing finance system. The amount of lending activity for housing construction is not sufficient, particularly to individuals who want to build their own houses using bank loans. Therefore, the inadequacy of funds allocated for housing has become a problem facing both low and middle-income groups in the private sector unless a household has enough savings to build their own house.

## **2.8 Tenure choice in housing**

This section reviews, in considerable detail, the factors that govern tenure decisions, as well as the various forms of tenure in the housing market owner-occupation, as the ultimate ambition of most housing consumers; rental housing, as a more affordable alternative in the short-term; and shared housing, as a demonstration of the inability

of many urban low-income households to afford any of the available official housing option. In the socialist era, now have choice regarding both housing type and tenure. Tenants of public housing are given the option of either paying an increased rent or buying their current flats at subsidised prices (Huang & Clark, 2002). For example, the structure of housing tenure in urban China is also different from market economies. Because of dramatic changes in ideology and political economy, it has changed from mostly private rental housing in the early 1950s, to virtually all public rental housing after the Socialist Transformation (1955-66) and then to a mix of increasing home-ownership (Huang & Clark, 2002).

The objective of this section is to illustrate the linkage between housing need, effective demand and supply of housing. The utility of this will be appreciated when considering the realities of the housing situation in Tripoli. Edwards, (1990b) contends that tenure has an influence on the level and distribution of income among the poor, on health and nutrition, satisfaction with housing, participation and community development, savings and investment. There are different types of housing tenure. Owner-occupation, which is the preferred choice by most users; rental housing, which is the affordable option in the short term and shared housing which is an alternative form for low-income people who are unable to afford any of the above option. These types will be discussed in this sub-section.

### **2.8.1 Owner-occupation**

The economic perspective assumes that households are economically rational and choice a certain type of tenure to maximize utilities within a given budget constraint (Huang & Clark, 2002). In this approach, home-ownership is not just a consumption

decision by households, but is also an investment decision in competitive housing markets.

The meaning of home-ownership, according to Rossi, (1980), has come up with rather global positive attributes of home owning. For instance, owning is identified with the concept of “home”, while renting is identified with the concept of “house”. There is Home-ownership preference over renting, as Gilbert and Varly (1991) in their study of rented housing in two Mexican cities (Guadajaran and Puebla) found that 97 and 93% of the tenants respectively prefer home-ownership. In Singapore the home-ownership rate increased from 29 per cent in 1970 to the present 90 per cent ((Phang, 2001).

### **2.8.2 Rental housing**

Renting traditionally means paying rent for a dwelling. A dwelling in this context is the accommodation occupied by a household (whether or not that dwelling was originally constructed for that purpose and is self-contained. Tenure represents a high proportion among households in different countries. Except Singapore for the public housing rental sector represents the social housing sector. It is completely regulated by the HDB (Housing Development Board) and provides minimum standard housing for the lowest-income families (Phang, 2001). A proportion of rental units also cater to transitional families waiting for their home-ownership flats as well as to foreign workers in Singapore

Previous studies show that roughly 40% of the world’s urban dwellers are renters and, in many Third World cities, two-thirds or more of the housing stock is rental

(Gilbert, 1990; Malpezzi, 1990; Rakodi, 1992). In Africa, as a result of rapid urban growth, the demand for cheap rental housing quickly outpaced the traditional sources of supply. There was only one sector of the housing market which could satisfy this rapidly increasing demand the informal sector in squatter settlements, illegal subdivisions and other forms of officially unauthorised housing which began to spring up around Third World cities during the 1950 (Edwards, 1990).

Eastern European countries have faced a vast array of challenges in their transition from socialist to market economies. In socialist Eastern Europe, public sector housing provided a large share of the housing stock (Davidson, 1999). Low rents (fixed in some cases at 1928 prices) made rental housing a very cheap option, but failed to cover the maintenance, management, and utility cost. The Eastern European countries are currently engaged in rent reforms, and the full scale restructuring of the public rental sector (Berry, 2000)

Analysis believe that tenure profile can be predicted accurately given adequate information on the local factors governing the housing market; City size, situation and growth rates, housing preferences, migration motives, household incomes, housing costs, and government policy. According to Edwards (1990), it is therefore, possible for government to predict with a reasonable degree of certainty whether the proportion of the poor who rent their homes will increase or decrease.

### **2.8.3 Shared housing**

This usually refers to a form of non-ownership tenure in which the main occupant of a unit of either rental or owner-occupied housing lets rooms rent-free and shares

other facilities and services in the unit with a person or persons who are not members of his or her household, sharing the kitchen, bathroom and other facilities in the dwelling. In Third World urban housing, the responses of the housing market to rising demand for urban housing brought about at first by rapid rural-urban migration, and later by natural increase, is the increasing incidence of sharing and subletting in both public and private housing sector. Different factors have caused the growth of sharing, new migrants to the city, emergency housing for refugees, or for reasons of culture. According to Edwards (1990), a mining township in Zambia began to absorb an increasing proportion of recent arrivals who, shared with kin or sublet a room from the resident owner. Rakodi and Withers (1995) report that when it was realised that urban local authorities could not provide sufficient houses for the entire black urban population, the main tenants of municipal houses were permitted to let rooms to subtenants.

Malpazzi et al (1989) report that tenements housing between 12 and 20 families each are common in the low-income compounds of Kumasi, Ghana, due largely to cultural factors. In order to understand the concept of shared housing as used in the present research, it is necessary to put forward and justify the operational meanings adopted for two Key concepts: “dwelling unit” and “household”. Prior to 1976, much of the literature regarded a dwelling unit as a single unit of self-contained accommodation. “Self-contained” referred to either the sole use of the kitchen and/or sanitary facilities. Also Willis and Tipple (1991), in their study of tenure choice and demand for housing services in Kumasi, Ghana, used the terms “family houses” and “roomers” to refer respectively to households, who live in a family house rent-free

and those who rent rooms singly, or occasionally in pairs, shared facilities with other households.

## **2.9 Infrastructure standards for low-cost housing**

The traditional approach to infrastructure provision in housing areas in most developing countries has been, and to a large extent remains, that of giving an agreed layout to the engineers with instructions to design the various infrastructure networks to fit the plan and to meet set standards.

Provision of infrastructure is another of the problems in providing serviced land for the formal residential market in the cities of developing countries. Provision of infrastructure is consistently slow and lags behind demand in these rapidly growing cities (Sivam, 2002). A large segment of the urban population in the developing world has no access to basic services such as water, sewerage, electricity, gas and drainage. The lack of main infrastructure (e.g. road, water supply systems, sewerage systems, storm-water drainage and electricity distribution) is a very important constraint on urban residential. To improve the quality of infrastructure and housing stock requires a level of investment that is often beyond the reach of developing countries. Central and state funds for urban infrastructure will not be enough to meet the needs. It is necessary for municipalities to improve their revenue collection to generate additional resources for urban infrastructure.

## **2.10 Housing provision in developing countries**

All authorities on housing provision in developing countries agree that the vast majority of shelter and housing for the middle and low-income groups is provided

through the informal sector. However, a small share of low-income housing and practically all-higher income ones are provided through the formal channels of the government and the private sector. Public sector housing programmes for the low-income groups can take the form of direct public provision of completed units, (Okpala, 1992). However, with the exception of Bangkok, the scale of such activities by formal private builders has been relatively small in developing countries (Keivani et al, (2001).

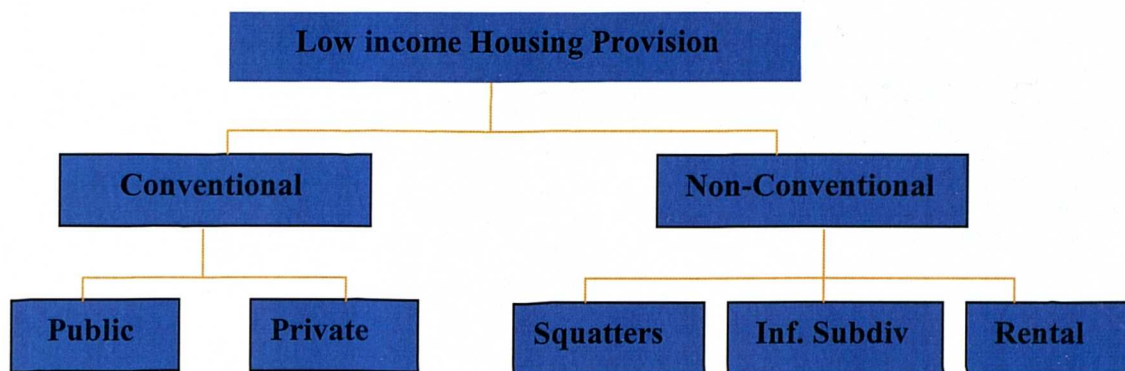


Figure 2. 1: A conceptual model of housing provision in developing countries.  
 Source (Keivani & Werna, 2001)

### 2.10.1 Conventional housing provision

The conventional or formal mode of housing provision mainly caters for the high-income groups of the urban population in developing countries. This is mainly achieved through the private market. Also provides housing units for some sections of the low-income groups and essential government employees. In addition units are



built according to official building standards mainly using industrial materials and semi-industrial building techniques.

#### **2.10.1.1 Government housing provision**

Government get involved in housing provision either to strengthen the state apparatus by building housing units for essential employees such as technocrats, middle-high managers and security and military personal or for the lower income groups (Keivani & Werna, 2001). This can be done either directly by initiating building programmes for complete housing units or indirectly through aided self-help and settlement upgrading programmes.

##### **a. Direct government housing provision**

In theory positive public housing policies, where they exist can be classified into three groups, reactionary, alien and indigenous (Drakakis-Smith, 1981). Reactionary responses are those concerned with eradicating slums and squatter settlements because they disfigure and disrupt the city. An example of such a reactionary response is that which occurred in Venezuela, during Perez Jimenez's (1952-1958). The indigenous approach is based on the premise that all non-conventional housing is a normal response to housing shortages. Many governments attempted to solve the housing shortage of the low-income population by initiating mass house building programmes during 1950s, 1960s and 1970s in order to resettle the residents of squatter settlements (UNCHS, 1996). These programmes are usually financed directly by the central government and most institutions there was little planning with regard to matching the needs of the low-income population. The architecture, size and technology of construction of these programmes were in most cases

influenced by the interests of private contractors who were involved in the actual construction of such projects (Keivani & Werna, 2001). Moreover, the need for reducing costs meant that many projects were on cheap land in the periphery of cities with bad access to jobs and also cutting back on the general construction work which has led to severe shortcomings in the overall quality of construction as well (Yap, 1996). It can be stated that, with the exception of relatively few countries such as Singapore and Hong Kong where 85 and 45 per cent of the population are housed through government housing provision, and some socialist countries such as China, direct public housing programmes in developing countries have been a complete failure with direct public housing contributing to only about 10 per cent of the total housing stock in general (Keivani & Wena, 2001). In addition such units can only be allocated to low-income households with very high subsidies. In Bangkok, for example, the rent for public housing apartments is set at 300 Bath per month to make them affordable for low-income households with the actual minimum economic rent for these units is estimated at 1000 Bath per month (Yap, 1996).

In Libya during the period of 1973-1975 the percentage of housing units which were built by public housing agencies amounted to 90% of the total housing units which were built during that time and the percentage of the public housing was 34 percent of the total housing provision in 1975 (Essyed, 1981).

#### **b. Indirect government housing provision**

Many governments in developing countries adopted indirect housing provision strategies for the low-income urban populations through aided self-help projects such

as sites and services and settlement upgrading, during the 1970s and 1980s (Drakakis-Smith, 1981; Pugh, 1994; Keivani & Wena, 2001).

#### **2.10.1.2 Private sector housing provision**

Conventional private housing is the housing, which is constructed by normal (formal) institutions and it is offered for sale or rent in the open market. Although most of the conventional housing in Third World cities is built by the private sector little of this falls within the financial reach of the urban poor (Drakakis-Smith, 1981). Housing provision through this mode can take many forms from individual house building, which is initiated and financed by the individual owner-occupier and built by a small contractor to small and large scale speculative residential development (Tipple et al, 1999).

The determining factor in this regard is the level of development of the private housing market and the presence of commercial housing developers whose function is the initiation and speculation in housing development (Drakakis-Smith, 1981)

##### **a. Formal private housing development by individual owner-occupiers**

In the urban areas of Iran, for example, the share of house building personal consumption ranged between 76 and 92 per cent of the total annual production in the 10year period of 1976 to 1986 (Keivani & Werna, 2001). A major part of the financing of the production of such units however, were from personal means of savings, sale of jewellery and other valuable items and borrowing from family and friends.

Speculative housing provision by the private sector, on the other hand can occur on a large scale which requires the involvement of formal banks for the provision of credit and is usually intended for the high income groups of the population whose effective demand is guaranteed (Baken and Van der Linden, 1993)

#### **b. Commercial formal private housing development**

In Bangkok, Thailand, a combination of high economic growth and increased real wages and effective demand among all sections of the population, supportive policies by the government in the form of tax incentives and credit allocation and ample supply of mortgage finance from both commercial banks and the Government Housing Bank has led to a situation where the share of developer built housing has increased from 26 per cent of all housing units in 1974 to 50 per cent in 1993 (Yap, 1996). Moreover, the affordability of the cheapest housing unit produced by private developers has increased from 15 per cent in 1988 and 70-80 per cent in 1994 (Yap, 1996)

#### **c. Public-private joint venture schemes**

Public authorities usually provide cheap suitable land and tax incentives and private firms finance and building housing units on these land in exchange for being able to sell an agreed part of the projects on the open market. Such schemes have been tried in many countries including Malaysia, India and Iran (Keivani & Werna, 2001). The success of such schemes is primarily dependent on the political will of governments to pursue the policy on the one hand and the attractiveness of the scheme to private developers in terms of profitability, on the other. In Iran, for example, until 1990 these schemes had not been very successful due to the bad locations of the land plots

offered by the government, which created problems of sale of the units on the open-market (Tipple et al 1999).

### **2.10.2 Non-conventional housing**

Unconventional or informal modes of housing provision in developing countries primarily exist due to the inability of low-income groups to purchase high quality and constructed housing produced through the conventional sector (Gilbert, 1990). This situation itself is brought about by the inability of peripheral capitalist development to absorb large sections of the urban population in formal sector. However, the exact form of such provision depends on the political, socio-economic and cultural conditions of the relevant countries and cities within each country (Gilbert, 1990; Drakakis-Smith, 1981). Land invasions and illegal occupation, for example, maybe tolerated more in cities with a high degree of public or communal rather than private ownership of land.

#### **2.10.2.1 Squatter settlements**

In the years between 1950 and the mid-1980s squatter settlements provided the most common form of housing provision in developing countries with an annual expansion rate of between 15 and 20 per cent up to the mid 1970s (Keavani & Werna, 2001). These settlements primarily refer to the illegal occupation of land by households for their shelter purposes.

In Valencia and Lima squatter settlements have been enhanced by the existence of large amounts of vacant public land and a tolerant attitude to land invasions and informal house building (Gilbert, 1990). In some West African cities such as Accra

and Kumasi, however, squatter invasions are rare despite the availability of large tracts of communal tribal land (Tipple et al, 1999). In Mexico City, on the other hand, land invasions are much less common than other Latin America.

The actual settlement development and construction varies widely across cities depending on the income level of squatters and the general socio-economic and political situation. In Bangalore, India, the mean time for the construction of housing units in squatter settlements is five years, with a minimum of three and a maximum of eight years (Keivani & Werna, 2001). Case studies of *gecekondu* settlements in Ankara and several barrios in Caracas, have shown that the eventual building standards of many units are comparable in most or all aspects to conventional middle class housing units in terms of internal services and building materials (Ramirez et al, 1992). With the experience of Bombay, Desai (1996) states that community organisations are formed to manage all common affairs of informal settlements including adjudicating in local differences on the use of resources. However, their primary objective is identified as obtaining basic services such as water, drainage, street networks and electricity.

In the case of Libya, the shanty areas have been removed and the people who used to live there were transferred to new public housing units. As a result, these areas do not exist at the present time.

Attir (1983) stated that:

*During the eighties Libyan cities were free from the shanty areas which still existed in the majority of Middle Eastern Countries. (P 60)*

In the early 1970s in Libya, a development plan was aimed at improving the living conditions of the residents. One of the objectives was to provide a new house for every family, as well as other facilities. Since the establishment of these facilities, the shanty areas have been removed (Mukhtar, 1993).

#### **2.10.2.2 Informal land subdivisions**

Since the early 1980s illegal subdivision of land by private developers is gradually replacing squatter settlements as the dominant form of housing provision in most developing countries (UNCHS, 1996c). The change in Nairobi's informal settlements between 1969 and the mid 1990s, from areas where housing was primarily characterised by self build to areas where commercial and market mechanisms dominate the low-income housing scene both for rent and owner occupation (Amis, 1996).

In some other countries particularly many West African cities and Papua New Guinea there is also a high degree of informal subdivisions on customary land, which was given to households as gifts by original customary owner or another person who has the right to allocate (UNCHS, 1996c; Tipple et al, 1999).

#### **2.10.2.3 Informal low-income rental housing**

The proportion of households in rental accommodation tend to vary between different countries and cities. In comparison with the various forms of owner occupation the rate of tenancy reduces with economic development of the most of the developing countries (Keivani & Werna, 2001). This is shown by the fact that the proportion of renters in urban centres of India have fallen from 53.7 per cent in 1961

to 46.4 per cent in 1981 and 37 per cent in 1988 (UNCHS, 1996c). Similar reductions can also be seen for the Colombian cities of Cali and Bogota where the proportion of tenants has respectively reduced from 42 and 50 per cent in 1973 to 27 and 40 per cent in 1985 (UNCHS, 1996c). Moreover, the available data also suggests that during the 1980s the highest amount of renting occurred in the cities of West and sub-Saharan Africa with some cities such as Port Harcourt, Nigeria, and Thika, Kenya, respectively having as much as 88 and 99 per cent of their households in rental accommodation (UNCHS, 1996c). However, new evidence by Tipple et al (1999) with respect to the Ghanaian cities of Accra, Kumasi and Berekum largely points to low rental levels and low levels of exploitation of tenants

### **2.11 Housing policy in the former Eastern bloc**

Because of economic and political pressures, market economies emerged in the countries of East Central Europe and the former Soviet Union in the 1980s and early 1990s, and gradually brought about the demise of the system of centrally planned command economies which had been set up under socialism in earlier decades (Gowan, 1995). However, within the context of rapid political change, emerging housing policies in, for example, Hungary, the Czech Republic and Poland needed to take account of the legacy of previous policies before introducing new solutions to often old problems. Within East Central Europe there had been three common features of housing provision during the communist period of government (Turner, 1992). First, there was almost a complete absence of the private rented sector, private investment property being nationalized after the Second World War. Second, because of wartime destruction and the lack of building during the war, there was a substantial shortage of dwellings in the 1950s and 1960s, which necessitated the



large-scale construction of state or state-sponsored in high-rise estate. Third, although there were large home-owning sectors throughout most of East Central Europe (mainly because there were comparatively large rural populations), when communist governments took over in the 1940s it was not considered appropriate to nationalise this sector of housing (Turner, 1992).

During the 1990s, with the substantial reductions in state-funded housing investment, with rents rising to market levels, with housing management being transferred from central government to private agencies, with an increased reliance on private finance to expand owner-occupation, and with massive programmes of privatisation depleting the social housing stock, it was very evident that a liberal welfare regime was being created (Balchin et al, 2000). However, although housing privatisation was undoubtedly the single most distinguishing feature of the transformation of the housing sector from the Soviet, centrally planned model to a more market-oriented system (Struyk, 1996). While programmes of housing privatisation were introduced extensively throughout the former Soviet bloc, involving a large number of sales at discounted prices and enabling individual units in multi-household buildings to be privatised, quite a high proportion of state housing in some countries was not claimed by its tenants because of concerns relating to the costs of maintenance, repairs and rehabilitation (Balchin et al, 2000).

In the Russian Federation, with 100 per cent discounts, a total of 11 million units were sold between 1988 and 1994, but this represented only 36 per cent of the state housing stock at the start of privatisation and in Hungary, with 50-85 per cent discounts, only 39 per cent of its stock of 306,000 dwellings had been sold from the

mid-1980s to 1994 (Struyk, 1996). In Estonia, however, 85-90 per cent of its stock of state housing was sold between 1993 and 1995 with the aid of 90 per cent vouchers, and in Bulgaria over 90 per cent was sold between 1958 and 1994, with 90 per cent discounts.

In the former Eastern bloc, governments have sold off a substantial proportion of their housing stocks to realise capital receipts and reduce the costs of management, repairs and maintenance, while simultaneously increasing the private rented sector and/or owner-occupation. A simultaneous reduction in the rate of house building in this sector and a decrease in the size of the stock are also intended to reduce the level of public expenditure and public sector borrowing (Balchin et al, 2000). In the transition economies of east Central Europe and the former Soviet Union, there has been a decline in state housing since a high proportion of the stock has been transferred to private ownership, and it is evident that governments in this region have tended to embrace the liberal system of housing enablement.

With economic growth, housing policy systems in the newly industrialising and developing countries might gradually emerge or become consolidated during the twenty-first century. However, in the 1980s-1990s, there was a clear retreat from state provision in these countries. This process has been particularly dramatic in East Central Europe, where the privatisation of the state housing stock may be the single most distinguishing feature of the transition of these countries (Habitat, 1996). In many newly industrialising and developing countries, recession, debt crises, cuts in public expenditure and structural adjustments have resulted in the discontinuation of

large-scale social housing programmes, and the selling-off of much of the stock (Habitat, 1996).

## **2.12 Housing planning and development strategies in Third World countries**

Urban housing policies have been unable to provide shelter at costs that intended beneficiaries can reasonably afford. Such failures have exposed the weaknesses in traditional approaches to planning and encouraged the search for policies that are based on an understanding of what is feasible as well as desirable.

Writing on the housing situation in Latin American cities, Gilbert (1994) saw sub-standard housing as an inevitable solution. He stressed that given the unenviable background of poverty among urban dwellers, inequality in society and a land market dominated by commercial monopolies and interests, that a proper house was clearly beyond the reach of most poor families. In most newly industrialising countries and in all developing countries, the majority of people are unable to purchase houses that have been professionally surveyed or built (Balchin et al, 2000). At least half of all city dwellers in these countries live in sub-standard informal housing, for example 90 per cent in Addis Ababa, 70 per cent in Casablanca, 61 per cent in Caracas, and 60 per cent in Bogota and Mexico City (Potter and Evans, 1998).

Since the 1960s, policy responses to housing and dwelling environment issues of the low-income groups in the Third World urban centres have changed significantly. These changes, according to the United Nations Centre for Human Settlements, reflect different perceptions of informal settlements and slums and of the process of rural-urban migration that has partly fuelled their growth (UNCHS, 1987). Since the late 1980s, are witnessing a policy shift in the role of government in housing and

related services. The new shift in policy referred to as, the enabling strategy (Brennan, 1993) is supported by the United Nations Centre for Human Settlements and the World Bank. The Global Shelter Strategy to the year 2000 prepared by the UNCHS elaborated on the enabling approach. Government functions are to shift from provider of housing to managing the legal, regulatory and economic framework in such a way as to create an environment for the people and the private sector to provide housing and services (UNCHS, 1996c). The UNCHS defended the new approach by insisting that, given economic constraints facing the developing countries, they are not in a position to invest heavily in housing programmes (UNCHS, 1993).

In a related development, the World Bank urban policy changed from the affordability paradigm of the 1970s and 1980s to a paradigm that focuses on market economic efficiency (Linden and Baken, 1993). With respect to housing and services, this means that the private sector is to become the main force for housing development, while the government takes the secondary role of enablement such as improving the financial regulatory environment. However, reservations have been expressed that the World Bank's interest in the enabling approach is enabling housing markets to work rather than on enabling policy on the private formal sector as insensitive to great income inequality and severe poverty in Third World cities. They argued that the informal/illegal sector rather than the private formal sector should be enabled because it has proved willing and capable of catering for low-income groups.

It needs to be pointed out that an enabling strategy could refer not only to new housing development, but also to the improvement of shelter and services. This is recognised by the global report on human settlements which stresses:

*“One measure of a government’s commitment to enabling policies` should be the extent to which it has moved from upgrading projects` to institutionalising upgrading within city and municipal authorities who develop the capacity and knowledge to continuously work with the inhabitants of low-income settlements in upgrading the quality and extent of infrastructure and service provision (UNCHS, 1996).*

In essence, the government is to enable the private sector, including local residents not only with respect to new housing development but also the provision of services and the improvement of shelter in the existing settlements that are in poor condition.

### **2.12.1 Public sector**

The public sector, which produces conventional dwellings, includes the various central and state government departments and agencies, and institutions owned or controlled by government (Sundaram, 1990). Public sector activities are often concentrated on producing subsidised housing aimed at its own employees and/or at providing homes for low-income households.

In the Third World, public housing constitutes but a fraction of the urban housing stock and contributes generally less than 1 per cent of the new construction produced each year (Okpala, 1992; Wakely, 1988). Records show that direct public sector intervention in the urban housing market (through the provision of finance, the development of land, or the construction of dwellings for rent or sale) in most independent Third World countries has a relatively long history dating back to the

colonial era and has had varying degrees of success. Wakely (1988) reviewed cases from India, Brazil, Colombia, Africa and Indonesia, and concluded that public housing agencies have been established in Third World countries over the last 30 to 40 years. Public sector intervention in the housing market during this era was, therefore, limited to the provision of rental units in the form of township houses for married workers and hostels for single ones by central governments, municipal authorities and employers (Edwards, 1990).

One of the most successful public housing programmes in South East Asia is in the city-state of Singapore. The programme involving the selling-off public housing to its tenants is state-driven and state-sponsored, closely linked to the government's financial planning and savings system, and has relieved the government of a large proportion of its housing development and estate management debt (Balchin et al, 2000). The government has been able to address the health and an environment problem associated with poor and inadequate urban housing and has taken effective action.

Many studies have shown that public policies fail to provide housing for the poor, thus they have created an alternative mode of provision, referred to in official circles as the informal sector (Keivani & Werna, 2001; Pugh, 2001). In some countries the informal sector has experienced more growth than the formal sector. The existence of this sector was recognised in Africa as early as the beginning of the 1970s (Mukhtar, 1997).

In respect of the participants of the public sector in building large numbers of dwelling units in many developing countries, it faces many problems in developing countries and has been criticised on a number of counts:

- Public housing programmes are applying Western solutions to solve the housing problems in the developing countries, which takes the form of high-rise buildings. Their design is usually not suited to the culture and the social aspects of the society and therefore, does not meet the needs of the local households. It is often built in small apartments, which does not suit the large families with the average size of 6 persons in Libya (SOP, 1984). Studies by Tipple (1991; 1992) in some developing countries showed that many houses with unsuitable designs have been extended and transformed.
- The design standard usually involves advanced technological industrial methods, which uses a high standard, which led to high cost of dwelling units that the low-income groups cannot afford without subsidy. Accordingly, most governments try to solve this problem by cross subsidy. Although this policy can overcome the problem of affordability, in many countries the rent is still too high particularly with extra charges for electricity, water and transport. As a result, in many cases the low-income people and poor families usually sell or sublet to middle income groups, to solve their housing problems (Laquian, 1983; Drakakis-Smith, 1979; Wakely, 1995).

- Public housing schemes are mostly in unsuitable locations, outside the inner city, leaving the inner city free for commercial development. The provision of transport is inadequate.
- Public housing projects usually took the form of high-rise buildings, which again does not suit the culture of third world people, particularly rural migrants. Also, these buildings generate many problems, such as the unavailability of water in the higher storeys, lifts breaking down and lack maintenance.
- Many public housing projects use prefabricated building systems imported from Western designers. This does not suit the developing countries in terms of maintenance and climate particularly in the hot areas.

In contrast, despite the general unsuitability of programmes to construct complete low-cost dwelling units to meet the housing needs of the urban poor, such programmes still continue to play a large part in national housing policies (Rakodi, 1986). This is because no country relies exclusively on the private sector to solve the problem of sheltering its low-income households (Linneman & Megboluge, 1993). This idea is also supported by Addae-Dapaah (1996) when he illustrated that public housing programmes still play a role in solving the housing problem in some countries.

In Libya, the public housing sector constructed 37% of the total dwellings constructed between 1970-1990 and it is still operative in providing a large number of dwelling units. In Singapore, public housing policy has also played a very



important role in the national development of the country. Lee and others (1993) argued that Singapore provides an excellent example of how a developing country has formulated an integrated housing policy to modernise the country.

### **2.12.2 Sites and services scheme and settlement upgrading**

According to Onibokun (1989) three important considerations are central to the concept of sites and services:

- The project must provide a package of benefits that is widely acceptable and affordable by the beneficiaries; the charges must be small mortgage repayments not generally exceeding 20 percent of the income of the participants;
- The cost of the project must, to a great extent, be recoverable;
- The programme must be capable of being replicated to meet the demand of others for urban housing and community services.

The major attraction of the sites and services scheme seems to be its deliberate attempt to eliminate the demerits of earlier programmes: Inadequate regard for the socio-cultural of the people and the neglect of target beneficiaries in the final allocation of residential units in public housing programmes. According to Rakodi (1986) and UNDP (1996) the occupants are eligible for loans and technical advice to build or extend their houses to some initial minimum standard. This programme brings down the cost of services by reducing standards, and housing costs by using self-help labour to make decent housing available to the urban poor. The infrastructure such as water, electricity, sewage and solid waste disposal, and drainage may be provided (Larbi, 2001).

Accordingly, this programme will increase the housing stock, which most governments have found difficult to achieve. In addition, site and services projects will provide a decent environment by providing social facilities such as schools, health and a site for commercial and other economic activities. According to the World Bank this project can provide:

- Increased supply of building plots and services
- Improvements in the living conditions than are available in unplanned squatter settlements
- Restraint on the growth of unplanned squatter settlements
- Better general environment
- Efficient new townships within a more efficient urban development pattern

Onibokun et al (1989) recommended, to reduce subsidies and improve on cost recovery strategies, pricing policies for sites and services projects must be revised to reflect the true resources costs (i.e., land, building materials, infrastructure, administration and recurring costs).

Upgrading on the other hand is concerned with an already built-up area, usually an informal, low-income settlement. The composition of these settlements is generally those of low-income brackets, who usually might have migrated to the city from the rural areas. In Latin America the phenomenon has predominantly been one of illegal squatting on vacant land, or mass organised land invasions (Larbi, 2001).

Mosha (1995) illustrated that upgrading is a housing process in which the main emphasis is on upgrading the housing stock through a combination of house construction or improvement loans, technical, secure tenure, the reduction of density, and so on. This programme is considered as the second component of the policy package adopted and widely supported by the World Bank in the early 1970s, (Mukhtar, 1997)

### **2.12.3 Self-help housing building**

Self-built housing is defined as housing built by people for their own use and not for sale or rent on the market. Therefore, the process from design to usage is totally determined by the future users. Government intervention in self-built housing is minimal. The presence of this housing varies by country. Self-built housing may be legally or illegally built on private or public-owned land. Its quality may or may not accord with standards set by governments. Self-help housing has its own characteristics issues of financing. The labour values of self build, the management of the process and participatory environmental improvement can be regarded as saving (Pugh, 2000)

In some cases low-income households have also built their own units on rental land (Yap, 1996; UNCHS, 1996c). This form of informal settlement exists in some areas of Bangkok. However, while the households have more control over their housing units due to their own efforts they are still subject to lack of security of tenure over the land and resultant unwillingness to invest in their housing units (Keavani & Werna, 2001). Other examples of self built housing on rented land are to be found in

Papua New Guinea, Fez in Morocco, Calcutta, Mombassa and Abidjan (Keavani & Werna, 2001)

#### **2.12.4 Upgrading**

In conclusion, it is fair to say that, although public housing has been subject to criticism by most of the analysts, many developing countries continue to base their housing policies on the provision of public housing to meet the housing needs of the urban population. While the construction of complete housing units may form part of the housing policy in many countries, it is often only for particular groups such as civil servants and low-incomes.

#### **2.13 Summary and conclusion**

This chapter explored broad concepts and idea relating to housing in developing countries. It began by reviewing issues concerning the concept of housing, need and demand. Affordability was examined for the purpose of learning how it could be applied in the planning and design of a low-income housing programme.

Need is related to the total requirement for housing regardless of the ability to pay, whereas demand is the number of households who are able and willing to pay a certain amount for particular housing and services. As most of the low-income groups are unable to afford a certain amount for housing, many countries try to solve this problem by subsidising the gap between the monthly housing repayment and the amount, which the household can afford. These subsidies cannot be offered on a large scale, because most countries have only limited resources at their disposal.

This chapter also reviewed housing provision in the developing countries. There appear to be three major sources of housing provision in the developing countries. Firstly, the private sector, which supplies, the middle and upper income groups. Secondly, the public sector, which supplies both the lower and middle-income groups; and thirdly, the popular construction sector to meet the needs of the poorest households. Housing construction is divided into conventional and non-conventional sectors, the former comprising public and private and latter slums and squatter settlements.

The housing literature shows that most of the developing countries are unable to meet the housing needs of the urban poor. As a result, a large proportion of the urban poor are living in squatter and slum areas, which lack many facilities.

Lessons of housing policies and programmes in developing countries have been discussed in this chapter. It was established from a review of relevant literature that public housing policy, which built new housing in various forms is not able to solve the housing problem for the lowest income groups, but it is still used as the main housing supply in many countries in the world. The experience of public housing in developing countries has revealed lot of similarities as issues pertaining to external influences. In Libya, for example, public housing policy needs further investigation to assess whether it meets the populations needs or not.

In conclusion, this chapter established that, neither public housing policy nor site and services and self-help housing are able to meet the needs of the low-income urban population. Therefore, the real challenge of the 2000s and beyond will be to find a

planning approach, which will be able to raise standards of housing and public services.

However, this chapter has provided a context for an examination of parallel issues in the context of Libya and Tripoli in Chapter 3, and for the empirical investigation of the research issues in the study areas in the rest of the thesis.

**CHAPTER THREE**  
**HOUSING POLICIES AND URBAN**  
**CHANGE IN LIBYA**

# CHAPTER THREE

## HOUSING POLICIES AND URBAN CHANGE IN LIBYA

### 3.1 Introduction

Libya's social, political and governmental system has undergone a series of changes since 1951, the year of her political independence from Italy. Throughout this period, the country's housing production and delivery mechanisms have directly reflected those dynamic transitions. Thus, political and financial commitment to housing provision has changed with the different stages in the country's development. After the discovery of oil the country was transformed from a poor one to a rich one. This has resulted in radical changes that affected the life styles of the people. Jobs and other opportunities were available in the large cities, whilst the rest of the country lacked such opportunities and facilities.

One of the major problems facing most of the developing countries is the rapid growth of the urban population. During the oil exportation period of the early 1960s, Tripoli increased in both population and area. This has resulted in a concentration of the population within this city, which has become the most important port, as well as the commercial, employment, administrative and educational centre of Libya. The housing sector has been directly affected by social, political and economic changes. Different policies have been adopted to tackle the housing problems. These policies are discussed in this chapter.



### **3.2 Housing policy in Libya**

Housing policy in Libya will be divided into three periods. The first focuses on the immediate post-independence period (1951-62) prior to oil revenues, when the quantitative housing need was acute and construction figures remained low. The second period, (1963-69) marked the beginning of the new era of deliberate public participation in the process of housing policy formulation and implementation. The third period looks at the post-revolution years of (1970-2000) when housing sector construction increased rapidly with the active participation of the organised private sector

#### **3.2.1 The immediate post-independence years prior to oil revenue (1951-62)**

Libya entered its early post-independence era with an acute housing shortage in both its major cities and in the rural regions. Amongst the most serious of the housing problems were the following:

- Quantitative housing deficit;
- A substantial stock of substandard dwellings;
- Lack of proper maintenance of the existing stock which were in reasonably good condition;
- The proliferation of slums, unplanned development of cities;
- High cost of urban land;
- Severe shortage of technical and skilled labour for the construction industry;
- Shortage of private capital;
- Shortage and high cost of building materials;
- High rate of population growth;

- Massive urban-ward migration; and
- The special housing needs of nomads (who constituted about 21% of the total population).

In 1952, the *First Six-Year National Development plan (1952-1958)* was approved. This stressed the reconstruction of war damage, public works and public utilities; training, education, agricultural research, experiment, demonstration and improvement; and the restriction of population growth (Allan, 1981). Housing construction was limited and had been left to the people themselves. Construction of private houses in the rural areas was undertaken entirely by the owners while general contractors undertook those in the urban centres. Table 3.1 illustrates the private building activity in Tripoli from 1957 to 1962. In the urban centres, the rate of house building was largely hampered by shortage of construction firms and labour. For example, there were only 146 contractors registered in the Department of Public Works in Tripoli and 112 in Benghazi (Doxiadis, 1964).

In 1962, a *Family Budget Survey* for Tripoli town revealed conditions of harsh overcrowding: 4% of the people were living at densities of 4 or more persons per room; 39% at densities of 2-4 persons per room; and only 15% at below 2 persons per room (Doxiadis, 1964). Similarly, 45,300 dwelling units, which is about 24% of the national housing stock were dilapidated structures, lacked minimum facilities and were constructed of materials of very limited life span.

Furthermore, 36,200 units which is about 19% of the national housing stock, were in need of major improvements such as the addition of sanitary facilities, repair of roofs, and so on (Awotona, 1990). With regards to the shortage and high cost of

building materials, the local production accounted for only about 20% of all the building materials used in the country (Stroller, 1962). Although the housing conditions were difficult as briefly illustrated above, this is because the government did not intervene in the housing sector and did not create any institutional or legislative machinery to facilitate new housing provision.

**Table 3.1 Private Building Constructions in Tripoli City Between 1957 and 1962**

Type of building	1957	1958	1959	1960	1961	1962
(A) Residential						
i. Apartment buildings						
Number of buildings	39	26	31	23	23	20
Number of apartments	195	102	185	123	170	140
ii. Villas						
Number of villas	115	158	163	125	78	50
Number of apartments	298	402	163	315	216	135
iii. Traditional (local) houses						
Number of houses	63	80	98	120	165	726
Number of apartments	82	96	127	156	216	812
(B) Non-residential						
Number of units	28	42	28	37	65	809
<b>Total</b>	<b>820</b>	<b>906</b>	<b>795</b>	<b>899</b>	<b>933</b>	<b>2692</b>

*Sources: SOP (1967) Statistical abstracts of Libya. 1958-1962*

The period (1952-1962) was, therefore, characterised by the generally low level of housing construction and the consequent increase in the housing deficit due mainly to a rapid population increase.

### **3.2.2 The Second Period: The early years of oil revenues**

The discovery of oil in the late 1950's improved Libya's economic status, but most of its people still lived in inappropriate housing or were homeless. The government of the time attempted to solve this problem. The housing problems, which plagued Libya from 1951 to 1962 endured beyond that period. In 1964, 24% of all the

dwelling units in Tripoli city (approximately 8,000 units) and 17% of those in Benghazi (about 3000 units) were officially classified as slums. The same reference shows that, 41% of the total population of Libya were living in shanties and tents, 3% in caves and, at the same time, most of the housing provision lacked sanitation. After oil production began in the early 1960s there was a dramatic change in the national economy. This gave the government a chance to introduce the first five-year plan in 1963. The purposes of this plan was stated in the Doxiadis (1964) as:

*Provision of suitable sanitary and reasonably low-rent housing to alleviate a large burden of living costs, especially for citizens of limited means and resources. This is to be achieved through the inauguration of low-cost housing projects throughout the various depressed population centres all over the country. (P 49)*

However, The most important issue in realising the plan is implementation, which needs skilled technicians, planners and architects who are responsive to the real needs of society. After 1963, the government rapidly established plans and programmes and quickly created the institutions needed for their implementation. These housing programmes had general definitions, but did not result from an integrated policy defining problems. The first attempt to create a National Housing Policy was in 1963 when the Ministry of Planning and development commissioned Doxiadis Associates, to undertake an extensive study of the housing conditions and problems in Libya and on the basis of that study to devise the appropriate housing policies and programmes to be followed in the 1964 entitled "Housing In Libya" (Doxiadis, 1964).

The first ever National Housing policy for the country was recommended. It was suggested that this policy should aim at achieving the following 3 major goals (Doxiadis, 1964):

- The elimination of slum dwellings within 10 years;
- The achievement of a reduction in the average occupancy density from 1.37 families per dwelling to 1.1 families per dwelling; and
- The provision of adequate community facilities.

The basic principles for the National Housing Policy were strongly recommended as follows:

- Maximisation of private participation through the investment of capital and efforts in housing activities;
- Integration with overall development policies of the country;
- Differentiation of housing policies and programmes to meet the varying needs in different parts of the country and
- Adoption of correctly planned approaches for overall housing improvement.

Moreover, the consultants (Doxiadis, 1964) recommended the adoption of a national housing programme. The first stage of this programme covered a period of five years. This was defined as The Basic Foundation Programme, which contained three comprehensive programmes. As follows:

- Urban Housing Programme: This group comprised individual projects aiming at covering the most urgent of the contemporary housing needs of the urban centres;

- Rural Housing Programme: The object of this programme was to raise the living standard and to improve housing conditions in an attempt to slow down the accelerating migration from the rural areas, and
- Special Housing Programme: This programme was conceived as individual programmes each of which was intended to provide dwellings urgently needed both in urban and rural areas.

Libya's First Five-Year Development Plan was initiated in 1963 and 10% of the planned investment budget was allocated to the housing construction programme. In the first year 4,000 dwelling units were built, 2,500 in Tripoli and 1,250 in Benghazi (United Nations, 1969).

In June 1963 the government also commissioned Doxiadis & Associates to undertake a survey and a comprehensive study of housing conditions and problems and to set up the appropriate housing policy and programmes which would need to be adopted to overcome the acute housing problems in the country (Essayed, 1981).

In August 1965, a huge programme was launched to further the construction of housing throughout the country this was the Idris Housing Project. According to this programme 100,000 dwelling units, costing about L.D 400,000,000 were to be built over a period of five years. 60% of the project's funds were allocated to rural areas in order to stabilise the high rate of urban rural migration (Wedley, 1968).

In 1966, the Ministry of Housing was created and the first housing programme began. Housing policies were poorly co-ordinated, houses were started and left unfinished and some were built for influential people, e.g. a cabinet member or

member of parliament, who considered the project to be for their own benefit (Almuakkaf, 1976). However, these efforts were ineffective because of a misunderstanding of the nature of the problem.

The housing construction programme consisted of two types of project. The popular or the economic housing projects were designed for low-income people, mainly shanty dwellers. The other type was of middle or average housing projects, built mainly for civil servants.

During the period 1965 and 1969 the number built of the first type was 11,553 dwelling units; 3,332 dwelling units were built of the second type during the same period. Besides the fact that this number of housing units was much less than was needed, most of them, especially the economic housing type, were just slums after only one year of their occupation because they were badly constructed. Most of them were just two room houses, and very few of them had three rooms or more. The middle project houses were reasonable, but there were not many and most of them were not given to the people who were in big need of them (Sharnanna, 1976).

In Libya, in this period, most of the housing projects were implemented in the absence of an adequate social and economic framework and also in the absence of proper physical planning policies.

### **3.2.3 The third period: Housing policy after 1969**

Since the Revolutionary Government came to power in Libya in September 1969, it committed itself to the provision for every family of a “suitable, decent house” regardless of the family’s income or location. The government in 1969, had a main

goals to improve the living conditions of the poor people. In addition, the aim of the Revolutionary housing policy was to help low-income groups secure housing by a variety of means, e.g. renting, purchase, or building. However, despite the fact that the government decided, in conformity with its socialist principles, to completely socialise the housing sector, it initially gave a lot of encouragement to the private sector to contribute in solving the housing problem through granting it loans, with little or no interest, for housing construction (Awotona, 1990). In the early 1970s the plan aimed to provide a large increase in new housing units to reduce the housing shortage, replace unsuitable dwelling units, and accommodate the increase in the number of families. This concern led the government to create a new project, the “urgent housing project” in early 1970.

The first step taken by the new government concerning its housing policy was land tenure reform. Land is one of the most important aspects of housing policy, especially in the urban areas where both population density and land prices are usually high. The second step taken by the new government was initiation and development of several housing programmes. The main housing programmes can be divided into four types:

### **3.2.3.1 The public housing programmes**

Under the public housing programmes, the government built at predetermined locations and with standard designs. This housing programme was mainly designed to provide housing for low-income groups, particularly those living, in shanty, towns. The government through its agency had to find and provide the locations for the public housing, for financing, construction, and follow-up building processes until they were completed. After that, the government agency distributes this housing



according to specific priorities. Since 1969, the public housing programmes have been organised by three major organisations. These are the Secretariat of Housing, the General Housing Corporation, and the Housing Control Department. The Secretariat of Housing generally determines the housing policies, such as number of housing units to be built and their locations. The General Housing Corporation had two major goals:

The first objective was to complete all government obligations remaining from prior public housing projects. The *second objective was to implement new housing projects*. The Corporation either planned or participated in planning projects such as the emergency housing programme and the investment housing, programme, (Secretariat of Housing, 1975). The Housing Corporation started the emergency housing project in 1970 and completed that project in 1973. The total number of housing units completed was 728 in Tripoli, Benghazi, Derna and Sebha. According to the Secretariat of Housing Report for 1982, the total housing units completed by the General Housing Corporation from the date of its establishment until the end of 1980 was 104,791.

In the first socio-economic development plan 1973-75, the government aimed to construct the largest possible number of dwelling units in different geographical areas for low-income people. This programme comprised a number of elements:

- To conduct comprehensive surveys of vacant land in the cities, to identify land suitable for housing construction.
- To sell the land to low-income groups at a price not exceeding the value of the land.

- To encourage high density construction to maximise the use of land.
- The government created a budget for projects covering the cost of both the dwelling and infrastructure.
- Demolishing the houses, which could not be upgraded and building new housing projects.
- Encourage the private sector to participate in housing construction
- Providing design skills and building materials.

The government aimed to reduce the cost without changing the construction standard. Improving the construction framework, providing building materials, using new technology and encouraging self-built housing particularly in rural areas achieved this.

### **3.2.3.2 Low Interest Programmes**

In 1971 the commercial banks of Libya were asked by the government to provide mortgage loans to all Libyan citizens. These loans were divided into two categories:

- Mortgage loans to middle income people whose monthly income was in excess of LD 100 at an annual interest rate of 4% the maximum amount of the loan would be LD 6,500 unless the loan was to cover the purchase of land, in which case the amount would be increased to LD 8,500.

These amounts were later increased to 10,000 and 20,000 respectively (Central Bank of Libya, 1976). Table 3.2 shows the number of loans that have been granted from the five major commercial banks from 1971 to 1978.

The low interest loan programme was stopped in 1981 and replaced by new mortgage programmes, which will be discussed below. The main reason for stopping the low interest loans programme was the financial problems of the Libyan government, which came about as a result of the world recession and the American embargo on Libyan oil.

**Table 3.2 Number of housing loans granted by the commercial banks (1971-78)**

<b>Bank</b>	<b>71-72</b>	<b>72-73</b>	<b>73</b>	<b>74</b>	<b>75</b>	<b>Total</b>
<b>Jamahirya Bank</b>	140	569	1587	2867	1775	6431
<b>Sahara Bank</b>	37	177	448	448	466	1934
<b>Wahda Bank</b>	102	418	1900	1700	1130	5250
<b>Omma Bank</b>	125	556	1917	1319	1022	4939
<b>Tejari Bank</b>	168	711	3173	4608	2690	10350
<b>Total of all receiving loans from commercial banks, (1975-78) 17,096</b>						

*Source: Central Bank of Libya (1978)*

- Mortgage loans for construction development: These kinds of loans were introduced with the construction development law issued in 1972. The Libyan government ordered the banks to process loans to all Libyan citizens having lands suitable for residential development but lacking funds for construction. Priority was given to those applicants who desired to construct large buildings consisting of more than four apartments, which were designed to be occupied by more than four families and were mainly for rent. The annual interest rate would be 5.5 percent, with the maximum period of repayment to be ten years.

Despite the fact that the construction development programme was very important in solving the problem of the housing shortage, especially in Tripoli and Benghazi this programme was completely stopped in 1974.

Furthermore, all the rented housing units, which were built with loans related to the construction, programme were confiscated by the government and the owners of such buildings were given compensation according to the value of the building in 1974.

### **3.2.3.3 The housing policy of 1978 and home ownership**

Libya policy on home ownership has developed rapidly since March 1978 when the Secretariat-General of the General Peoples Congress issued Law No. 4 which sets out the guidelines for home redistribution. Law No. 4 indicates that all Libyan families have the right to own one home, and no one may own more than one, with certain exceptions: Widows, whose only source of income is rent, and families with at least one son over eighteen years of age (The Official Gazette, 1978). Committees have been set up in every municipality to carry out the resolution. By 1979 the committees had completed the redistribution of apartments and houses owned by private companies and by government bodies in all municipalities. The resident tenants had become the new owners. The committees then moved to take over and redistribute properties owned by individuals, when those individuals owned more than one home. Despite the legal and personal complications, the process was completed by the end of 1980, until 1980 about thirty percent of Libyans in main towns were living in rented accommodation, most of them rented from private owners.

From 1973 to 1975 about 41 percent of Libyan private investment was in real estate. Housing therefore was most affected by the reduction in private investment. Where the private sector had usually exceeded the housing target, the public sector has failed to reach them.

Despite these government efforts to overcome housing problems, the housing market in Libya, was still suffering from a very acute shortage in the number of housing units (Kshedan, 1984). This shortage problem became more serious as a result of the reduction in private investment. Within the national five year Transformation Plan for the period 1976-1980, the socialist Libyan government set up a policy for the development of the housing sector. The broad statement of this policy was expressed as follows:

*The 1976-1980 plan is concerned that each household should get a house of a suitable size and type, taking into account the evolution planned and expected to occur in economic and social conditions, as well as in habits and customs, and the effects thereof on the form, components and conveniences of house. The realisation of these aims must be based on a comprehensive housing policy to ensure that difficulties and problems encountered in the execution of housing works in the past years, which prevented full and efficient utilisation of housing services, will be overcome (Essayed, 1981).*

The Secretariat of Planning (1976) stated the following broad guidelines and principles (Transformation Plan 1976-1980):

- Suitable sites will be provided for the construction of new houses and quarters by making available to individuals and co-operative societies of land fit for construction at reasonable prices.

- Realisation of physical integration between housing schemes and their requirements for public utilities and services building such as schools, dispensaries, gardens.
- Meeting the requirements of the various economic sectors such as industry, agriculture, petroleum, etc., for adequate housing for their workers in their work positions.
- The design of houses should be in harmony with the size and living system of the household as well as the localities in which they are built and should be so suited to environmental conditions as to enable utilisation of building materials available locally.
- Expansion of loans through the Land and Industrial Bank and other banks to assist in the achievement of all the objectives of the medium range, housing plan.
- Taking inspiration from the importance which the state attaches to the role of the housing co-operative societies, the plan aims to remove the obstacles to the activities of these societies providing them with land fit for construction, enabling them to obtain loans on easy terms, at the same time introducing the self-service method in building wherever possible.
- Laying down of suitable bases and policies for constructional activity so as to improve its standards and overcome its obstacles, as well as conducting studies on reducing its costs through determination of the requirements of the construction plan for building materials and specialised manpower.

The Five Year Development Plan of 1976-1980 envisaged the construction of 150,000 dwelling units during this period as a part of the total needs until the year 1990, which were estimated as 562,000 dwelling units (UNDP, 1977).

This plan estimated the total needs for dwelling units up to the year 1990 (see Table 3.3)

**Table 3.3: The estimation of housing needs up to 1990**

Status	Dwelling units
Dwelling units to cover the deficit in houses in the year 1975	48,000
Replacement of the balance of the dwellings existing in 1975	6,000
Replace shacks and caves	50,000
Dwelling units to cover revolving replacement needs during 1976-90	92,000
Dwelling units for the increase in the number of families	362,000
Dwelling for meeting the needs of nuclear family needs	4,000
Total	562,000

*Source: United Nations Development Programme, Housing Development in Libya: project findings and recommendations, a report prepared for the Government of the People's Socialist Libyan Arab Republic, New York, 1977*

The achievements during 1970-80, were 192648 dwelling units had built, 75724 by the public sector and 116924 by private individuals, through loans from housing co-operatives, commercial banks, real estate banks and self-built. In addition, a further 60,000 dwellings were under construction by both public and private sector will be completed in the 1981-85 plan (SOP, 1997).

**Table 3.4: Housing construction n Libya 1970-80**

Plan period	Public sector		Private sector		Total	
	D.units	%	D.units	%	D.units	%
1970-75	43549	39	68780	61	112329	100
1976-80	32175	40	48144	60	80319	100
<b>Total</b>	<b>75724</b>	<b>39</b>	<b>116924</b>	<b>61</b>	<b>192648</b>	<b>100</b>

*Sources: SOP (1997) an assessment of housing in Libya*

Table 3.4 shows that during the period 1970-80, 40 per cent of the dwelling units built by the public sector and 60 per cent by the private sector.

### **3.2.4 Housing policy during the1980**

The aim of the government was still to provide adequate housing for every family. Public housing construction activity was limited to the Secretariat of Housing, which provided houses free to families who are financially incapable of housing themselves. The Secretariat of Housing built units for general projects (housing for employees) such as, industrial projects, health and education services, and the Secretariat of Agriculture built housing for agricultural projects.

The plan proposed a considerable increase in housing construction. The target was 206,152 dwelling units to be completed by 1985 that is to say 165%, of the previous plan. Moreover, the housing sector has usually had the lion share of the development plan budget. Table (3.5) shows the share of housing sector in the government budget during 1981-1990



**Table 3.5: The share of housing sector in the government budget  
During the period 1981-90**

<b>Plan Period</b>	<b>Total Budget</b>	<b>Housing Sector</b>
1981	100%	9.6%
1982	100%	9%
1983	100%	9%
1984	100%	9.8%
1985	100%	9.9%
1986	100%	8.6%
1987	100%	9.8%
1988	100%	7.7%
1989	100%	11%
1990	100%	8%

*Sources: SOP (1999) Socio-economic development plan*

As a result of the large amount allocated for housing development by both public and private sectors, and the steps taken by the government to improve the housing sector,

During this plan the National Investment and Real Estate Council was established as an investor in housing mainly to provide housing for rent to the workers from abroad. However, despite great efforts, the problem that remained if this housing goal was to be achieved was one of tremendous magnitude. The new policies emphasised the role of co-operative and private individual housing aiming at a further contribution of the private sector through the population's own resources in building their own houses (Essayed, 1981).

This programme included the following basic principles, which underlie housing development:

- Public authorities will provide houses free to families with limited resources.
- Loans for housing construction will be made available through lending institutions for individuals, who will be granted a loan when a determined percentage of the amount is provided by the individual as a contribution for building his house.
- All Social savings (Insurance and Social Security) will be subordinated to housing investment through renting activity for the non-Libyan manpower required for the implementation of the Transformation plan 1981-1985.
- The importance of housing maintenance has been recognised and specialised institutions will be available everywhere to enable housing maintenance to be executed according to a defined system and at fixed prices.
- The Ministry of Housing will also build dwelling units in areas of industrial investment and all health and educational facilities for that sector.
- Regulations, acts and measures relevant to housing appropriation and ownership, lending and loan granting for building houses should also be revised and unified, in line with the stated housing policy.
- Local authorities will help in land provision and the state will pay for the public utilities and facilities for housing.

However, the plan proposed a considerable increase in housing construction to build 146,200 new dwelling units and the completion of 59,952 dwelling units under construction from the previous plan (Mukhtar, 1997).

**Table 3.6: The number of dwelling units estimated to be constructed during the 1981-85 plan.**

<b>Institutions</b>	<b>To Complete 1976-1980</b>	<b>New Units 1981-1985</b>	<b>All</b>
Public institution, Secretariat of Housing	44,683	43,700	88,383
Individuals through commercial banks, co-operatives, and the REISB	11,237	65,000	76,237
National Investment and Real Estate Council	4,032	37,500	41,532
<b>Total</b>	<b>59,952</b>	<b>146,200</b>	<b>206,152</b>

*Sources: SOP (1981) The 1981-85 socio-economic development plan. Tripoli-Libya*

The implementation of the 1981-1985 Plan projects and programmes the responsibility of the following institutions:

- Secretary of Housing, (SOH) involving only in direct execution of dwelling units for certain groups and also public facilities.
- Property Investment and Saving Banks, (PISB) grant loans for housing construction.
- Housing Co-operatives, (HCO) execute housing complexes for their members.
- National Investment and Saving Banks, (NISB) execute housing projects for housing investment.

In 1987 the Secretariat of Housing was abolished and some of its responsibilities, particularly those related to construction, were transferred to other government organisations. This decision caused a defect in housing policy in the country as a whole. There was no control over the housing sector in terms of policy formulation and implementation throughout the country (Mukhtar, 1997).

### **3.2.5 The executive programme of the approved housing policy in the 1990**

The General Organisation for Housing commenced its work under the direct supervision of the Secretary of the General People's Committee for housing to shape an executive programme for the implementation of the approved policy. After extensive studies decided the following

#### **3.2.5.1 Long term plan including**

- Determination of the urban plans to prepare suitable places for the expansion expected after the year 2000 up to the year 2010. The need has been estimated for 650,000 housing units. This will need lands not less than 50000 Hectares to cover 77% of the new units and 23% to replace old units.
- By identifying suitable economic building materials of reasonable cost, based on locally available materials, which take into account the environmental and climatically requirements.
- Simplifying the methods and systems of building construction to enable every citizen to build their houses relegating the role of the state to supervision only.

### **3.2.5.2 Short-term plan**

The government changed from a provider to an enabler in the provision of housing. During the development plan from 1/1/1994 to 31/12/1996, all organisations operating in the housing sector were expected to participate in the plan by financing and constructing thousands of dwelling units and to provide the building materials, which were not available in the country for solving the housing problem.

The aims of the three- year housing programme 1994-1996 were summarised by GHC (1994) as follows:

- To build a number of housing units in accordance with the available means and financing abilities. The role of the state will be limited for constructing housing for the limited income groups only.
- To achieve the construction of the target number of housing units by the national sectors (private and public sector).
- To make an executive plan to enable people construct their own dwellings.
- To direct financial and investment resources to finance housing projects.
- To minimise the housing construction cost by controlling the distribution and marketing channels of the building materials.
- To enable national companies to participate in the housing programme.

- To change the role of the state from a guarantee of residence to enable individuals, with the exception of low-income groups.
- To replace the foreign companies, the contractor sector needs to be developed and organised. The national consultant offices should establish partnerships companies to work in housing construction.
- To collect the real estate loans and housing repayment from the housing occupiers to provide new housing loans from commercial banks to individuals.
- To persuade the cooperative societies to organize themselves to contribute in the housing programme.

The three years housing programme comprises 60,000 dwelling units to be constructed outside the government budget during the period 1994-1996 as follow:

**Table 3.7 The distribution of the estimated dwelling units during the period 1994-1996**

<b>Year</b>	<b>Dwelling units</b>
<b>1994</b>	<b>10,000</b>
<b>1995</b>	<b>20,000</b>
<b>1996</b>	<b>30,000</b>
<b>Total</b>	<b>60,000</b>

*Source: GHC (1994)*

The 60,000 units of the three years housing programme 1994-1996 were distributed as follows:

- Completion of 6,000 units by companies with previous contracts;
- Completion of 4,000 units by selling them to the Joint Stock companies and citizens;
- 3,500 dwelling units to be build by public institutions;
- 30,000 dwelling units to be built by national investment companies;
- 14,100 dwelling units to be build with loans from the Real Estate and Commercial Bank and
- 2,400 dwelling units to be build by individuals savings

The housing shortage has become more serious as a result of the reduction of private investment. At the same time, the existing housing stock needed improvement and replacement in the future.

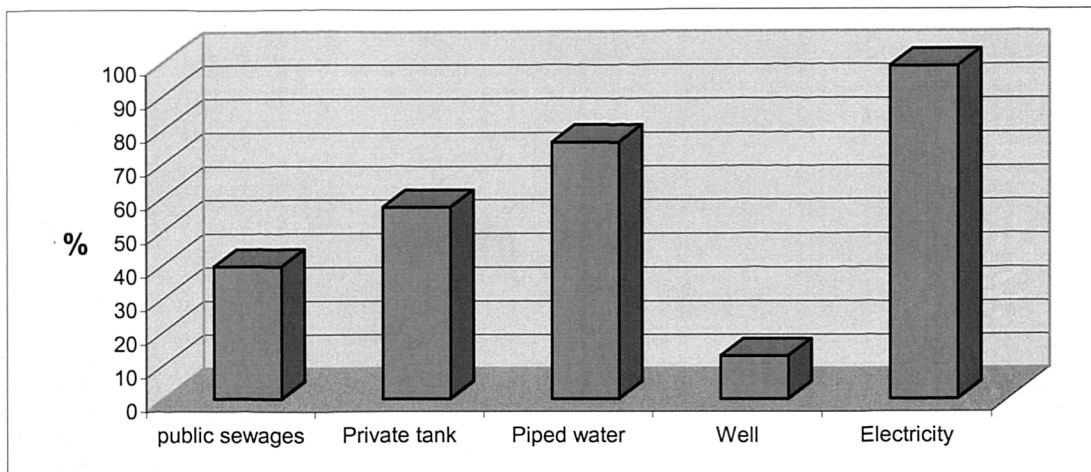
**Table 3.8: Housing construction n Libya 1988-96**

Plan period	Public sector		Private sector		Total	
	D.units	%	D.units	%	D.units	%
1988-1992	19588	29	48655	71	68243	100
1993-96	28695	40	43295	60	71990	100
Total	48283	34	91950	66	140233	100

*Sources: SOP (1997) an assessment of housing in Libya*

Table 3.8 shows the achievements during 1988-96, were 140233 dwelling units had built, 48,283 by the public sector and 91,950 by private individuals, through loans from housing co-operatives, commercial banks, real estate banks and self-built. Table 3.8 shows that during the period 1988-96, 43 per cent of the dwelling units built by the public sector and 66 per cent by the private sector.

An assessment of housing policies during the post-revolutionary period, it clear that the authorities are doing their best to achieve worthwhile aims. In addition, it appears that most of the important elements of the housing sector were taken into consideration, aiming to provide decent dwelling for every family. However, whether or not these objectives have been achieved is an empirical question. Furthermore, SOP (1990) in a report on national economic achievements during the period 1970-1990 showed that, investment in the housing sector reached LD 3,528,500 million to construct 312,111 dwelling units. Of this figure, 114,590 dwelling units were completed by, public sector and 197,521 dwelling units by the private sector. In addition, 114,629 dwelling units were still under construction. The 1999 population census shows that there are 589,427 buildings used either exclusively or partly for residential purpose. Figure 3.1 shows these buildings in relation to the basic utilities provided in 1999.



**Figure 3.1: Basic utilities provided to residential buildings**

Figure 3.1 indicates that there was an improvement in the housing conditions. The number of buildings using the sewerage network system was increased from 36.7 per



cent in 1984 to 39.4 in 1999 and the number of buildings using other methods of sewage disposal decreased from 10.1 in 1984 to 3.7 in 1999. The power supply was still the same, with almost 99 per cent of the buildings using electricity as a means of power supply. Therefore, current housing policy with an emphasis on the construction of large numbers of dwelling units, had to take into account the Libyan way of life. Despite the government efforts to overcome the housing problems, the housing market in Libya, particularly in Tripoli city, is still suffering from a very acute shortage in the number of housing units. The main problem lies in the housing shortage. The quality of most public housing is far from satisfactory, and badly maintained. This particularly true of the high rise buildings, which appear to be of a high standard, but don not reflect cultural and social traditions of the Libyan people. Also the absence of government control over the management of public housing results in poor conditions, particularly in the high-rise blocks where the residents are unable to carry out maintenance themselves.

The absence of new plans to provide land for housing development, caused inadequate availability of plots particularly for individuals. This situation caused an increase in land prices, which led the people to look for plots of land outside the city master plan. Lack of stability and continuity in the institutional framework for the housing sector, for example, since 1973, the housing sector was under the responsibility of the SOH through the GHC, then the SOH took over the responsibility of the GHC. The later was abolished in 1986, and their remit then came under the SOU

The money allocated for the period 1991-2000 reported in table 3.9

**Table 3.9: The share of housing sector in the government budget  
During the period 1991-00 in million (U.S Dollar)**

<b>Plan Period</b>	<b>Total Budget</b>	<b>Housing Sector</b>
1991	5,147.5	0.0
1992	4,647.9	76.8
1993	5,374.3	94.1
1994	3,652.9	187.8
1995	7,526.1	385.1
1996	8,966	528.9
1997	9,579.7	471.4
1998	6,971.8	46.3
1999	6,406.9	46
2000	5,773.7	0.0

*Sources: SOP (1999) Socio-economic development plan, Central Bank of Libya (2002)*

The present policy of the state is to provide housing for residents who cannot afford to build their own homes: no attempt is made to involve the people in the housing process. Housing policy during 1991-2000 suffered from the lack of such supporting elements as manager skills, technical, planning and design capability. The housing Authority has been involved in directing and controlling most activities related to the building industry and makes its own decisions in housing projects, therefore, the authority ignored households' social characteristics

Due to the high intervention by the government in the housing sector it was found that the actual expenditure for the housing sector is more than or almost as much as some plans have allocated originally.

### **Management and maintenance**

During these periods the absence of effective planning control is one of the main problems facing the country in present time. Uncontrolled growth takes place in different parts in the country symbolised in building houses, shops and other facilities without any appropriate design and permission from the municipality. There is a lack of appropriate housing that suits people social and cultural background and environmental context. In this regard UN Housing Experts (1977) noted that:

*“Housing sector in Libya took and still takes great care in terms of building houses but not in terms of the necessity of an integrated, efficient and detailed housing policy which makes the housing achievements of sound meaning”*(quoted by, Essayed, 1981)

Huge public and private investments have been made in the housing sector in Libya without any effective system of administration. This has seriously affected the efforts made to develop better housing conditions in the country and has accelerated the deterioration of the housing stock. The main shortcomings in management policy may be identified as follows:

- Dwelling units are built to accommodate specific income groups. Housing is sometimes devoted to other purposes or allocated to different groups without taking into account either the background of the new dweller or his desire and preferences.

- Housing projects are usually built with little or no consideration to variations in household requirements.
- Maintenance system of public housing, have been ineffective. The outdoor space, main entrances, stairs, lifts, deteriorate faster than the dwelling units

### **Construction problems**

The capacity of the building industry is limited relative to the tremendous demands of Libyan development programmes and is very badly affected by persistent constraints and problems. Local construction companies have a low level of industrialisation and foreign companies, apart from different patterns of implementation, do not seem to contribute considerably to the modern conception of building in Libya. The scarcity of qualified technical manpower, lack of experience and knowledge and absence of managerial skills are assumed to be fundamental reasons for insufficient construction capacity. The building industry depends mainly on imported building materials and is severely affected by international inflation as well as by fluctuations in the demand and supply of different building materials in the world market.

Housing programmes have been mainly a series of sites and schemes in different urban centres, varying according to the size of the project and the number of units rather than in terms of neighbourhoods or residential communities which are an integral part of the plan of any urban settlement. The provision of adequate services and other essential requirements has not been given its relevant importance in project planning. In 1969, when political power changed, the new government aimed to

support low-income groups by constructing as many dwelling units as possible. Therefore, a large amount of money was allocated for housing activities in the development plans budget.

### **3.2.6 Housing finance system**

Housing finance is the most important factor, which countries have to consider in seeking to solve the difficult task of providing housing for poor people. The system of housing finance in developed countries is completely different to that of the developing countries. In developed countries the process of financial commitment in order to obtain a mortgage is variable and most households have access to obtaining mortgages. This is not so in developing countries, where the overall total national savings sum is less and also inaccessible or inflexible at any one time (Okpala, 1992). In Libya, financing low-income housing was the major problem during 1950s and 1960s. Little attention was given to the low-income groups. Most of the banks granted loans to government employees or to businessmen who are able to repay the loan.

Public housing projects called “popular housing” have not met household needs in terms of quantity and quality (SOP, 1973; Awtona, 1990). The most important source of public housing finance has been the government. Since the 1970s, there have been two types of housing finance, public and private sector. Public sector takes two forms.

*Firstly*, money located in the development plan budget for housing development.

*Secondly*, funds provided by public institutions such as banks, insurance companies and other investment institutions for housing activities.

### **3.2.6.1 Sources of housing finance**

The housing problems in Libya require a significant commitment of financial resources on the part of the public and private sectors.

#### **1) Public sector**

Organisations having a direct relation with the development budget:

- General Housing Corporation (GHC)
- Secretariat of Housing and Utilities (SHU)

Organisation that have their own finance resources apart from government subventions:

- National Investment Company (NIC)
- Real Estate Investment and Saving Bank (REISB)
- Islamic Call Society
- Commercial Banks
- The General Institution of Social Security (GISS)
- The Insurance Company

#### **2) Private sector**

People throughout the world generally desire to own a home, and this is particularly true in a country like Libya, where the individual feels very close, emotionally, to his home. The present Libyan government expects the private sector to play an active role in solving the housing problem. This sector depends mainly on:

Firstly, loans granted from the public institutions which undertaken housing finance through co-operative housing activity such as Real Estate Investment and Saving Bank and Commercial Banks. The Co-operative activity was not of any significance until 1973 when the government issuing a new law and regulations. A new department was created in the Ministry of Housing to advise, supervise and follow up the housing co-operative societies. The increasing number of housing co-operatives throughout the country received help and a number of subsidies in the form of payments to meet administrative expenses and technical assistance, low interest loans for purchase of land, subsidised building materials for building agricultural houses and other dwellings which were constructed away from urban and rural centres (Yassin, 1977). In addition, co-operatives are exempt from all taxes and fees. Their functions are as follow:

- To help their members to obtain loans and any assistance relevant to housing.
- To help their members to build houses for rent or sale.
- Collect the monthly payment after the dwelling is occupied.
- To help their members in the provision of land, building materials and technical assistance.
- Collect members, savings and invest them on their behalf in housing activities.

During the 1981-1985 plan the housing policy involved a shift from public sector to public sector by providing loans from (REISB) and commercial banks to individuals and housing co-operatives (SOP, 1981). In 1987, due to the financial problems the co-operatives stopped their activities and after re-establishing of the GHC in 1994, the aim was to support the development of housing co-operatives again (Mukhtar, 1997).

Secondly, sharing investment companies which are owned by groups of people building houses for sale.

Thirdly, self-financing: individuals and families save from their personal incomes and these accumulated savings are used to build their dwellings.

Fourthly, lending activities, which involve organisations providing funds for housing development to individual and co-operatives.

In Libya the lending activities for housing construction are:

- **Commercial Banks:**

Until 1971, the Industrial and Real Estate Bank was the only major bank to provide long and short-term mortgage loans to all citizens, while the commercial banks would make only short-term loans. In order to encourage citizens to own homes, the government, in 1971, instructed the Central Bank of Libya and the Commercial Banks to provide the low-income citizens with all kinds of mortgage loans.

However, five commercial banks in Libya have been dealing with lending activities for the housing sector. Each bank contributes one million Libyan Dinar to the capital of the REISB plus 25% of their distributed profits every year. The commercial banks are as follow:

- Umma Bank
- The National Commercial Bank
- Wahda Bank



- Jamahiriya Bank
- Sahari Bank

These banks provide loans to owner-occupiers, who are not bank employees, at a low rate of interest over a period up to 20 years, and for their employees by granting interest free loans either for building or buying houses repayable by monthly instalment over 20 years.

However, the amount of loans was LD 6,500 in 1971, which increased to 10,000 in 1975. This then increased to 25,000 in the 1982 with an administration fee of 10%, which decreased to 5%. During the period 1991-2000 the amount of loan was increased to 30,000 (*Secretariat of Planning, 1997*). *The Central Bank of Libya* (1978) shows that, 28,904 housing loans were guaranteed by these banks during 1971 to 1975, and 1,467,000 housing loans during the period 1990 to 1999

- **The Real Estate Investment and Savings Bank:**

This bank was established in late 1980. Its functions are to plan, and sell the land and to grant loans for prospective home-ownership. The bank introduced the interest free loans for Libyan people, the applicant have to pay a membership fee of LD1000 as a down payment. This loan is repaid in monthly instalments based on his financial capacity (*Transformation Plan, 1981-1985*).

The bank guaranteed LD 218,1 million as a loans during the period of 1981-1990 and 404.9 million during 1990-2001, 75 per cent of this was housing loans (*Central Bank of Libya, 2002*).

### **3.2.7 Renting Public Dwellings**

During the post-Revolutionary period the first step towards controlling the rents for public housing was the Rental Act 1970 and amendments following it were issued to organise the rental system of public housing, aiming:

- To provide a suitable healthy accommodation for the largest possible sector of society especially for desperate families.
- For martyrs, war veterans and disabled families, rental values are determined by the Ministry of Housing according to ability to pay.
- Households with a monthly income of less than LD30 are exempted from paying rent.
- Government employees may rent public dwellings against their housing allowance to which they are entitled. In some cases, employees are allowed to pay only part of their housing allowance for rent (20% to 40%).
- Other groups are entitled to public housing according to the following rental values:
  - a) 5% of the monthly income does not exceed LD 90
  - b) 10% of the monthly income between LD 90 -120
  - c) 15% of the monthly income between LD 120-200

During 1970 the public dwellings are not rented unless the applicant fulfils the following conditions. This was stated by, LAR (1970) as follows:

- a) He must be married, or supporting dependants.
- b) He has not bought a public dwelling before.
- c) He is not renting another dwelling.
- d) He has not been granted a housing loan before.
- e)
- f) He does not own a suitable dwelling for his accommodation.

The government Act in 1973 facilitated, the sale and purchase of public dwellings. The cost of the dwelling unit was supposed to be equal to the lowest value of a similar unit built anywhere in the country within the same year with a discount of 2% yearly since the construction of the unit, to which must be added the land cost at that time. Further discounts for the low-income groups are were follows:

**Table 3.10: The government discount in the price of public dwelling**

Annual Income	Discount
Not exceeding LD 600	90%
Between LD 600 and LD 750	80%
Between LD 750 and LD 900	70%
Between LD 900 and LD 1050	60%
Between LD 1050 and LD 1200	50%
Over 1200	No discount

*Source: Essayed, 1981 Publicly Provided Housing in Libya*

At the present time, public housing dwellers are divided into two categories in relation to the renting system:

- a) Free of charge for those whose income is limited to social security, such as the disabled, widowed women, families of martyrs, war veterans and prisoners of war.
  
- b) Housing allowance, all employees have received a 35 LD or 40 LD as a housing allowance depending on their salary. The government does not pay it to them and consider it as a rent.

### **3.3 Libyan urbanisation**

Libya's social, political and governmental system has undergone a series of changes since 1951, the year of her political independence from Italy. Throughout this period, the country's housing production and delivery mechanisms have directly reflected those dynamic transitions.

The pace and depth of urbanisation which has been experienced by Libya is attributable to the discovery of oil. The discovery of oil in Libya sparked off a process of speedy and widespread urbanisation. The whole country is in the midst of major social and economic transformation. The rural areas are more affected than the cities. This has not only changed the possibilities and prospects of the economy tremendously, but also played an important role in transforming a great mass of the rural population into urbanites virtually over night and has diffused urbanisation into the rural area (Shembesh, 1975). Stone and Simmons (1976) verify this phenomenon when they write:

*“Urbanisation brings an increasing number of people from peasant or rural backgrounds to work in the modern economy. This transition to wage labour is more than a difference in working patterns. It involves a major change in way of life in attitudes and standards of behaviour”.*

The spread of urbanisation has brought the greatest upheaval to rural areas where the traditional way of life has clashed with the influx of new ideas and upset the balance of life for the local populations. Nevertheless, urbanisation in Libya has been and will continue to be for quite a while, confined by the locally established culture and traditions of large cities, especially when the local values and customs of urban inhabitants are often derived directly from the rural areas, and when society as a whole enjoys cultural and religious homogeneity (Doxiadis, 1964). The local socio-cultural traditions of Tripoli in many ways provide a basis for the conduct of contemporary urban life and they account for some of the qualities of social urbanisation and physical changes typical of cities throughout the Middle East (Abu Lughod, 1975).

In global terms, the urbanisations of Libya’s rural areas cannot be equated with modernisation, but in local terms, better off families appear to be modernising by purchasing the accoutrements of modern life style (Elforatea, 1989). The community and family patterns of living are fundamentally affected by such changes, which the whole nation experienced in the midst of the problem of people’s assimilation in urban areas. In most Western societies, urbanising has been a slow and steady process allowing time for social and economic adjustment.

However, the Italians came to Libya to settle. Thus, they started to extend and modernise the big cities. These improvements were preserved for Italian citizens. As

a result, the number of Italians increased in these cities. In Tripoli, for example, there were more Italians than Libyans. In 1940, 41.9 per cent of the population of Tripoli were Italians, 41.6 per cent were Arab Libyans, and 16.4 per cent were Jews. (Sharif, 1973; Mukhtar, 1993)

After the Second World War many Italians left Libya when the country became an independent state in 1951. The departure of the Europeans caused a profound transformation not only of the urban features, but also of the urban social structure. The non-rural middle class Libyans were the first group to experience the change and to benefit from it (Essayed, 1981).

The urban population is mainly based in the major cities of Tripoli and Benghazi, housed in the modern sector. It has become fully integrated into city life with a diversity of social characteristics, values and standards. Prior to independence and the subsequent economic boom, many Libyans emigrated to neighbouring states to seek security and prosperity. When these benefits were offered within Libya,

Attir (1983) reported that:

*In Libya... the growth rate of the urban population during the era which preceded the discovery and exporting of oil in the early 1960s was similar to the total population growth rate. The average annual urban growth rate during the first half of the 20<sup>th</sup> century was 4 per cent, which is just over the average annual of the total population growth rate. Between 1966 and 1976, it was 10 per cent, which is more than twice that of the total population. Although this average fell to 6 per cent between 1976 and 1981, it was one and half times the average annual population growth rate during the same period. (p.159)*

By the early 1970s, a development plan was established to provide new housing for every family, as well as other facilities such as education, health and transport. The

shanty areas were removed. Attir argued that by the 1980s Tripoli city was free from this phenomenon, which still exists in the majority of Middle Eastern countries.

### **3.3.1 Physical planning**

Libya is the fourth largest state in Africa with a total land area of approximately 1.77 million square kilometres, and a Mediterranean coastline of about 1900 km. With such vast land territory, the country is thus very sparsely populated. In the 1960s population density was approximately one person per km<sup>2</sup>, with a high rate of natural increase (3.7 per cent per year) and a reasonable though curtailed influx of immigrant workers (Kamara et al, 1987). Much of the area to the southern part of the country is desert, and of the four planning regions (Tripoli, Banghazi, Khalij and Sebha) the northern regions of Tripoli and Bengerhazi covers 21 per cent of national territory and contains 88.7 per cent of the total population, resulting in local densities of 5-6 persons per Km<sup>2</sup>. Further, the coastal strip of these two regions covering an area approximately equal to 2 per cent of the national territory contains 75 per cent of the total national population, including 85 per cent of urban and 70 per cent of the rural components (Kamara et al, 1987).

Libya has been confronted with tremendous tasks in all areas of development, including the growth of urban settlements. Physical planning and development control was completely absent until 1969, when final formal approval was given to a 1966 scheme for an extensive mapping and inventory preparation programme and for the making of master and layout plans for all major settlement (31 MP and 152 LP).

Tripoli was the first and perhaps the only settlement in the country to have a plan before the war. In 1936 the “Regolamento edilizio per la citta di Tripoli” was drafted for a population of 70,000 inhabitants (Nerfin, 1965). Another master, plan was prepared for the city, by Professor C. Valle in 1958. Although this plan was never formally approved, it was considered to a great extent in the development of the city (Doxiadis, 1964).

Planning at the regional level is being carried out through the various socio-economic plans of the government. The scope of physical planning as such at the regional and national level was very limited, but there are two relevant projects:

- Italconsult Study 1973-2000, as planning became fashionable; Italconsult was commissioned in 1973 to undertake a comprehensive study of population re-distribution. The outcome of the study, in 1976, was a settlement pattern study at national regional and local levels.
- National Physical Perspective, Plan 1981-2000 the draft of this plan, issued in 1979 was prepared by a joint team from the United Nations and the Libyan government. The aim of the project is referred to in the plan as:
  - 1) Prepare a National Physical Perspective Plan that will integrate economic, social and land use policies and programmes.



- 2) Establish a framework including definition of planning boundaries guiding developing principles with respect to each region, physical planning standards and design norm etc (Essayed, 1981).

### 3.4 Land Policy in Libya

#### 3.4.1 Urban land

It is well known throughout the world that land is the most crucial aspect of housing policy, especially in urban areas, where population is dense and land prices are very high. No housing policy can be carried out without the availability of the necessary land. Libya is no exception in this regard, and the land problem is particularly acute in Tripoli and Benghazi. Land in Libya mostly desert except for about 10% of the land area, which is suitable for the development of agriculture and settlements. Table 3.11 shows, the land uses in 1980.

**Table 3.11: Land use distribution in Libya in 1980**

Land uses	Area in Sq. Km	%
Urban areas	500	0.03
Irrigated and dray farming	18,000	1.01
Dry pasture	70,000	3.94
Forest	5,000	0.29
Mostly desert	1,682,000	94.73
<b>Total</b>	<b>1,775,500</b>	<b>100</b>

*Source: SOU (1985) physical perspective plan 1981-2000*

Table 3.11 shows that the land policy has given more attention to the urban and agricultural land.

Most of the land in Tripoli and Benghazi is owned by a very small number of wealthy people, who charge high prices for their property. Prices are high for the additional reason that this land is desired not only for housing programmes and for industrial, commercial use, but also for public facilities (Almuakkaf, 1976). Finally, the fact that most of these landowners live in single-family dwellings increases the demand for land, making it difficult for low-cost housing to compete in the market for land. Therefore, the government took on the task of solving this problem by means such as fixing land prices, controlling land use, and imposing taxes.

The government could decide to use any land lying within the layout plan of any city or village for public projects. The Ministry of Housing was to submit any such proposal to the cabinet for approval. The proposal would provide a comprehensive description of the project, including the size of the land necessary for public use, community facilities, and the improvement in the residential areas. The decision could allocate land for a number of various projects, such as:

- Government housing and utilities;
- Construction of buildings for sale or rent, done in accordance with the government's public housing policy by public companies;
- Division of land to be sold to citizens for construction;
- Specification and division of land to be sold for industrial purposes;

In each case, the government would compensate the landowner on the basis of the land value at that date.

- **Private land**

In 1972 an act was issued organising urban development. The purpose was to prevent speculation in land to define land prices within the urban areas; prices being fixed on 1964 value plus 5% increase per year thereafter.

The act also imposes a yearly tax on open land of 2.5% of its value and only 1600m<sup>2</sup> per owner are exempt from that tax (Secretariat of Housing 1975). In 1978 a new law put all private land into state holding and individuals are only allowed one building plot to build a house for owner occupation.

- **Public Land**

In 1974 the government issued a set of regulations organising the sale of publicly owned land within the urban areas. The prices are determined within the limits of the market price and in conformity with urban development in each locality the prices prevailing being those in the nearest urban centre. A set of priorities for deciding between potential buyers are including in the regulations as well as the system of payment (Secretariat of Housing, 1975).

### **3.4.2 Agricultural land**

Any land with agricultural features within or outside the master and layout plan areas of all cities, towns and settlements is prevented from urban development by law and construction in such areas is severely restricted. The land is reserved for recreation and green space for adjacent urban areas or, if suitable, for their future expansion and development.

### **3.5 Housing and urban development in Tripoli City**

After the discovery of oil and especially after its exportation, Libyan housing problems became more spatially concentrated particularly in urban areas than in the rural areas. The provision of adequate housing in Tripoli is among the more difficult goals that the government has to achieve (Sharnanna, 1976). This section will focus on Tripoli city, with the first part considering the urban growth trends, urban population and land use changes, and the second part analysing the housing provision, demand for housing, supply of housing, utilities and estimating housing need.

Housing is one of the basic needs for the people to have a place to dwell, a shelter for a family with primary services and it is a major part of the urban economy (Gibb and Munro, 1991). All over the world there is a housing deficit: in the developed countries it is of a qualitative nature, and in the developing countries it is of a quantitative nature. According to the World Bank (1993), every year there is an additional requirement for twelve to fifteen million houses in the urban areas of the developing countries.

The major issues involved in the provision of housing in such countries are urbanisation, land, affordability and availability of housing finance. The main crisis of the housing situation lies in the urban areas, or more precisely, in the big cities. This is caused by the flow of migration from the rural areas to the urban areas. Tripoli is the capital city of Libya has experienced very poor housing conditions as result of the rapid population growth.

### **3.5.1 Historical background of Tripoli city**

Tripoli city is the largest city in the country. About 30% (1.7 million) of the Libyan population live in the city. Tripoli metropolitan area at present spreads about 30 km from west to east along the coast and about 8 km from north to south. Tripoli city is the main transport point in the country and is also regarded as the main connection point with the rest of the World (Secretariat of Planning, 1997). The natural landscape around the city is well maintained, much more than anywhere else in the country. Tripoli city was, and is recognised as the main commercial centre of the country.

### **3.5.2 The colonial city of Tripoli**

#### **3.5.2.1 The Italian occupation (1911-1943)**

By the end of the nineteenth century, the only area in North Africa unoccupied by Europeans was Libya, primarily because it had only limited strategic importance (Wright, 1982) and a poor economic base. The only occupied territory left for Italy was Libya, which was under the administration of the powerless Ottoman Empire. According to Segre (1974) there were two main reasons behind the Italians occupation of Libya: First, the value of the colony as a symbol of great power status and, second, the hope that Libya might provide a partial solution to the growing Italian population.

The Italian occupation of Tripoli (1911-1943) represents one of the most important stages of Tripoli's historical urban development. It represents the transformation of the city from a Turkish town with several characteristics of a pre-industrial Islamic

city to a colonial city with dual characteristics of the Old City and the New City with an Italian design. Under the impact of Italian colonialism, Tripoli moved its centre of gravity. The economic, political and cultural centre became located south and west of the Old City. The first stage of the Italian construction activity in Tripoli was almost entirely of military character. The new Italian houses were built in the West and South of the old city (Tripoli Municipality, 1972). The Italians based the city on a grid plan, which expanded southward in semicircular developments with wide, paved streets and shopping in the new central business district. The facilities which brought the sudden change of Tripoli's urban structure began with the rebuilding of Tripoli's port since every imported item would have to come by Tripoli sea door.

They also improved the water supply of the city. Additionally, the municipality constructed a new sewage system, which included both the old city and the new parts of the city (Segre, 1974). The chief function of the new city of Tripoli was clearly to serve the needs and interest of the Italians' social and economic system. The city was developed originally as a military base and an administration centre for the Italian invaders.

It should be mentioned here that when the Italian occupied Tripoli they found no master plan for the city; consequently, the Italians issued the first master plan for Tripoli in 1912, modified it in 1914, and made it final in 1934, (Municipality of Tripoli, 1972), thus dividing the city into four urban land uses:

- Multi-story building
- Traditional houses
- Villas

- Light industry

The main purpose of Tripoli's master plan was to serve the Italian segregation policy. All of the multi-story buildings and houses were built for the Europeans; and the native population was restricted to the traditional house zones in the old city and other areas (Harrison, 1967).

### **3.5.2.2 The British administration period (1943-1951)**

In 1943, as a result of defeat by the Allies in the Second World War the Italians were driven out of the country. From that time until 1951, Tripolitania and Cyrenaica were under British Administration and Fezzan (southern Libya) was administered by the French.

The British policy was based on a "care and maintenance" basis. The only effort made by the British to develop the city was the rebuilding of Tripoli's port, which was destroyed during the war, and establishment of bus lines inside the city. Furthermore, several Italian businessmen had transferred their money to Italy before the British occupation of Tripoli (Municipality of Tripoli, 1972). All of these factors had a significant impact in increasing the unemployment rate, which was made even worse by the increased number of rural migrants to the city, especially after the removal of the Italian restriction policy on migration to the city.

### **3.5.2.3 The industrial city of Tripoli (1951-1969)**

During the period (1951-1969), Tripoli's structure changed from that of a colonial city to that of an industrial city. Political, economic, and demographic factors have had a significant impact on the city. Tripoli became the capital of western Libya and Benghazi became the capital of eastern Libya. As the country was considered to be

poor at that time, therefore, most of the new buildings were residential, for the employees of foreign missions. In local residential areas there was no planning of the settlements. The owners were left to plan the use of their land. This resulted in poorly planned buildings, and street layouts and sub-division of land into small plots with narrow streets and without public services and open space. Thus, essential infrastructure such as, water supply, footpaths, roads, sewage system, electricity and transport were not built

The sudden discovery of oil South of the Sirt Gulf has changed the economy of the country from a poor economy depending on agricultural and foreign aid to a strong economy depending on oil revenue (Wright, 1982). In Tripoli, for example, expenditure on transportation services, building sector caused a very high demand for labour, and large numbers of rural migrants flocked to the city (Kshedan, 1984).

### **3.5.3 Urban and population growth**

During the oil exportation period of the 1960s, Tripoli increased in both population and area. The city population increased from 130,000 in 1954 to about 290,000 in 1964. One of the most important causes of Tripoli's growth was the increased number of rural migrants. The growth of the Libyan economy and community gained international recognition for the country. This sudden transformation led to changes in all levels of social and physical context. The emphasis was concentrated mainly on building a new infrastructure where many projects in all fields were created, such as in modern education system, health, housing, electricity and transportation.



Due to the large scale of public and private sector developments in all fields there was massive immigration from the countryside looking for jobs in Tripoli city. The available statistics showed that the number of migrants to Tripoli began to increase after World War Two. For example, SOP (1968) shows that between 1943 and 1967, Tripoli received 87,223 Libyan persons.

There was a high construction programme in Tripoli city during the implementation of the 1970s plan. This caused unequal distribution of economic activity and employment opportunities between Tripoli and other areas (Mukhtar, 1997). The 1973 census showed that the number of migrants in Tripoli city amounted to 141,386 Libyan persons. In addition, the planning department in Tripoli (1989) illustrated that during the period of 1985 to 1989 the city has received about 22,804 persons from other part of the country. Moreover, there were a large number of illegal immigrants from neighbouring countries. The Census in 1998 showed, that Tripoli is the highest urban population in the country. (See table: 3.12)

**Table 3.12: Urban and rural growth in Libya**

Region	Urban	Rural	Total
Tripoli	1,277,206	36,790	1,313,996
Benghazi	613,233	52,382	665,615
Misurata	450,471	38,102	488,573
Fazzan	228,920	85,109	314,029
Zawia	450,063	67,332	517,395

*Source: Statistical Book (1998) National Corporation for Information and Documentation*

Other reason for is Tripoli population growth was the high rate of natural increase. Between 1970 and 1981, Tripoli's natural rate of increase has been estimated to be

3.5% compared with an estimated rate of 3.2% for the whole country (Master plan of Tripoli, 1981). This high rate of natural increase came as a result of improvements in sanitation, institution, education, and medical care all of which reduced the death rate, particularly among infants and the younger age groups (Kshedan, 1984).

### 3.5.3.1 Population forecasting

Taking into account the present trends, as well as the directives of national and regional policy for planning period 2000-2010, three variants of future population growth in the study area have been considered, which are represented in Table 3.13

**Table 3.13: Variants of population growth 2000-2010**

	Population in 2000	Total increase	Annual % Growth	Population in 2010
<b>Variant 1</b>	1,700,000	1,360,000	4.0%	3,060,000
<b>Variant 2</b>	1,700,000	1,220,000	3.3%	2,822,000
<b>Variant 3</b>	1,700,000	918,000	2.7%	2,618,000

*Sources: Altumi (2001) A Decision Support System for sustainable urban development of the Tripoli agglomeration- Libya*

From among these variants, the first variant reflects the high rate of natural increase due to a continuity of the present migration to the area. The second variant assumes no more migrants to this area, while the third variant expects some out-migration from the city as a result of applying planning policies on this area in the next planning programmes.

### 3.5.4 Present development problems

The dynamic development of the Tripoli city in recent years has led to some growing problems whose solution is not just a matter of an increase in capital expenditure or

acceleration in implementation of some projects. They are much more serious and their solution requires detailed studies and investigations. All these problems are related to degradation of land resources, which will have affects on the housing development in the city. They particularly concern such problems as:

- Ensuring a sufficient supply of land suitable for urban development
- The utilisation of agricultural areas in the face of rapid urban development
- Protection of the natural environment
- The need to modernise certain high-density residential districts.

Factors, which may hinder or slow down a further development of the city comprise:

- Delays in the development of utilities and public facilities as compared with the population growth and development of new residential areas
- Growing shortage of dwellings
- Shortage of qualified personal
- Growing degradation of the natural environment and exhaustion of land resources.

### **3.5.5 Land policy in Tripoli city**

It is well known throughout the world that land is the most crucial aspect of housing policy, especially in urban areas, where population is dense and land prices are very high. No housing policy can be carried out without the availability of the necessary land. Libya is no exception in this regard, and the land problem is particularly acute in Tripoli city. Most of the land in Tripoli city is owned by a small number of wealthy people, who charge high prices for their property. Prices are high for the

additional reason that this land is desired not only for housing programmes, industrial, commercial use but also for public facilities. This increases the demand for land, making it difficult for low-income people.

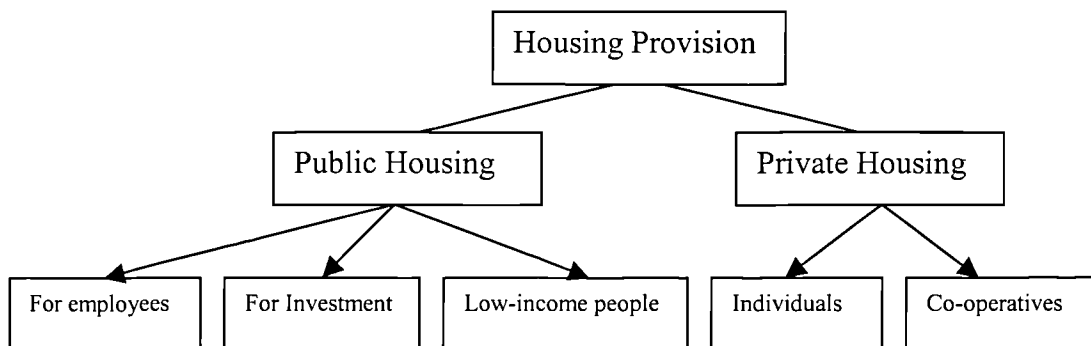
Therefore, the government took on the task of solving this problem by means such as fixing land prices, controlling land use, and imposing taxes. In 1972, the government issued Law no. 116/1972, "Organisation of Construction Development" to organise land policy. The law prevented landowners from speculating in land prices when selling land to the people, insisting that the prices of the land to be based on land values in 1964 with yearly increases of five per cent of that value and imposed a yearly tax on open land of 2.5% of its value and only 1600m<sup>2</sup> per owner were exempt from that tax (Secretariat of Housing, 1972). In order to solve the problems of the city, the government adopted policies in an effort to improve the situation of the city. This policy was incorporated into the 1973-75 and 1976-80 national development plans. Physical planning at the national level was linked to both local and regional economic and social aspects of planning. The plan aimed to provide a decent dwelling for every Libyan family (Attir, 1983). This was implemented through direct construction of public housing and large number of schools, health centres, and industrial plants has been established.

In 1993 the government issued Law No. 3 for organising the land and decided that the municipalities would take over the responsibility for selling vacant land. The popular committees of each municipality would check the price of such land taking in to consideration the circumstances of construction and fixing the price of land

being sold only near the city (Secretariat of Planning, 1997). The selling price so decided would not be valid until ratified by the Secretariat of Housing

### 3.5.6 Housing provision in Tripoli city

This section attempts to identify housing provision in the Libyan capital city. Housing in developing countries falls in two major categories: conventional and non-conventional. In Tripoli city, almost all housing, provision is conventional which provided by public and private organisations. These major categories are subdivided into further categories as shown in Figure (3.3). Unconventional housing construction, have not been used in the city since the early 1970s. However, the private and public sector usually work according to the government planning standards.



**Figure 3.3: Housing provision in Tripoli city**

The conventional housing sector is made up of conventional private and conventional public housing. Housing developed by the authorised private sector in Tripoli can be classified in two categories. These are individuals who build dwelling units for themselves and co-operatives which build dwelling for their members. Housing provision through the public sector can be classified into three categories. These are low-income housing, dwelling for investment and dwelling for employees.

The high rate of urban population growth in Tripoli city has led to several housing problems such as slums and poor conditions in the housing provision.

During the 1970s, the government aimed at rehousing people from all slums and squatter areas. This objectives, was achieved by the late 1970s in Tripoli city when all slum residents were rehoused with new dwellings. This reflected the strong government intervention on the housing sector. However, the available data about housing in Tripoli was as follow:

**Table 3.14: Housing provision in Libya and Tripoli city in 1995**

<b>Dwelling</b>	<b>Libya (1)</b>	<b>Tripoli (2)</b>	<b>2/1</b>
<b>Completed dwelling</b>	<b>668,686</b>	<b>206,292</b>	<b>31%</b>
<b>Uncompleted</b>	<b>39,502</b>	<b>1,656</b>	<b>4%</b>
<b>Total</b>	<b>708,188</b>	<b>207,948</b>	<b>100%</b>

*Sources:* Secretariat of planning (1997) An Evaluation of Housing Strategies, SOP Press, Tripoli-Libya, (in Arabic)

### **3.5.6.1 Public sector**

The housing development in this sector can be divided into two schemes:

#### **General public housing schemes**

This scheme takes the form of urban renewal, slum clearance to supply the needs of growing population. These houses were built by SOH, PHC and GHC. Several public housing projects have been built by these organisations.

Traditional and prefabricated building construction systems have been used to build large number of public housing in Tripoli city and all Libyan families are able to gain access to this scheme.

The public housing schemes in Tripoli city contains three types of housing development. These are as follows:

- **High-rise**

High rise development is seen as the only option for providing more housing units to meet the demand. This type of development became a common sight in many larger urban areas, which had high population densities. In Libya, this type of development began in the early 1970s when the new government adopted the policy of removing all slum and squatter areas by building new public housing for the people. However, the advantage of this type of development is mainly in achieving a high density, which will reduce the use of land (See Photo 3.1).

The disadvantage of this type is that high-rise building creates social and physical problems. In Britain, in a study by Dunleavy (1981) of mass housing in Britain, life in high- rise flats may have a particularly damaging effect on young children, whose play is restricted and whose development may be inhibited.

The residents in both developed and developing countries are highly critical of high-rise housing and have found that they experience increased rates of crime, vandalism and mental health disorders.

In Libya, some studies have suggested that the high-rise buildings, do not suit Libyan families. At the same time there are various technical problems associated with this type of development particularly in developing countries. Accordingly, it has been suggested that housing development should not be more than four storey walk-up flats (Italconsult, 1976).

**Photo 3.1: High rise building**



- **Medium density**

This type of housing was built in and outside the inner city to accommodate large number of Libyan families within the city of Tripoli. These types of flats contain two or three bedrooms. Due to the lack of management most of these flats have not been maintained, the facilities are shared by both tenants and owners. This causes the deterioration of these building elements and reduces the expected life of the building.



- **Low density**

Since 1970s many projects have been built by the SOH and GHC in Tripoli city. This type of building is single and two storey houses, which were first introduced by Doxiadis in 1964. These houses contain two or three bedrooms and each project contains from 200 to 350 houses and most of these houses have been extended by the residents to create more room.

### **Investment public housing schemes**

Investment in housing is mainly for renting to foreign people who are working in Libya or purchased by Libyan families. This type of housing is built by several organisations, who use their own resources to build dwelling. This scheme is mainly for investment purposes and built by REISB, SSB and REISC.

### **3.5.6.2 Private sector**

The literature review showed that the majority of housing provision in most of the developing countries is built by the private sector. In Libya the private sector built 60 per cent of the total dwelling constructed during the period 1960 and 1993.

Most of the private houses were built through banking loans to individuals and housing co-operatives, who built houses for their members.

### **Dwellings built by individuals**

Mainly the migrants who moved to Tripoli from nearby areas seeking better job opportunities built these houses. These dwellings comprise two or three bedrooms, and the houses have a total plot size of 144 square metres. However, the new type of

dwelling developed in Tripoli city, in the 1970s, was the villa. The standard stated that the plot size for building a house should not be less than 300 square metres. These are detached and semi-detached houses with gardens on three or four sides.

### **Dwellings built by housing co-operatives**

The co-operative housing system, which covers all sectors of society is heavily encouraged and continuous efforts have been made to accelerate its construction programmes. The 1981-85 Transformation Plan envisage that integrated housing projects and multi-dwelling complexes would be constructed by the housing co-operatives for their members in different parts of the country, taking into account natural and social variations.

Different types of houses have been built by housing co-operatives to serve their members. These co-operatives either build a block of flats, or provide a plot of land with loans and the members build their own dwellings under their supervision. The lack of data makes it difficult to provide a clear statement on the number of dwelling units provided by these co-operatives. It should be noted here that all co-operatives do not exist at the present time.

### **3.5.6.3 Housing types**

The housing in which people live is indicative of the development of the city. In Tripoli, the rapid economic and social changes following the oil development resulted in a growing desire by its inhabitants for better accommodation. This section presents the major dwelling types in Tripoli city. These are three major types of dwelling units as following:

1. Traditional houses (Haush) as a traditional dwelling type, generally with an interior courtyard. Built in rows with a plot of land of 144 square metres open to the streets. The traditional Arab haush is a square, uncovered courtyard surrounded by rooms (2 to 6). The new haush is usually smaller in size (2 to 3 rooms), covered and built of more resistant building materials such as stone, brick and cement. Haushs are the dominant type of construction in the city and represent about 70 per cent of the housing provision in Tripoli city.

2. Villas are defined as a luxury form of housing. Most of this type of dwelling constructed by private sectors. All these type of dwelling have separate gardens, and surrounded walls. The majority of these types of residential units are either one or two storey buildings. The total area of the plots for these dwellings is between 250-700 square metres.

3. Apartments, defined as dwelling units contained with at least one other such unit in a building of two or more floors. This type of dwelling unit is the dominant pattern in the central business district and the area surrounding it. Most of these have been constructed by the public sector. Using both traditional and prefabricated building system.

#### **3.5.6.4 Infrastructure services**

The provision of essential infrastructure and services to the residents is, next to land, the most important obstacle to meeting the shelter demand for all income groups (Van Huyck, 1987). Due to pressing economic conditions, most public institutions have had problems of providing adequate and efficient services and during the last decade there has been a move to contract out services. Although this is still minimal

in developing countries and has often covered mainly the area of education, health, communication, urban transport, water and sewage (Roth, 1987). Infrastructure and services are an important aspect of housing and should be planned and provided concurrently. However, this has not always been the case. At the same time, in cases where provision is done, it is often inadequate and insufficient as reflected in the case of Tripoli city. The data will be used in this section to examine a range of facilities:

- **Refuse collection**

Inadequate refuse waste disposal is one of the factors that affects the residential quality of cities in developing countries. Inefficient refuse management could jeopardize other urban infrastructure services such as roads and storm-water drains (World Bank, 1994), by blocking storm water channels and encouraging flash floods. An absence of proper cleaning can affect the health of the environment and the entire population since diseases associated with poor cleaning can spread quite easily.

In Tripoli city the General Cleaning Company (GCC) under the control of Tripoli municipality is responsible for domestic rubbish collection. As a result of the residents dispose of their own rubbish the GCC does not provide a good services. SOU (1993) stated that the GCC faces a number of problems such as lack of technical machinery and lack of financial resources.

- **Sanitation**

Since 1994 almost all the dwelling within the urban areas of Tripoli city have been connected to the sewerage system. The type of sewerage system used in Libya is a sewerage network and septic tanks.

- **Electricity and water supply**

The Libyan government has given this service a high priority during the last two decades. As a result of that electricity power is available everywhere in the city. The electricity power is supplied to the consumer through a continuously extending system of electric power network with voltage of 220kV, 30kV and 11kV.

In Tripoli city the quality of water varies from place to another and all public housing is constructed with complete piped water network. However, there some problem in the city related to the low pressure in which water cannot reach the upper floors of buildings particularly during the daytime. Since 1996, Tripoli city has received water from a man-made river and the water problem in the city solved.

- **Road and drainage system**

Access roads are part of the basic urban infrastructure. Roads and streets link up and enhances access to residential buildings. Most of the road network within the city, particularly the main roads, are paved and serviced with storm water drainage. The storm water drainage is connected with the sewerage network system.

### **3.6 Summary and conclusion**

This chapter has considered two parts; first housing policies adopted by the Libyan government and second considered housing construction, provided by both the public and the private sector.

Housing policies have been changed to reflect changes in the socio-economic situation of the country. Before the 1960s the rate of economic development were

low, the implementation of housing policy was unsuccessful. Since the early 1970s, the new government have given more attention to the housing sector by adopting a new policy of providing dwelling unit for each family through the private and public sector.

The study shows that there have been many changes in the administrative structure of the housing sector. This caused a lack of stability and continuity of these organisations. Despite the efforts that have been made with the new government, it can be said that the housing sector still facing number of problems and there is still a housing shortage, the quality of housing is far from satisfactory, and there is a lack of housing management.

Through the last 40 years Tripoli city has been the most important residential, commercial, educational and administrative centre in the country. The increase in the population within the city, the unavailability of residential land within the urban areas of the city and the absence of an effective planning system has meant that some private land owners have sub-divided their land into plots without planning permission and sold it to the people in need of land to build their own houses. In relation to the housing sector, it appears that both the public and private sector have participated in providing houses within the city.

This chapter shown that the city is free from the slums and squatter areas in 2001. But there is a housing shortage within the city. The local authority in Tripoli city does not providing adequate services with exception to the electricity, water supply and sewerage system, which seem to be satisfactory. The available information shows that population of Tripoli city will continue to grow and the demand for

housing will increase. Therefore, the government should encourage both public and private sector to provide the required number of dwelling units.

After 1969, the political situation in Libya changed. The new government adopted socialist policies. Education and health facilities became freely available to all Libyans, and free housing was provided to people with limited income. During this period, new socio-economic development plans were formulated which covered the period 1973-1975, 1976-1981 and 1981-1986 since 1986 development plans have operated on an annual basis till the current plans 1998-2000. These plans aimed at providing housing and basic infrastructure to improve the standard of living of the Libyan people. Both public and private sectors participated in the implementation of the plan objectives.

This chapter discussed the housing situation in Tripoli and Libya. The next chapter is concerned with the research methodology used in this study.

# **CHAPTER FOUR**

# **RESEARCH METHODOLOGY**



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## **RESEARCH METHODOLOGY**

### **4.1 Introduction**

As with any research, the first task was the choice of the topic of study. Once this was established then the researcher spent time reviewing the nature of the problem, and determining clearly the research objectives. At this point it is appropriate to present an explanation of the research procedure and method in addition to the method of collection of the data required, as this will help to identify the path that leads to the answers to the research questions.

To achieve the objectives of study, the researcher followed a specific design and strategies during the different stages of the study. This chapter aims to examine the design and the methodology of the research carried out. It answers the questions of why the case study approach was followed. It examines in some detail the different stages of the study, with some concentration on the problems faced by the researcher during these stages. Also, this chapter demonstrates the validity and reliability of the data.

Thus the intention is to examine the policy, the structure and the role of the implementing authorities and their standards, with the intention of assessing whether the housing needs for low-income group can be met through them, or whether there is need for restructuring and/or extending the existing systems.

## 4.2 Reason for choice public housing schemes

In the research, public housing schemes were chosen because:

- Different types of public housing schemes exist (houses and flats) and building systems (normal and prefabricated), which makes it easy to compare and to assess (See chap. 3).
- Strategies and programmes, which have been designed by the public sector in Libya to meet the low-income housing, need in Tripoli have not been evaluated thoroughly (See chap. 3).
- It has been demonstrated (See chap. 2) that the past housing provision and strategies in Third World countries and the methods implemented, have proved ineffective in satisfying low-income housing groups' need.

## 4.3 Research design

Research is usually designed to examine a problem, something which needs describing, explaining or improving, or about which more information is needed so that future occurrences can be predicted and an appropriate policy adopted.

According to Sekaran, (1992) research can be defined as:

*“organised, systematic, data based, critical scientific inquiry or investigation into a specific problem, undertaken with the objective of finding answers or solutions to it”.*

The researcher, therefore, needs to select methods appropriate to the problem.

According to Ghauri et al (1995), research methods refer to the systematic, focused

and orderly collection of data for the purpose of obtaining information from them to solve/answer our research problems or questions. Thus the research involves the collection of primary or secondary data or both. In this respect Piel (1982) stated that:

*Designing a research project involves organising the collection and analysis of data to fulfil the purpose of the research, to provide the information, which is sought (P.10).*

To generate enough data required by this study, an appropriate research methodology was adopted to the research question.

The availability of data particularly at the local level (projects) has been a major problem. Data on sectors like housing is published at the national and regional levels. Therefore, it is not appropriate to use a single model or technique to address all the issues examined in this study. For example, holding interviews and discussions with government institutions who are involved in the implementation of housing policy to evaluate policy from the point-of view of the policy formulators and implementers, in isolation from interviewing those who should benefit from such programme, would not provide adequate information for assessment. This study attempts to undertake an empirical examination of different related issues.

The data is to be collected from three levels, the state level, the city level and the household level, using secondary and primary data. Primary data comprise questionnaires, guided interviews and researcher observation where possible. This approach should generate enough data to understand and analyse the implementation of the housing policy from both the residents and the implementers' point of view.

A household survey was conducted to collect qualitative and quantitative data on household socio-economic variables, housing and environmental attributes and characteristics. The decision to carry out a survey is motivated by the need to obtain specific data and information about the households and housing aspects in the study areas.

The items chosen for a questionnaire had to be intelligible and relevant. The questionnaire included a range of factual and attitudinal questions about public housing in Tripoli. The questions were intended to be brief, clear and simple so as to admit of one interpretation only and to draw the information sought in straightforward answers, in order to avoid ambiguity in the responses. The survey design is intended to further the objectives of the study. It is informed by the need for appropriate data to enable a systematic description of housing and environmental service conditions. Therefore, the empirical research is that which is required to produce data/information to answer the research questions. However, there is a debate on which methods or techniques are more suitable or scientific. It is sometimes stated that structured and quantitative methods are more scientific and thereby better. On the other hand, Cassell and Symon (1994) stated that:

*It is argued that adopting qualitative (phenomenological) approaches implies taking a different perspective on human behaviour from that adopted in utilising quantitative (positive) approaches.*

The distinction between quantitative and qualitative research methods in organisations studies is generally perceived as being that while the quantitative approach is objective and relies heavily on statistics and figures, the qualitative approach is subjective and uses language and description. Differences between the

two approaches are located in the overall form, focus, and emphasis of the study (Ghauri et al, 1995; Cassel and Symon, 1994; Lee, 1992).

Quantitative research methods involve the use of systematic and also sophisticated procedures to test, prove and verify hypotheses. It is derived from the natural sciences that emphasise objectivity, measurement, reliability and validity (Lee, 1992). Also, according to McClintock et al (1983), quantitative methodologies have been characterised by other writers as “thin, but hard, and generalizable”.

By contrast, quantitative methodologies suffer from some shortcomings. For example Lee (1992) stated that:

*Quantitative methodology is seen as increasingly inadequate, especially in cross-cultural research.*

Cassel and Symon (1994) mentioned that qualitative techniques emerge from the phenomenological and interpretative paradigms. They stated that the emphasis in such methodology is on constructivist approaches where there is no clear-cut objectivity or reality. That is because social life emerges from the shared creativity of individuals (Filstead, 1978). Qualitative methods are often associated with the collection and analysis of written or spoken text or direct observation of behaviour (Cassel and Symon. 1994). The main difference between qualitative and quantitative research is not quality but procedure. In qualitative research, findings are not arrived at by statistical methods or other procedures of quantification. However, in some social studies, data may be quantified, but the analysis itself is qualitative (Ghauri et al, 1995)

#### **4.4 Reasons for choice for Tripoli city as case study area**

This study concentrated on Tripoli city due to many factors:

- Tripoli is the capital of the country and is the largest and most populous city in Libya.
- The city of Tripoli controls the economic and social activity in Libya, and has been considered the most attractive location in the country, especially in terms of economic and job stability, which in turn has encouraged thousands of citizens to migrate to Tripoli. Unfortunately, the city was unprepared for such an influx of people.
- The supply of housing in Tripoli city has not been able to grow as fast as housing requirements.
- The city has several urban problems. Particularly public housing, have received little investigation. This study is designed to investigate different issues of public housing and to contribute to the knowledge in this field.

#### **4.5 Research methodology**

To achieve the purpose of the study and to extend the wide range of information needed to establish a firm basis for the analytical argument of the problems, information had to be collected about the public housing stock in different stages:

- General information was needed about housing institutions finance, management and regulations affecting housing development;
- Information about housing programmes, design and construction was also collected;
- Information about specific housing estates of different features, standards and locations was collected from households, survey.
- Information on resident views of the housing schemes.

The investigation relies on both secondary and primary data. The secondary data is examined in Chapter three, and the primary data in Chapter Six and Seven. A literature review, which provides a review of housing problems, policies and programmes in developing countries, has provided the context for the research design. The data upon which this study was based came from both secondary and primary sources. Secondary information provided data, which made substantial input towards all the research objectives. The secondary data has been used to analyse the housing and urban situation in Libya with particular reference to the Tripoli city. This has included general information about Libya, housing policies and institutional framework, the socio-economic characteristics of the population of Tripoli city, the location, types and sources of housing supply in Tripoli. The data was obtained from government reports, journals, conferences, policy documents, maps, population census and academic dissertations. This was followed up as necessary and informal interviews conducted with officials.

The secondary data could not meet the objectives of the study. It is therefore, necessary to provide the required information with the primary data.

A questionnaire survey and guided interviews formed the main instruments of the survey. Primary data was collected mainly from the three public housing projects in Tripoli city (the study area projects are: ElMadena ElSyahia, Abusaleem C and 2nd of March).

The main aspect of the empirical survey was to obtain specific information, such as the socio-economic characteristics of the households, dwelling conditions, housing tenure, residents satisfaction with their area in relation to services and utilities, rent or/ monthly repayment, discussions with officials of the public housing institutions and other organisations involved in the implementation of the public housing programmes. This is to understand if there are any problems in these projects.

#### **4.5.1 Case study method**

A case study can be defined as an in-depth a study of the cases under consideration (Hamel et al, 1993). After the researcher had reviewed the literature of research methods in social science generally, it was found that the case study was the most appropriate and flexible way of all research designs (Hakim, 1987).

Therefore, a case study was chosen to describe and examine public housing in Libya. The case study for research purposes is employed in many fields, such as social psychology, historical studies, and cultural studies and it is also becoming increasingly widespread in management research.

Other researchers define case study as a detailed investigation, often with data collected over a period of time, of one or more organisations, or groups, with a view to providing an analysis of the context and processes involved in the phenomenon

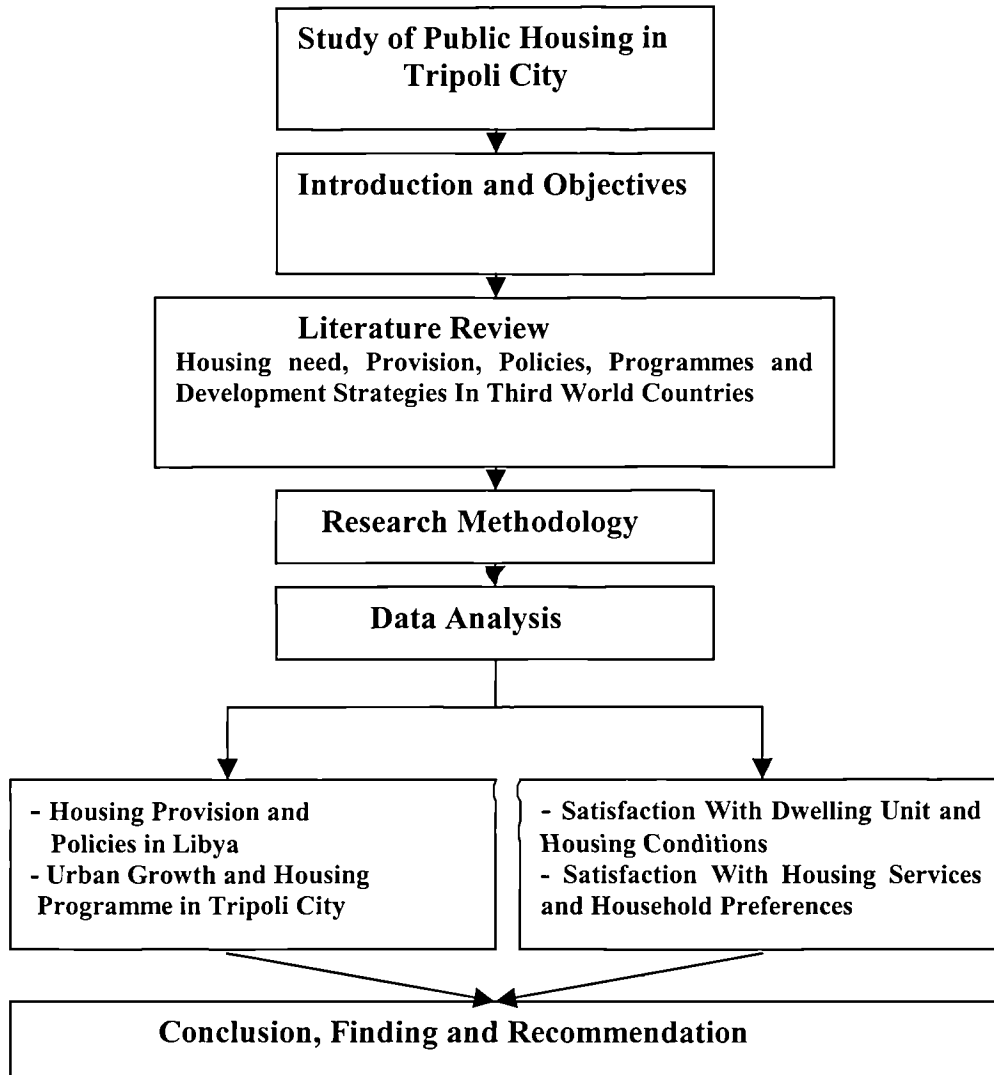


under study (Hartley, 1994). Therefore, case study offers us the possibility of understanding the nature of a particular activity, in terms of techniques, procedures, systems, etc. In this matter Yin (1989) stated that the case study used in many settings, including:

- Policy, political science, and public administration research;
- Community psychology and sociology;
- Organisational and management studies;
- City and regional planning research, such as studies of plans, neighbourhoods, or public agencies; and
- The conduct of a large proportion of dissertations and theses in the social sciences.

Case studies can involve either single or multiple cases; the single-case study focuses on a single case only. Multiple-cases studies, however, include two or more cases within the same study. A single case study can employ an embedded design, that is, multiple levels of analysis (Yin, 1989).

On the other hand, multiple cases should be selected so that they are replicating each other – either exact (direct) replications or predictably different (systematic) replications (Yin, 1993). Hakim, (1987) pointed out that multiple cases are more appropriate for topics that involved too many people to be surveyed and interviewed.



**Figure 4.1: Research methodology structure considered for this project**

#### **4.5.2 Scaling method**

According to the social science research and similar studies, three scaling methods are widely used to measure people's opinion or satisfaction with their built environment, namely the Thurstone, Likert and Guttman scales (Oppenheim, 1992). Most data required in the analysis of the schemes under study is ordinal the most appropriate scale to use is the Likert scale, which is widely used in professional literature. In this scale, generally, five categories of responses are provided for each

item. In the current work these are: very dissatisfied, dissatisfied, uncertain, satisfied and very satisfied. The Likert scale is not restricted to five points. Many studies use a three-point scale (for example, Sulaiman and Nurizan, 1987) depending on how detailed the required data are. The five-item scale is however, the most widely used in research work. In the schemes under study three and five point scales were tested in the pilot survey to determine the most appropriate. The five-point scale was found to be more discriminating and achieved the best results therefore the five point scale was used for most of the questions in this research.

### **4.5.3 Data collection**

To achieve the objectives of this study both secondary and primary data were used. Data about the selected public housing projects were collected through field, work during October 2001 and March 2002.

#### **4.5.3.1 Secondary data**

Some secondary data were needed to get more information housing provision in Tripoli city such as layout, maps, reports and studies. The secondary data were collected from various sources, namely:

- Journals, articles and relevant books etc., on and around the subject were taken from Salford university library, Manchester university library. These gave a basic knowledge and better understanding of the requirements for investigating the research subject.

- Appropriate local data were based on the aim of the study and the findings of the fieldwork, more documents regarding the residential environment such as institutions, regulations, reports, research studies, journals, maps and so on. In this respect an official letters was sought from the researcher's sponsors to the government agencies, explaining the purpose and the importance of the study and asking for their assistance in collecting the necessary data.

Furthermore, the researcher had to contact the organisation concerned the urban planning and housing sector in the country at both government and local level.

These organisations were:

- Secretariat of planning (SOP);
- Real estate investment and saving bank (REISB);
- Prefabricated housing company (PHC);
- General urban planning corporation (GUPC), and
- Secretariat of housing and utilities in Tripoli city (SHUT)

#### **4.5.3.2 Primary data**

Different instruments tools were used to collect data. These were questionnaires, guided interviews and observation where possible.

Questionnaires are likely to get the best results if they are short, contain straightforward and easily answered questions. The choice of the form of data collection is related to different factors. A questionnaire survey was considered to be the most appropriate technique for collecting data required by this study.

Furthermore, the questions were framed in a simple manner and most of them were closed to make answering easier for the respondents. Oppenheim (1992) in this matter stated that:

*The close-ended questionnaires are easy and quicker to answer and very popular because they provide a greater uniformity for respondents.*

Robson (1994); Babbie (1979) supports this idea.

People need home to live in, with adequate space for their activities. Privacy for the family and its individual members is an essential requirement. The traditional way of life within and outside the dwelling unit requires appropriate and adequate space to be used in designing units and their surroundings. The close social interaction and feeling of community, which provide the warmth, security and comfort of a desirable residential environment, require a high degree of priority in housing provision.

The preparation of the questionnaires involved many drafts. The first drafts of the questionnaires were drawn up in English in August 2001 and reviewed by the researcher's academic supervisor, Professor Les Ruddeck of the School of Construction & Property Management at Salford University. The questionnaires were quite lengthy, some areas proving problematic, with several questions needing to be removed and additional ones incorporated. Modifications were made, and the second drafts were reviewed by the research supervisor.

An English/Arabic translator translated the third drafts of the questionnaires into Arabic. Copies of the questionnaires were then distributed to PhD students of the School of Construction & Property Management particularly those with experience

in questionnaire design, and to the property department at Real Estate Investment and Saving Bank In Libya. Both were informed of the purposes of the survey and requested to comment on the clarity and comprehensibility of the questions.

Additional modifications were suggested and incorporated into the fourth drafts of the questionnaires. These fourth, drafts were reviewed by the research supervisor, at Salford University and his notes and comments were taken into account to improve the wording of the questions.

Because the final versions of the questionnaires were in English, a language not understood by the respondents, the questionnaires were then translated back into Arabic. The translation was, checked by an independent native Arabic speaker.

However, the provisional questionnaire was designed specifically to suit the study's aims. It consisted of a mixture of semi-structured and open questions. Sub-questions were used in most questions and designed to provide a means of double-checking on each response. The questionnaire dealt with four major items which were selected as being relevant to the overall perspective of the study and designed to elicit facts, attitudes and values that would indicate the degree of satisfaction of the households involved about these items. The items were:

- Household characteristics;
- Dwelling units;
- Housing estate and
- Physical and social Infrastructure

Detailed questions were included concerning:

- Characteristics of respondents, their age, family size and level of education;
- Employment status, income and household expenditure;
- Type and location of the dwelling
- Housing history;
- Dwelling tenure and the method and amount of payment;
- Occupant's reaction to the dwelling unit and
- General information about services and residents opinions about physical and social infrastructure in their project.

Questions concerning information, which could be obtained from sources other than interviewing, were eliminated. Information, which was difficult to obtain by the interview method, was also avoided. Each interview was intended to be conducted within a period of 30 minute to 45 minutes, depending on the size of the household and the characteristics of the individual respondents. However, in cases where households did not represent a family type structure, adult members, male or female, at the dwelling unit represented the sample unit.

Once the case study areas were identified, it become clear that a structured approach to data gathering at the local level was necessary. The approach taken was to do with an examination of regional policy, developed at state level and local level. Initially this stage was based upon an examination of policy documents (regional guidance, structure plans, local plans, etc.,) but it soon became clear that it would be necessary to interview key participants in housing provision and housing policy formulation.

This was to ensure that any area of concern not sufficiently explained in the published material could be examined and to allow the reasoning behind the policies to be understood.

Therefore, the heads of some organisations were asked questions related to: problems facing public housing (management, allocation, maintenance), problems facing the implementation of public housing policy, their opinions about public housing, their opinion about the type and building system used, problems causing housing shortages and their future plan about public housing.

The “focused interview” or “standardised open ended interview” technique was the most appropriate method of conducting this section of the research. This recognised approach (Bell, 1993) allowed respondents to talk freely around specific themes, allowing elaboration on certain issues if this is what the interviewees wished. A major advantage of this approach is that it usually produces more satisfactory results than a mail questionnaire (Piel, 1982). Moser and Kalton, (1972) describe the survey interview:

*“As a conversation between interviewer and respondent with the purpose of eliciting certain information from the respondent (P. 271).*

The interviewers were confined to soliciting the opinion and views of the various officials involved in the public housing provision and finance sector. In this regard, structured talks were held with different officials working at various levels of planning department, housing agencies and financial institutions. These were as follows:



- Director of planning in Tripoli city;
- Director of finance department of the REISB;
- General Secretariat of Planning;
- Secretariat of Housing and Utilities in Tripoli city and.
- Director of planning department of the Prefabricated Housing Company.

#### **4.5.4 Questionnaire reliability**

The following measures were taken in this study in order to maximise the reliability of questionnaire items:

- The questionnaires requested only data essential to the subject.
- The questionnaires had a primary subject, seeking only information, which could not be obtained from *non-survey data*.
- Respondents were given clear instructions on how to answer each question.
- Questions were presented in good psychological order, proceeding from general to specific responses.
- Embarrassing questions were avoided.
- Questions were objectively constructed, with no hint of desired responses

These are the characteristics of a reliable questionnaire, which were very carefully followed during the construction of the questionnaire.

#### **4.5.5 The pilot study**

The pre-testing of the questionnaires was carried out exactly as it would be performed in the main study. A pilot survey was conducted to examine the validity of the questionnaire. In this matter Evens (1984) stated that:

*A pilot study serves more than one purpose. In the first place it gives a chance to practise to administering the tests. Secondly, it may bring to light any weakness in the procedures of administration. (p.39)*

Oppenheim (1992) supports this idea.

The pilot survey sample amounting to 10% of the total were selected randomly from the actual sample studied in Chapter Six and Seven. They were then interviewed using the fourth draft of the questionnaire for the pilot study. Therefore, Kidder (1981) has pointed out:

*Every instrument must pass the validity test either formally or informally. Every researcher who has decided on the instrument must judge whether the test measures the construct he or she wishes to study. (p.132)*

The purpose of the pilot study was to:

- Test the ability of the questionnaires to do the job for which they were designed;
- Measure the length of time taken to answer the questions;
- Reveal any weaknesses in the questionnaires and improve their organisations;
- Improve the clarity of any questions which may have been difficult for respondents to answer;
- Identify subjective questions.
- Afford an opportunity to assess whether the respondents have problems in understanding certain questions.

A covering letter was attached explaining the procedure for completing the questionnaires and advising that the survey would be used for independent research only. Respondents were briefed on the purpose of gathering the information and were

requested to co-operate by providing accurate replies to all questions. Pre-testing or pilot survey ensures that questions are phrased in such a way that they are not intimidating, or ambiguous to respondents (Eyles, 1988). The researcher noted any ambiguity, misunderstanding, or sensitivity that occurred. The results of the pilot study were, then, used to construct the final questionnaires. To make the questionnaires easy to complete, it was mostly a matter of simply ticking boxes. In other words, most questions were multiple-choice questions. The questions were also arranged sequentially.

#### **4.5.6 Sampling**

The volume and nature of the survey data to be collected and *amount of resources* available determined the size of the sample, which could be undertaken. The outcome of the pilot survey made *it easier to decide on the best sample for the main survey* to give as true a picture as possible. It was desirable that methods adopted should improve the chances of the sample being representative of all houses and income groups in the selected population.

To investigate all the public housing in Tripoli city with limited time and manpower is not possible. Therefore, a limited number of estate were chosen. It is important to choose estates that represent as closely as possible the shape of the housing sector. It is therefore, necessary for the study to incorporate the walk-up flats, which continue to be constructed. The high rise tower blocks of flats were excluded, because there has been no further developments of this type since 1975 except dwellings built for investment purposes, which was constructed on a very limited scale. Various studies

have suggest that high-rise housing in Libya should be a maximum of four floors (Doxiads, 1964; Awtona, 1990)

A number of variables were considered in the selection of the three housing projects, which were chosen to be the sample. Each one chosen was as homogeneous as could be found with respect to its general socio-economic, dwelling type and physical characteristics. The chosen projects share some variables and differ in others. But all the housing projects chosen represent all features and types of public housing in Libya.

However, the choice was intend to cover a wide range of comparable social and economic conditions. All of which would provide a common ground for comparison among different types of dwelling units.

Since all the above characteristics of public housing are not evident in one estate, it was necessary to choose more than one estate. The chosen estates to be studied included the different dwelling types (house & flat) and the building construction system (traditional & prefab), which covered all relevant features of the public housing in Libya. Table 4.1 shows all the public housing estates within Tripoli city with the exception of the high-rise buildings.

**Table 4.1 General Public Housing Projects in Tripoli City**

<b>Project name</b>	<b>Dwelling Type</b>	<b>Type of development</b>	<b>Building system</b>	<b>No. of dwelling</b>
El Fornage	houses	Low-rise	traditional	200
El Flah	houses	Low-rise	traditional	220
Ghaut El Shall 1	houses	Low-rise	traditional	200
Suqe Athulatha	houses	Low-rise	traditional	200
El Gheran	houses	Low-rise	traditional	230
Ghaut Elshall 2	houses	Low-rise	traditional	220
ElMadens Esyahia	houses	Low-rise	traditional	250
Sedi ElMasry	flats	Medium-rise	traditional	220
Suqe ElGumah	flats	Medium-rise	traditional	200
Abu Saleem A	flats	Medium-rise	traditional	250
Abu Saleem B	flats	Medium-rise	traditional	200
Abu Saleem C	flats	Medium-rise	traditional	250
Treq lMattar	flats	Medium-rise	traditional	220
ElReyathyah	flats	Medium-rise	traditional	200
El Tathamam	flats	Medium-rise	traditional	200
El Hadbah 1	flats	Medium-rise	traditional	220
Chuat El shall 3	flats	Medium-rise	traditional	200
Tarik Gorgy	flats	Medium-rise	traditional	200
2nd of March	flats	Medium-rise	Prefab	360
El Hadbah 2	flats	Medium-rise	Prefab	200
El Gheran	flats	Medium-rise	Prefab	250

*Source: Prepared by the author*

Table 4.1 shows that the total population of low-income schemes in Tripoli city is 4,690, about 1,520 in single storey houses, 2360 in traditional flats and 810 in prefabricated flats. According to Sidi (1991) a population between 25,000 and

50,000 and based on a 95 per cent confidence limit, would require a sample size of 397. However, in order to have statistically significant results, the number of respondents selected from every scheme was contained 62 dwelling units in project one, 63 units in project two and 90 units in project three. Nachmias & Nachmias (1992) stated that the sample size must be a certain proportion (often put at 5 per cent) of the population.

However, the total selected sample size was 215 dwelling units out of 4,690 dwelling units. These units represent around 14 per cent of the total number of project one. Compared to similar research this percentage is considered representative. For example, Behloul (1993) used 128 units as a sample size to represent 29,920 units in Algiers and Al-Abed used 180 dwelling units as a sample size to represent 33,012 dwelling units in Sana'a

The three public housing projects were chosen for a number of reasons:

- They all contain a large number of dwelling units.
- The three-selected project contains one type of building system and one type of dwelling.
- For the project No. 3 has been chosen because the first project built with this type of building system
- For the project No. 1 has been chosen because the project has been altered and extended and no longer be recognised as public housing

The most important consideration in any research is the need to get objective information from a sizable and representative element of the population being studied. Sampling also requires a comprehensive frame, which gives information on the characteristics, size and other aspects of the sample (Piel, 1982). The biggest problem that faces researchers in conducting research in the third world is the unavailability of adequate sampling frames. There are no up to date maps or data on addresses. Also, there is no data about the number of people who are living on these estates.

The sample size has been widely debated and many studies show that cost and time are normally the main factors determining sample size. Which is limited for the research in this study. The sample was selected proportionally according to the share of the total dwelling units on each project.

**Table: 4.2 Dwelling units and sample size in each project**

	Project No.1	Project No.2	Project No.3	Total
Total dwelling unit	250	250	360	860
Sample Size	62	63	90	215
Percentage of total	29%	29%	42%	100%

*Sources: Prepared by the author*

#### **4.6 Description of housing schemes**

The selected housing schemes (See Figure4.2) are as follow:

##### **4.6.1 ElMadena Esyahia, No.1**

Project No.1 is known as ElMadina Essiyhia Housing Estate and is named after an adjacent recreational centre. The Ministry of Housing, through the GHC, built the

project in 1972. The project is situated on the West of Tripoli city, about ten km from the city centre. The sea bounds the project to the North and Gargaresh Road to the south. Private villa-type dwelling units are to the West and East of the project: to the west there is a high-income low density privately developed housing project. The main land use of the district in which the project is situated is residential with the building rising one floor above the ground. The project comprises 250 houses.

#### **4.6.2 Abu Saleem C**

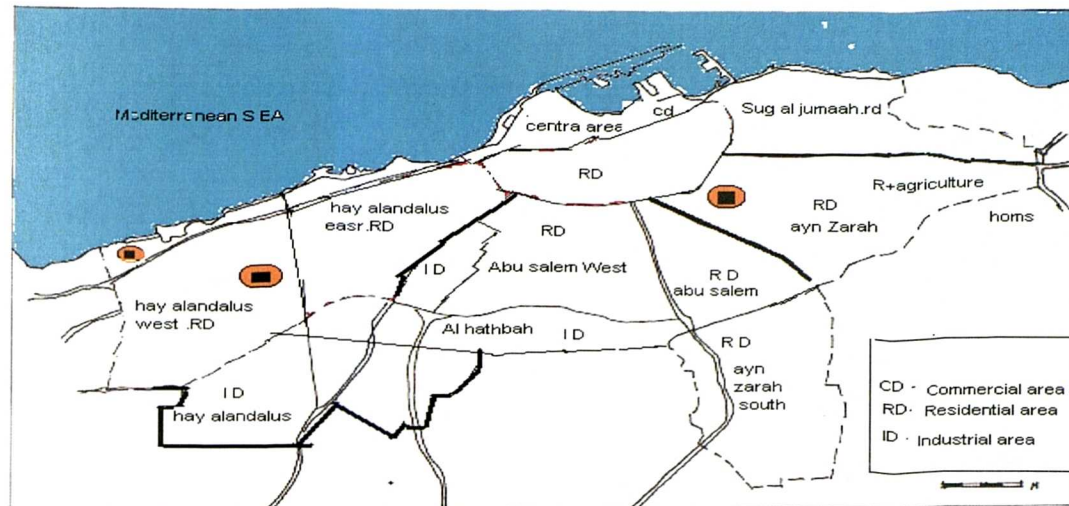
The project was, built in about 1975 by the Ministry of Housing through the General Housing Corporation (GHC). The state is bounded by, the coastal road to the north. The estate is situated in an eastern suburban area of Tripoli, about 7 Km from the city centre. The main land use of the district in which the project is located is residential area. The project is surrounding by residential areas of private housing, which were built using bank loans or family savings. The project is a low-rise development of rows of houses comprising 250 dwelling units. Within the local area there are two open-space but there are no facilities for children to play or gardens. There is a large private, supermarket and several shops in the project.

#### **4.6.3 2nd of March**

Project No. 3 known as 2<sup>nd</sup> of March situated to West of Tripoli city. The Ministry of Housing built the project in 1980 through (PHC). The project comprises 360 walk-up flats. The main land use of the district in which the project is located is residential. The project consists of four storey blocks of flats of two and three bedrooms. There are some industrial activities comprising a macaroni factory and tobacco factory. A



health centre was built during the mid 1980 and two schools were built in 1990 to serve the resident of this project.



**Figure 4.2: The locations of the three public housing projects**

#### 4.7 Data analysis

The researcher used the SPSS program for analysis of data. The data collected was tabulated in statistical tables and presented in the form of statistical charts and diagrams. Such presentation helps the reader to appreciate visually the salient characteristics of the data and can also suggest the type of statistical treatment. Three main techniques were applied: percentage analysis, cross-tabulation analysis and Chi-square test. These techniques were found appropriate for measuring residents' satisfaction.

#### 4.8 Problems encountered

There were a number of difficulties experienced during the field survey. Most of it related to the case study, where interviews had to be undertaken during the evening and night, except for those who gave an appointment. Problems ranged from

insecurity to the content of the questionnaires. Since, interviews had to be undertaken by research assistants.

The interviews had to be conducted by physically visiting and going into the units sampled. Transport was available for taking the research assistants into the three projects. The sampled households were not very willing to welcome strangers in the night. As in many developing countries, people in Libya are not familiar with research projects and they do not readily accept the importance of a questionnaire survey. As the field survey progressed, two of the two male research assistants had to be replaced by females, leaving only one male, who lived within the area. The female research assistants were more accepted by respondents, especially during the night.

Despite having undertaken a pilot survey, there were still some questions, which were not clear to the respondents, depending on their level of understanding. For example monthly income or do you save money?

Another problem was the unavailability of specific data about the housing sector at the local level.

#### **4.9 Summary**

This chapter detailed the research methodology used to conduct the present study of assessing the effectiveness of the implementation of the public housing policy in the capital city of Libya. The decision was made to collect the required data to answer the research questions through the use of secondary and primary data. Primary data was collected using questionnaire surveys of 215 households in the chosen public

housing projects and guided interviews with government officials. Different questions were addressed to the sample respondents of the residents in the selected three public housing projects in Tripoli city. Finally the chapter illustrated the procedures of data analysis, which were frequency, cross-tabulation and measuring significance.

Chapters Five will discuss housing evaluation building a research model.

# **CHAPTER FIVE**

## **BUILDING A RESEARCH MODEL**

## **CHAPTER FIVE**

### **BUILDING A RESEARCH MODEL**

#### **5.1 Introduction**

As housing needs cannot be defined solely in terms of objectively quantifiable physical criteria, the research evaluation process will apply a multidimensional approach, which includes assessment of both qualitative and quantitative influences. The non-materialistic qualitative approach concentrates on the occupant's needs, desires, aspirations and the degree of satisfaction.

The physical evaluation measures the housing adequacy. The two different types of variables will be combined to produce a value, which will determine the most effective housing development.

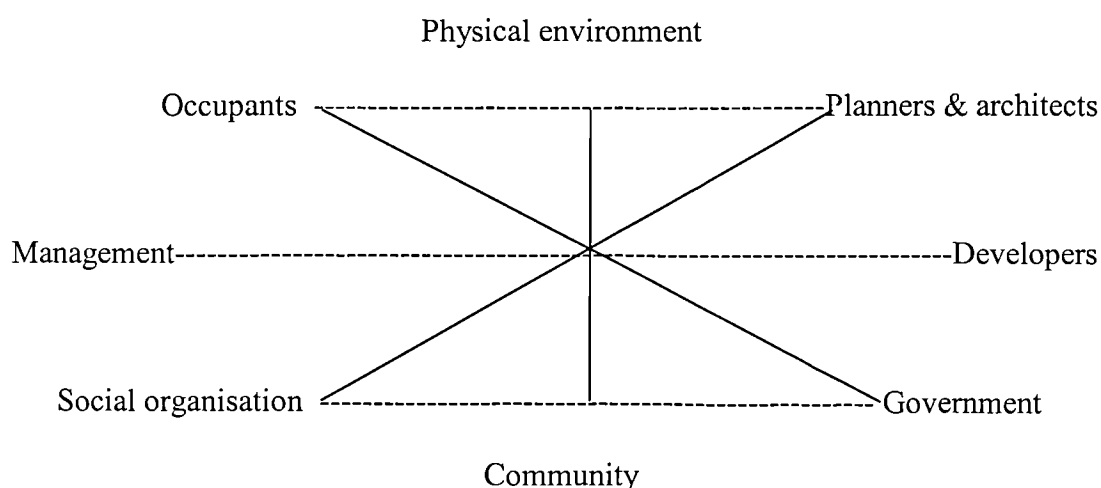
Therefore, this chapter presents a review and an evaluation of housing satisfaction models, and the process involved in the measurement of housing quality. It is also describes the design of the research model.

#### **5.2 Housing satisfaction concept**

Housing satisfaction refers to the degree of contentment experienced by an individual or family with regard to the current housing situation (McCary, and Day, 1977). Morris & Winter (1978) pointed out that housing satisfaction is an index of the level

of contentment with current housing conditions. Onibokun (1974) added that the habitability of a house is influenced not only by the engineering elements, but also by social, behavioural, cultural and other elements in the entire societal-environmental system. The satisfaction score in housing studies has been deemed an indicator of service quality or organisational success and effectiveness. At the same time, satisfaction has been heralded as an important means of organisations becoming more demand-responsive (Satsangi and Kearns, 1992).

Housing can be usually approached on the basis of the notion of a system as articulated by Churchman (1968). He defines a system as “a set of parts coordinated to accomplish a set of goals”. Therefore, housing can be thought of as a set of various components, such as physical structures and their environments; the residents, managers, planners, architects, developers and other entrepreneurs: the social and political organisations, the cultural characteristics; and so on (See Figure 4.1)



**Figure 5.1: Components of Housing System**  
*Source: Francescato et al (1987)*

Research on residential satisfaction must look at whose objectives are to be served, that is, who are the customers of the system. The study of the customers or users of the houses viewed is important in measuring the performance of the system. Francescato et al, (1987) explained that:

*“Research that uses the construct of residential satisfaction is predicated on the notion that in a realm of such great personal and social significance as housing, the residents themselves are the main customers of the system”*

The dwelling that is adequate from the engineering or from the design point of view may not necessarily be adequate or satisfactory from the inhabitant’s point of view. He concluded that the house is only one link in a chain of factors, which determine people’s relative satisfaction with their accommodation. Numerous studies have dealt with the problem of occupant satisfaction with the occupant’s dwelling. The concept has been utilised in at least four different ways:

- It has been used as an indicator of incipient residential mobility, and hence has altered housing demands and affected neighbourhood change e.g. Morris, et al (1976), Varady, (1983).
- It has been used as a key predictor of an individual’s perceptions of general quality of life (Campbell, et al. 1976).
- It has been used to assess residents’ perceptions of inadequacies in their current housing environment so as to direct forthcoming private or public efforts to improve the status quo e.g. Bohland and Davis, (1979); Anderson et al, (1983).

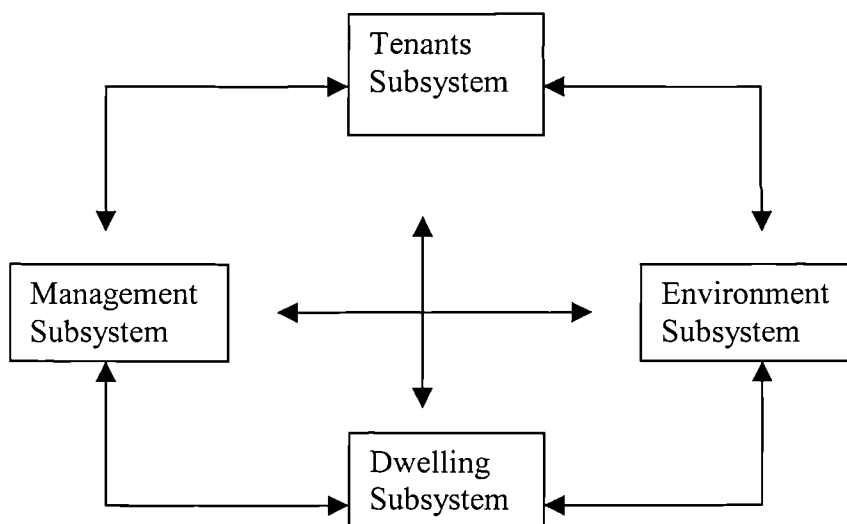
- It has been used as an ad hoc evaluative measure for judging the success of housing developments constructed by the private sector e.g. Lansing et al., (1970) and by the public sector e.g. Onibokun, (1974)

The research will utilise these concepts of housing satisfaction to measure subjectively the satisfaction level of low-cost housing provided by public sector in the capital city of Tripoli.

### 5.3 Housing satisfaction models

#### 5.3.1 Onibokun model

He states that housing habitability systems normally involve four interacting subsystem, the dwelling subsystem, the environment subsystem and the management subsystem (Figure 5.1). The adequacy of a housing unit, as determined by the internal space, the structural quality, the household facilities and other such housing amenities and qualities within the house, will influence the extent to which the inhabitant is satisfied with the unit.



**Figure 5.2: Onibokun model (Source: Onibokun (1974))**



According to Onibokun (1974), the variables that will affect the satisfaction level with a housing unit are: tenant, environment, management and dwelling variables.

### **5.3.2 Marans-Rodgers model**

Another model of satisfaction level is that developed by Marans and Rodger (1975). This model postulates that an individual's satisfaction with housing depends on his/her perception of the various neighbourhood characteristics.

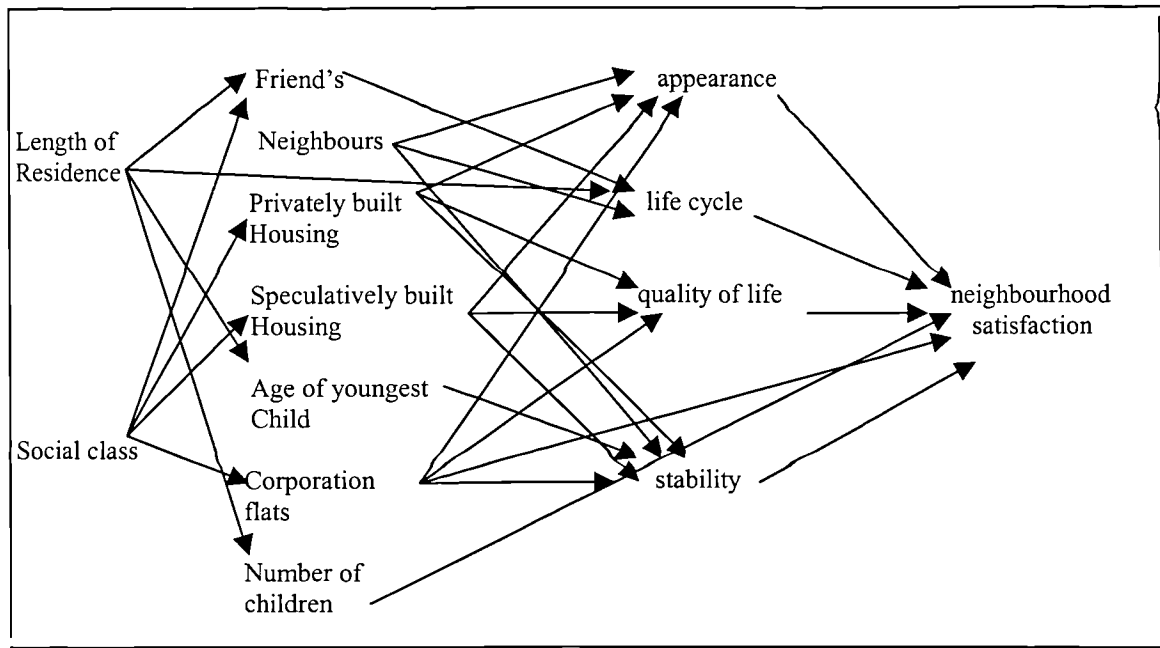
According to this model the overall satisfaction level related to the person's own characteristics (for example social class, housing status). These socio-demographic variables involve a smaller portion of the satisfaction than do the assessment of the neighbourhood features. They assessed personal characteristics through the assessments of housing and neighbourhood attributes, but these in themselves are insufficient factors to assess personal characteristics.

This weakness led to the development of the Path Analysis model.

### **5.3.3 Path Analysis model**

The Path Analysis model proposed by Hourihan (1984) postulates that personal characteristics are interrelated. This model specifies that residential satisfaction beings with residents' personal characteristics. These comprise measures of social class, local social attachments, residential experience, life-cycle stages and housing type. Neighbourhood attributes were also shown to have a direct contribution to housing satisfaction.

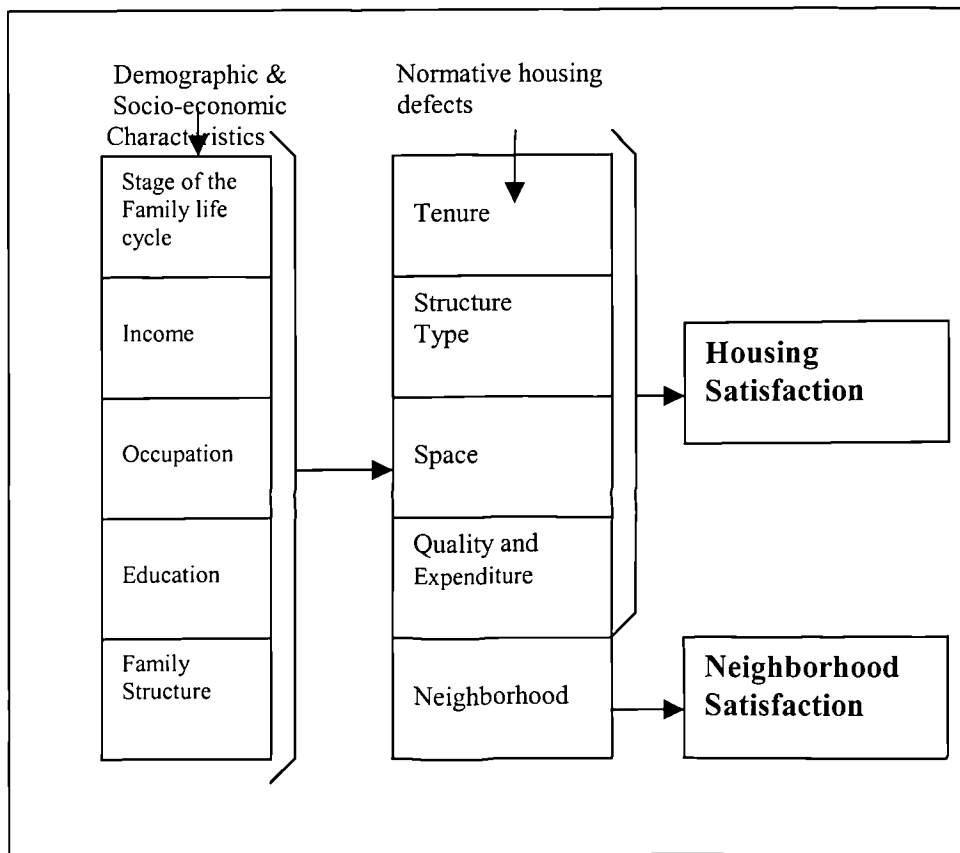
Attributes such as safety, design, stability and friendliness were found to form a fairly comprehensive profile of each resident's perception. Figure 5.3 illustrates the importance of this model



**Figure 5.3: Path Analysis model (Source: Hourihan 1984)**

### 5.3.4 Normative model

This model postulates that families judge their own housing and that of others using certain culturally derived criteria as norms. Housing norms are standards relating to the dwelling and its environment. A family whose housing does not meet these norms experiences one or more deficits. This model was, proposed by Morris (1978). The consumer's needs are defined in terms of both cultural and housing norms. Cultural norms are the standards by which the behaviour or conditions experienced by the members of a culture are evaluated as "good" or "bad". Figure 5.4 provides a schematic representation of the normative model.



**Figure 5.4: Normative model ( *Source: Morris, et al 1978* )**

Standards (good or bad) should be set according to the cultural factors of each country. In a developing country like Libya where housing standards are not available it is essential to measure, as objectively as possible, the physical quality of housing and its environment. This model emphasises, the importance of culture as factor in addition to the many variables common to the previous model.

#### **5.4 Establishing a research model**

Studying these previous satisfaction models leads to the conclusion that the essential variables that have an impact on housing satisfaction come under the following heading:

- Personal characteristics.

- Dwelling unit.
- Neighbourhood.
- Housing services.

Marans and Rodgers model (1975) is the most conceptual model of residential satisfaction. The model postulates that the individual's satisfaction depends on his/her perception of *three domains (the dwelling unit, the neighbourhood and the community services)*.

The research model includes the basic elements by which subjective and objective measurements are linked. The model aims to determine the effectiveness of low-income housing provision, and it sets out to measure this by a number of variables. The two principles variables are occupant characteristics and housing environment (See, Figure, 5.5). Housing environment is made up of three separate variables, these are:

- Dwelling unit.
- Location of public facilities.
- Housing services.

Subjective measurement of the housing environment will be made using:

- Questionnaire to obtain the household assessment (level of satisfaction)
- Interview with government officials (achievement and goals)

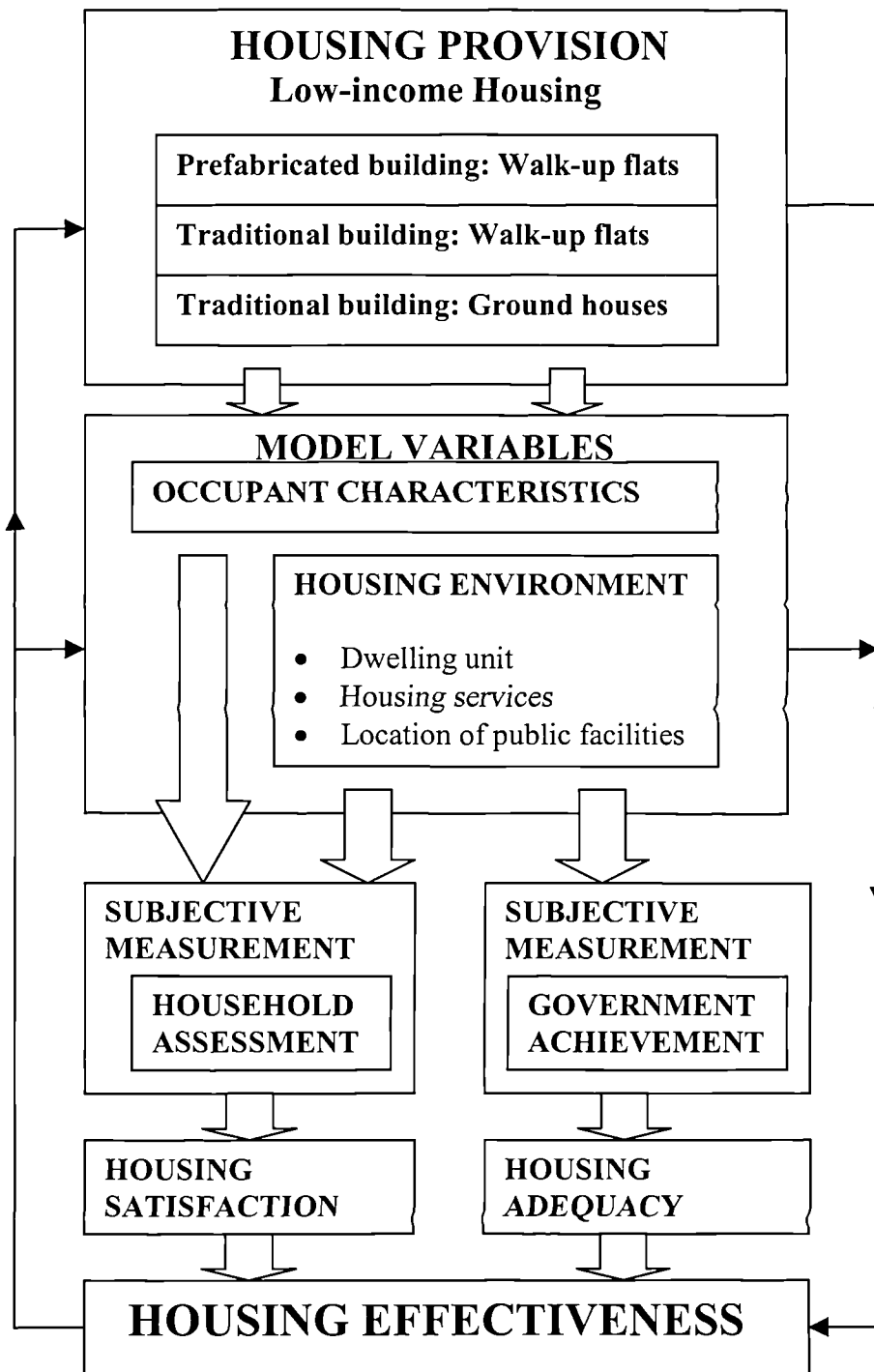


Figure 5.5: The Proposed research model

The data from a social survey, especially on people's sense of happiness and satisfaction, show that the 'personal' aspects of life (which tend not to be very easily measured by objective social indicators) are more powerful variables than those related to the environment, local services, or the community (Rogerson et al, 1989). Subjective data can give information about life-domains that are more or less impossible to measure 'objectively'.

Moreover, knowledge about people's evaluation, aspirations and priorities can act as an important corrective to decisions made by planners and other paternalistic agents. Another advantage is that knowledge about the priorities of the people concerned can help to overcome the problems of weighting, when it is necessary to compare or aggregate different components of welfare (Dale, 1978).

The satisfaction level is expressed by the households' subjective evaluation of their housing environment. Comparison of housing satisfaction with housing adequacy will then produce a measure of housing effectiveness. Effectiveness as defined by Mustapha (1990) is:

*“the relationship between performance and task objectives and between achievement against goals and purposes”.*

The case study has shown that in Tripoli city during the period of 1970-1997 two different building systems and two different types of dwelling units (see Table 4.2). The proposed research model will test the housing effectiveness of these different types projects.

**Table: 5.1 Selected housing projects**

Project name	Dwelling type	Type of development	density	Building system	No. of dwelling	Built by	Year
ElMadena-Esyahia	Houses	Low-rise	Low	Traditional	250	GHC	1972
Abu Saleem C	Flats	Medium-rise	Medium	Traditional	250	GHC	1975
2nd of March	Flats	Medium-rise	Medium	Prefab	360	PHC	1980

*Sources: by the author*

- The age of the building constructed in the three projects are currently in 2003 between 22 and 28 years old.
- The distance between the three projects is between 1.5 and 4 kilometres.
- The second and the third projects are very close to the city, while the first a modern high-income neighbourhood surrounds project.
- The model will therefore, determine which of the three schemes is more effective in providing satisfactory housing for low-income groups.

**CHAPTER SIX**  
**DATA ANALYSIS AND RESULTS**  
**OCCUPANTS' CHARACTERISTICS AND**  
**DWELLING UNIT CONDITION IN THE**  
**THREE HOUSING PROJECTS**



## **CHAPTER SIX**

### **DATA ANALYSIS AND RESULTS:**

#### **OCCUPANTS' CHARACTERISTICS AND DWELLING UNIT CONDITION IN THE THREE PUBLIC HOUSING PROJECTS IN TRIPOLI CITY**

##### **6.1 Introduction**

The results of the field study are reported in two chapters (Chapter Six and Chapter Seven). The aim of the analysis of this chapter is to answer the research questions using primary data obtained from a questionnaire survey carried out in the three public housing projects in Tripoli city, and interviews with government officials involved in the formulation and implementation of public housing policy in Libya. This thesis contains three chapter of empirical work: Chapter Three using secondary data and two based on field-work (chapter Six and Seven).

*Housing provision and utilities in Tripoli city are discussed in details in Chapter Three. However, these sources of data left some aspects of the research questions unanswered. Questions relating to, firstly, housing affordability: whether the dwelling and building system types meet the needs of the residents; the rate of share and occupancy and housing condition; and secondly, the adequacy of basic utilities and services, the residents satisfaction towards the current level of services and utilities.*

The residents of public dwellings might be expected to have a substantial knowledge and experience of the use of public housing. This chapter and the following chapter attempt to remedy this by undertaking an empirical examination of these issues through primary data. The three public housing projects covering the total features of public housing in Tripoli city were chosen, and primary data was collected from the sample of respondents who live in the project areas.

This chapter discussed issues relating to the household characteristics, building system type, dwelling condition, type of tenure and occupancy. Other issues, relating to services and utilities, residents satisfaction and the household preferences are discussed in the next chapter.

The procedures for the analysis of data comprised of the initial data analysis techniques, in particular, examination of the frequency distribution and cross tabulation. However, to give a clear picture of each project, the majority of tables give the frequency distribution in the form of numbers and percentages of the total number of each project as well as the total number of the sample.

Discussion in this chapter involves 215 heads of households living in the three projects in Tripoli city. These projects are:

Project No.1 (Elmadena Esyahia) Traditional houses

Project No.2 (Abu-Saleem) Traditional flats

Project No.3 (2nd of March) Prefabricated flats

The aim of the analysis of this chapter to provide the following information:

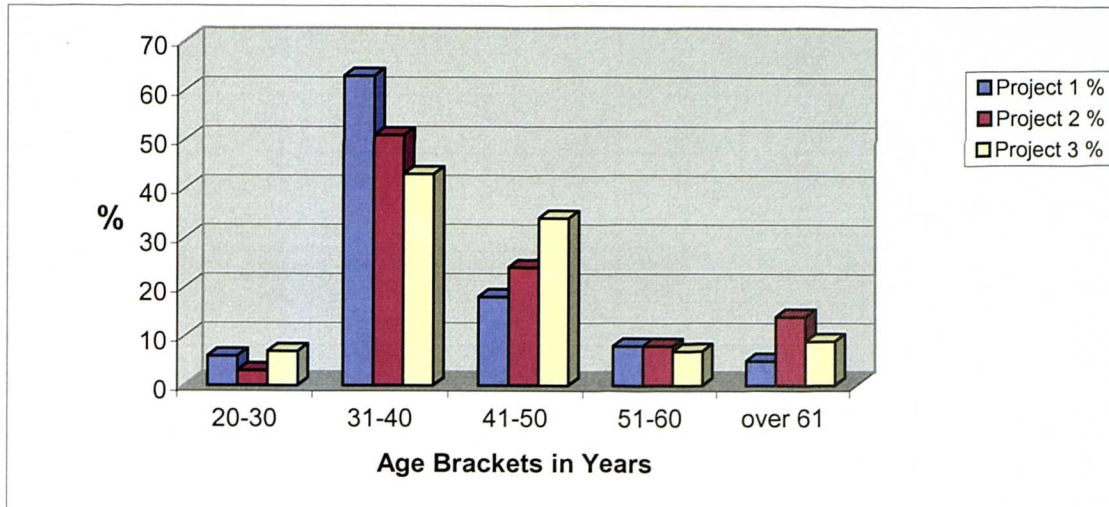
- The socio-economic characteristics of the respondents in each housing project
- Employment and household income
- Housing expenditure including the repayment rate and affordability
- Housing condition including building system, dwelling type and tenure
- Housing occupancy
- Residents attitude with dwelling unit and layout
- Factors influences the selection of accommodation

## **6.2 Socio-economic characteristic of the respondents**

Socio-economic characteristics of urban residents have been an important variable used by the planners and policy-makers while designing housing programmes. The socio-economic characteristics of the residents in the 215 dwelling units surveyed were very varied. This variation is expected to have an important influence on residents' attitudes towards their housing environment. However, other factors are likely to be equally important in influencing their level of satisfaction. Therefore, this section presents a general review of the population surveyed in the field study, a comparison between the characteristics of the residents of each project and, where possible, with residents of the city of Tripoli as a whole

### **6.2.1 Age, marital status and education**

These variables such as age, marital status and level of education are important in planning and developing appropriate housing policies. Figure 6.1 shows the age distribution of the heads of households.



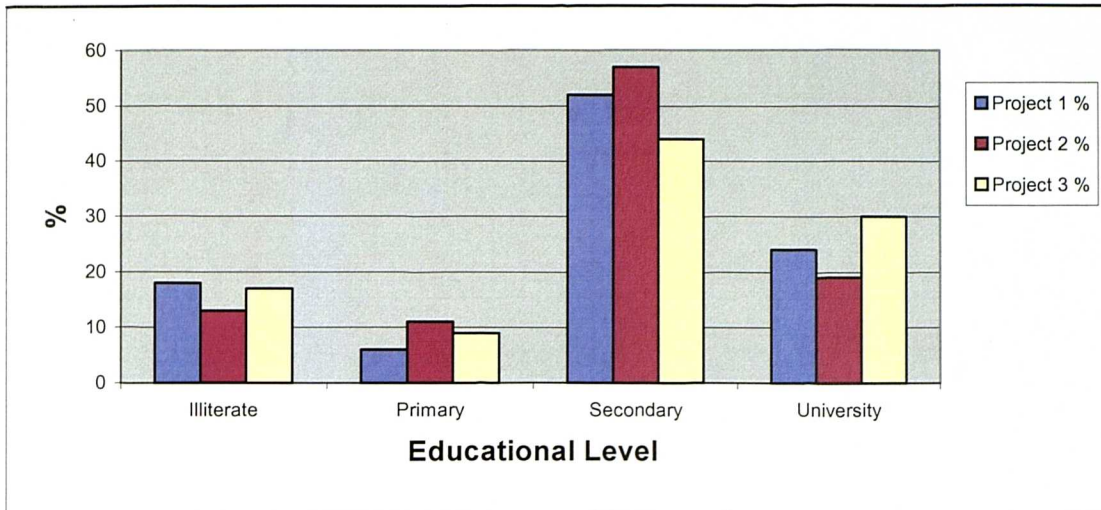
**Figure 6.1: Age of head of household**

A general feature of the projects under study is that the majority (51%) of the heads of households surveyed were in the age range of 31-40 years old. About 57 per cent of the heads of households were less than 40 years of age, which is an economic active age group and in the early stage of the life cycle. 27 per cent of the respondents are between 41-50.

Another significant characteristic here is the small proportion of the households aged less than 30 years old 6 per cent and that only 9 per cent are over 61 years old. This may be due to the fact that the projects were built almost 20 years ago, and so younger people are less likely to live there.

In analysing marital status the results shows that the majority (90 per cent of the sample) were married. Only 6 per cent being single and 4 per cent were widowed.

The household educational background in each project is shown in Figure (6.2)



**Figure 6.2 The Educational levels of the Respondents**

As can be seen from Figure 6.2 a substantial proportion (50 per cent) of all households in the three housing projects are secondary educated, 25 per cent having upper secondary and university degree. Only 9 per cent had been to primary school, and 16 per cent without any qualification. This is in contrast to the educational status of most of low-income households who are mostly engaged in small enterprises.

A survey conducted in 1984 of such activities showed that Tripoli city accommodated a high proportion of illiterates (59 per cent in 1984) whereas the three projects accommodated only 16 per cent in 2001. Hence, most of the respondents have achieved a good education level, which gives them the ability to discuss their problems and to give clear opinions about housing policies.

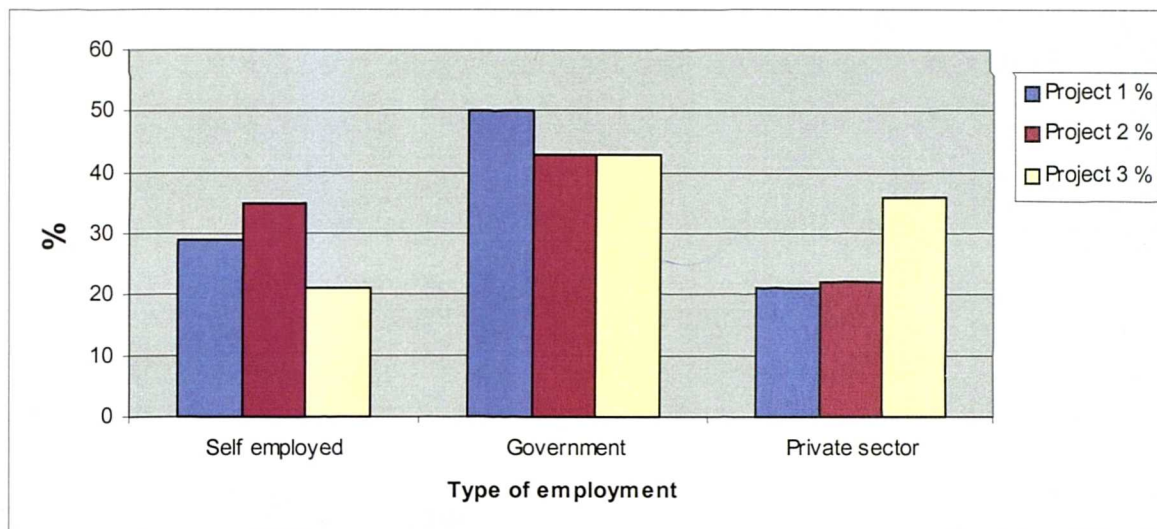
Meekya (1986) stated that the educational level of attainment is important, as it tends to influence perceptions concerning environmental quality, housing aspirations and preferences.

### 6.3 Employment and household income

This section will briefly analyse the employment, income and expenditure of the respondents in the three housing projects.

#### 6.3.1 Household occupation

As the majority of occupants of each dwelling have only one person in employment and this person was found to be the father and the head of the household, discussion of occupation was restricted to the heads of households. Information was collected about the occupation of the respondents are reported in Figure 6.3



**Figure 6.3: Household occupation**

Figure 6.3 shows that, as might be expected, category of heads of households tends to reflect some of the socio-economic characteristics of the population in the three housing projects. 45 per cent of the respondents are government employees and were found to be professionals with various backgrounds employed mainly within the formal sector of the economy such as education, accounting, management, and health services. There were 27 per cent of the respondents self-employed were basically



jobless and not in the process of getting any form of employment. Amongst those eight cases were widowed respondents receiving their husband salary. Moreover, the results show that 27 per cent of the respondents were engaged in the private sector.

### 6.3.2 Respondents' income

One of the most commonly used indicators of the socio-economic characteristics of population is occupants' income. This is because it is often used as a determinant of ability to afford housing in the implementation of most housing programmes. A direct question relating to occupants' income was asked mainly because it was known to the author that the housing schemes under study were built for low-income categories in the population. It is believed that a through understanding of overall income formation will throw light on the behavioural patterns of households and help in making appropriate recommendations.

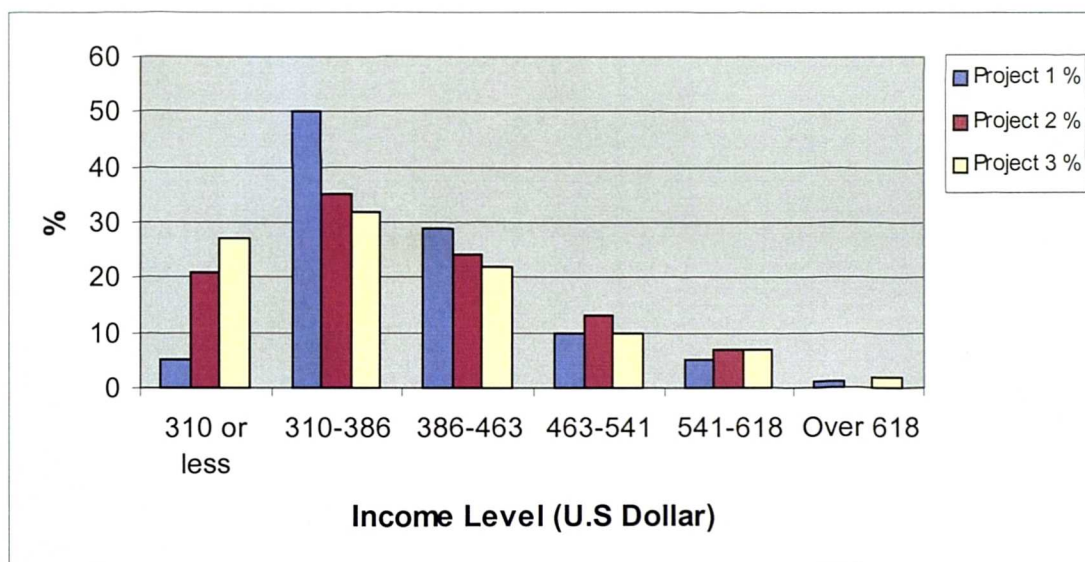


Figure 6.4: Level income of the respondents

In assessment of respondent income during the field survey Figure 6.4 showed that 92 per cent of the respondents income in the three projects was from \$310 or less to \$ 386. Among this percentage, 18 percent of the household income was \$310 or less. The majority (38 percent) of the household, income in the three housing projects between \$310-386.

Moreover the results show some residents within high-income categories. These groups only represent 8 percent of the households in the three projects. Yet the dwellings in the three projects were supposed to be allocated to those with income equal or less than the official standard minimum wage.

It should be noted with regard to the data collected that most households were very reserved in providing data on their income.

### **6.3.3 Household expenditure**

In the implementation of most housing programmes, income is often used as a determinant of ability to afford housing. An expenditure component is an important variable for assessing how much income circulates within a given household. However, the amount of money spent by the household on housing and services is a useful factor in planning housing.

Public housing in Libya is financed mainly by the government budget and the repayment varies with household income and type of tenure. Therefore, when the government issued policy on home-ownership in 1978 the owner had to pay 5 per cent of the total dwelling cost in advance, and the rest to be paid within a period of



not more than 20 years. Tenants have to pay the total housing allowance, which is fixed at \$54 and \$62.

At the present time the government is encouraging the households to own their dwellings. For those who wish to own their dwellings, the amount paid as rent is deducted from the total dwelling cost, and the outstanding is paid as monthly instalments at an amount not more than 20% of monthly income.

The results indicate that the type of dwelling finance varies between residents. 54 per cent of the households in the three projects, who are paying for the dwellings either in instalments as purchasers or as rent payments by tenants paid 20 per cent or less of their monthly income on housing. 24 per cent of the household paid in cash 14 per cent made no payment with 7 per cent of the households among these on social security (families of widows and families of war veterans), and the rest of it living without allocation from the authorities and did not pay any money to the government. Of those, who bought their dwelling in cash or in instalment were living 41 per cent in project 1, 51 per cent in project 2 and 56 per cent in project 3. The survey also shows that for 27 per cent of the respondents the government takes their housing allowance as rent, which is fixed at \$54 and \$62 depending upon their monthly income. At the present time, the REISB is responsible for collecting repayments from all residents living in public dwellings except those who rely upon social security.

The unrecorded residents of public housing are due to many factors:

- There is no management system controlling public housing projects.

- The public housing agency, which built these dwellings is not responsible for managing them.
- The abolition of the Secretariat of Housing from 1988 to 1992 contributed to this problem.
- There is no local authority responsible for managing housing.

An interview with the manager of the property department in the REISB stated that they are working towards recording all public housing dwellers and then intend to collect monthly repayments from all residents in these dwellings. The survey result shows also households expenditure on different items such as food, electricity, transport and water. The results are illustrated in table 6.1. The percentage can be used to determine the proportion of income used for housing after spending on other necessities.

**Table 6.1: Average percentage of housing monthly expenditure**

	\$310 or less	\$310--386	\$386-463	\$463-541	\$541-618	Over 618
Electricity	6%	8%	9%	10%	8%	11%
Water	3%	5%	4%	4%	6%	5%
Food & Clothes	54%	55%	50%	47%	47%	49%
Transport	11%	10%	11%	8%	7%	8%
Other	3%	2%	2%	4%	3%	5%
Total	77%	80%	76%	73%	71%	78%
Amount remaining	23%	20%	24%	27%	29%	22%

Comparing household income and expenditure, it appears that a large amount of the income paid is spent on housing and other things. The Table shows that, households

spent between 70% to, 80% of income on housing and other things. Therefore if we deduct the housing allowance some of the households cannot afford to pay the 20 per cent for housing. Moreover, the housing literature shows that many households can devote between 20 to 25% of their monthly income to housing (Grime, 1976; Laguian, 1983).

The 106 households who are paying for their housing were asked to give their opinion about their housing payments. Two categories were put in the questionnaire, affordable and not affordable, the respondents were asked to tick one of them. The results show that the majority (80 per cent) of the households who pay for housing found it affordable. Only 21 per cent stated not affordable. This provides another indication that housing payments are affordable for the large majority of the households in the three projects under investigation. Table 6.2 examines the household payment and their monthly incomes

**Table 6.2: Household opinions about their payment and monthly income**

Income groups	Households opinion about housing payments				Total	
	Affordable		Not affordable			
	No	%	No	%	No	%
310 or less	--	--	5	23	5	5
310-386	2	2	4	21	6	6
386-463	8	9	7	33	15	14
463-541	25	29	3	14	28	26
541-618	31	36	2	9	33	31
Over 618	19	22	--	--	19	18
Total	85	100	21	100	106	100

Table 6.2 shows that there is relationship between household monthly payment and monthly income. 20 per cent of the households, who were paying for housing (rent, instalment and other) in the three housing projects under investigation stated it is not affordable were earning less than \$540, whereas 80 per cent of the households stated it is affordable. Clearly, income affected household opinion about their housing payments. Therefore, it can be said that the housing allowance plays an important factor in housing affordability in Libya.

The aims were to estimate household income from all sources of the household under survey, and to relate the expenditure on housing to the overall pattern of household income generation and expenditure. It is believed that a through understanding of overall income formation, regularity, and expenditure patterns will throw light on the behavioural patterns of households and help in making appropriate recommendations.

#### **6.4 Occupant family size**

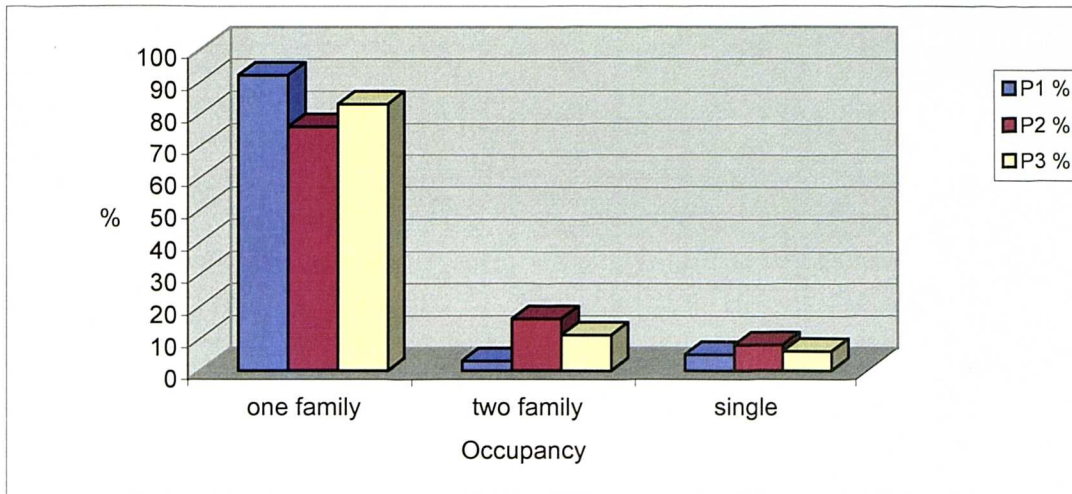
The occupancy rate is defined as the number of persons per room. Perhaps, due to the traditional nature of most of the housing stock, sharing of one room by more than two persons and sharing of a dwelling unit by several households is a dominant feature in Tripoli city. Thus, a great proportion of the households in the low-income groups especially those with large families, are overcrowded.

Family size and its changing structure is one of the most fundamental variables for development planning, more especially for housing provision estimation. In most developing countries, the household is a complex entity because of the component

elements such as female fertility, cultural attitude and socio-economic responsibilities regarding the dependents. Each of these elements of household size correlates differently in terms of socio-economic features and, therefore, the household size is a consequence of the behavioural pattern of all these components put together.

There is a positive relationship between household size and income and this tends to confirm that household size generally increases with increasing income. Income of the head of the household in most urban centres in developing countries is often added to the earnings of the other working members of the household. Occupancy of the dwelling units has not rigidly followed in accordance with the household size. For instance, a household of three persons could have been allocated a three bedrooms house while a household of 7 could get a two bedroom flat. This is because allocation was strictly based on first come first served.

In Tripoli, which is characterised by the extended family where the older son looks after his parents or brothers and sisters, the situation, particularly in the big cities, is changing. Each family needs to live in a separate dwelling and those who are living with others are not able to afford a house of their own. El Fortia (1989) argued that individual privacy and the changing patterns of life, leads to nuclear rather than extended family living. This has given young people the urge to have their own dwelling. In the dwellings being studied, all sharing families were living either with their parents or were parents living with their son's family. Figure 6.5 shows the rate of sharing and occupancy.

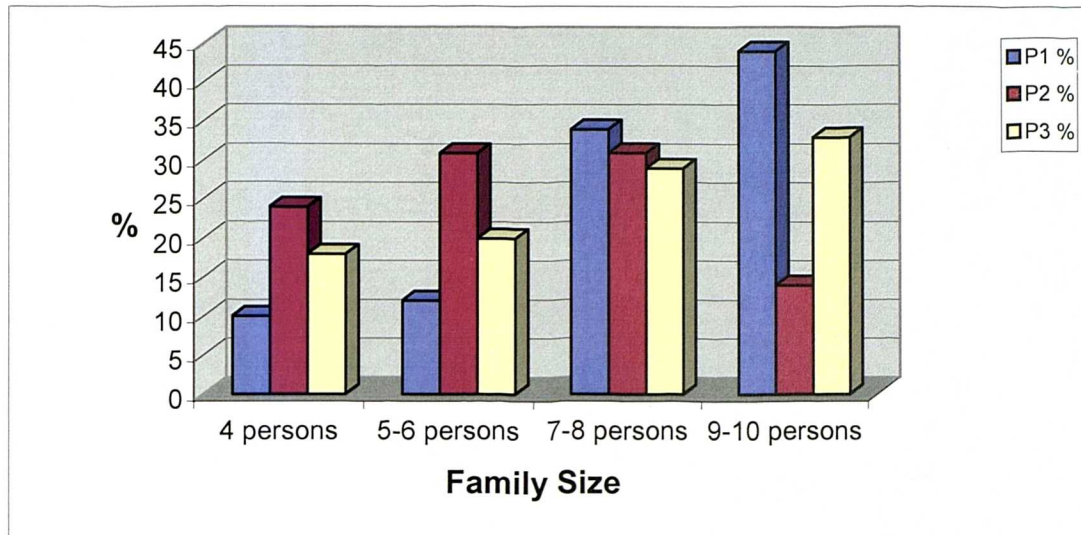


**Figure 6.5: The rate of sharing in the three projects in Tripoli city**

Field data shows that 84 per cent of the dwellings in the three projects under investigation accommodate one family. The highest proportion (92 per cent) living in project 1, 83 per cent in project 3 and 76 per cent living in project 2. In all cases, the sharer was related to the head of household except two families in project 2. Only 6 per cent of the respondents in the three public housing projects were single. 10 per cent of the dwellings accommodate two families. Respondents revealed that the high incidence (16 per cent) of sharing in dwelling units occupied by two families was in project 2, 11 per cent in project 3 and 3 per cent in project 1. This may indicate that there is a housing shortage within the city.

The most interesting feature of the household characteristics, as one would perhaps expect in a Muslim Arab city like Tripoli is the large household size. Figure 6.6 reveals that more than 60 per cent of the respondents in the three public housing projects under investigation contains 5 persons or more. However, households in the projects under study tend to be larger, with the exception of project 2, which contains a higher proportion of young families. In all the projects, the range 5 to 6 persons

accounts for 21 per cent of households. There are some differences within the projects themselves.



**Figure 6.6: Occupant family size in the three public housing projects**

The largest household sizes were observed in project 1 and project 3, nearly 32 per cent (as shown in Figure 6.6) might be a reflection of the fact that these two projects had been in existence for more than 20 years and the families have become fully established. This may also reflect the overall lack of dwelling units and the degree to which multi-occupancy occurs. The existing situation shows that the rate of occupancy is higher than the planning standard and the estimated average of persons per dwelling was 5 during 1990s (SOU 1985).

The survey shows a high percentage (more than 90 per cent) of nuclear families among the households sample population of 225 households. Their dependents are mainly their children, brothers and sisters.

The field, work actually reveals that most of the single young men and women have brothers and sisters who are either going to school in the city or looking for work. The greater significance to this study is the mean household size, which is 7.6 among the sample population of 225 households. This figure appears high, especially when compared with the estimated average of person per dwelling is 5 during 1990s.

This result is supported by a study conducted by Mokhtar (1997) who found that the number of persons per dwelling ranged from 5.2 to 6.8 per dwelling and Essayed (1981) in her study of six public housing projects in Tripoli city, found that the average household size 6.7 persons compared with 6.0 average of household size in Tripoli city during 1977.

This reflects the housing shortage in the city and the rate of sharing and occupancy is still higher than the policy standards set out in housing policies.

## **6.5 Dwelling unit**

The three public housing projects under study have some elements in common with each other and some which are different. Domestic functions and social activities are influenced to some extent by the space allocated to it. The architect faces a major problem of choice as a wide range of different layouts, designs and arrangements to meet the requirements of households within varying needs, and attitudes.

This section will examine that the dwelling units built in the three public housing projects are really suited to the composition, size and the way of life of occupants in the three schemes, and in particular to determine the overall residents opinions with the dwelling units or not.



General characteristics of the dwelling are examined, such as, types of dwellings in the three projects, the building system of the dwelling, type of tenure, extensions and maintenance programmes.

This information is valuable because it represents the opinions of residents with different socio-economic characteristics and different attitudes.

### 6.5.1 Types of dwelling units and building system

The housing estate examined in the study contains different types of dwelling and building system. The suitability of a dwelling unit as to its use as a “home” might be looked at from various points of view, for example, with respect to type, design, maintenance, space of provision and the availability of utilities. However, a notion of a dwelling unit is that in which the total environment meets the needs, desires of the occupants. The classification of which is defined below for the type and building system will be adopted throughout the analysis.

**Table 6.3: Building system types for the three public housing projects**

Projects	Dwelling Type	Type of development	Building system	Density	No of Dwelling	Year
Project 1	Ground floor houses	Low-rise	Traditional	Low	250	1972
Project 2	Walk-up Flats	Medium-rise	Traditional	Medium	250	1974
Project 3	Walk-up Flats	Medium-rise	Prefab	Medium	360	1980

Table 6.3 shows that the three public housing projects under investigation contain different types of dwelling (house and flats), with different building system (traditional and prefabricated building). These type of building used for the selected projects are the most common type of public housing development in Libya.

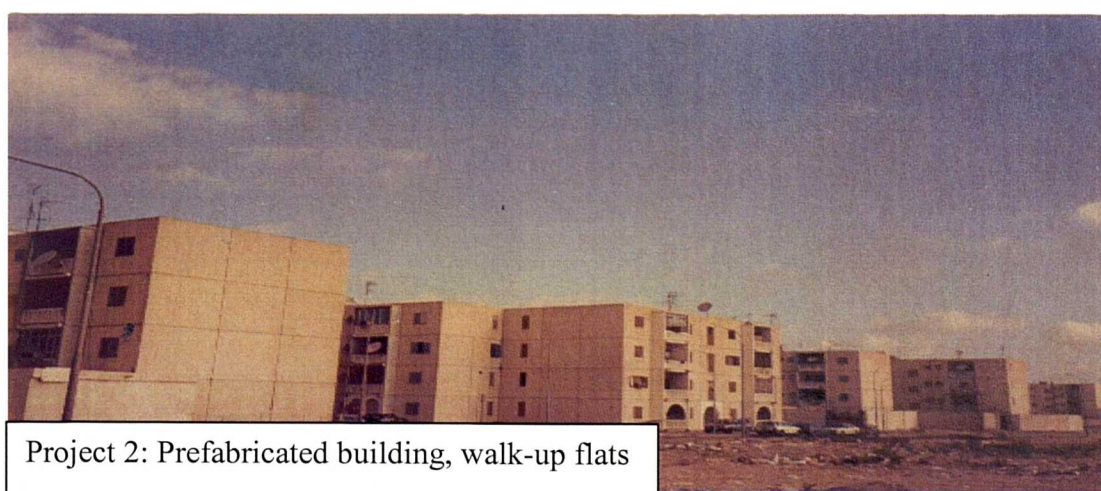
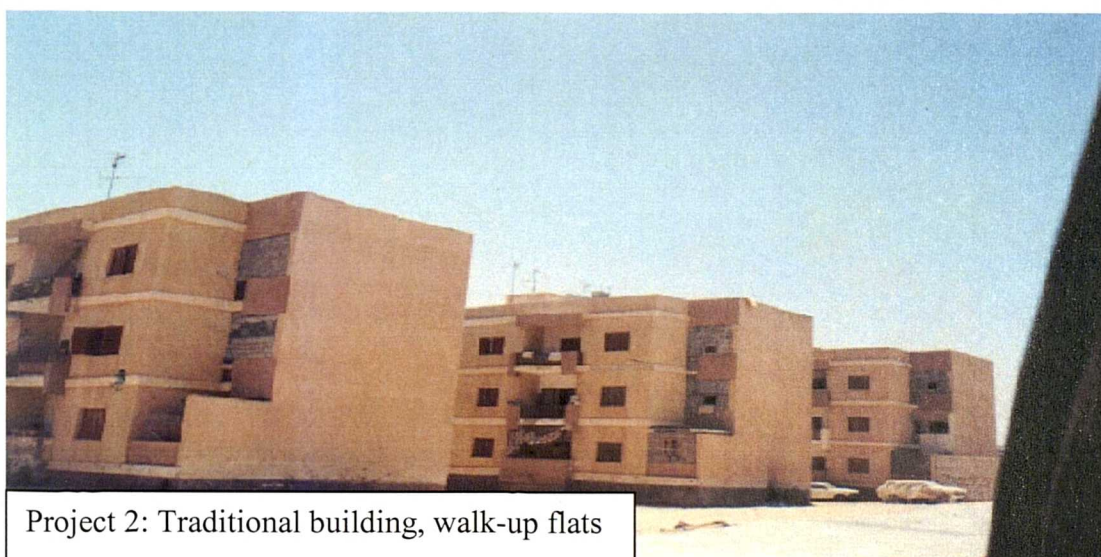
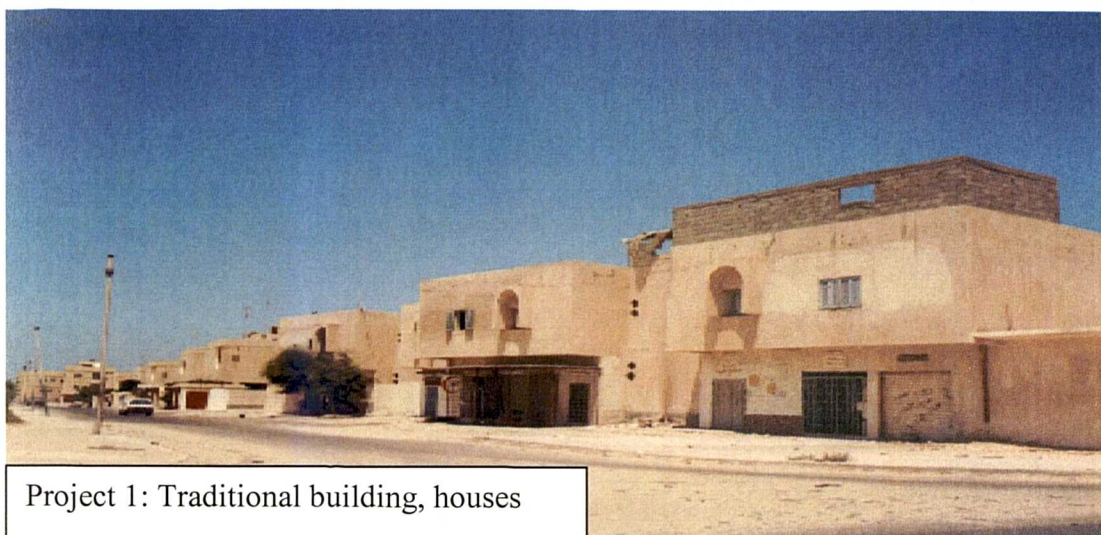
Types of dwelling in the selected projects are defined as follows:

- Ground floor houses: single storey enclosed dwelling unit usually with a private garden. This type of dwelling unit is found in project 1
- Walk-up flats: A dwelling unit in a building of less than five storeys with which more than one such unit is contained. This type of dwelling unit is found in project 2 and 3

The selected projects built by different institutions at about the same time (See photo 6.1). These are as follows:

- Project No. 1 built by (GHC)
- Project No. 2 built by (SOH)
- Project No. 3 built by (PHC)

**Photo 6.1: Dwelling and building types in the three public housing projects**



### 6.5.2 General dwelling condition

The term dwelling represents a mixture of different elements that together formalise the definition of housing. It represents the dwellings that a society has, in terms of the legal, social and economic criteria that determine number, size, quality and geographic distribution. Housing is important for a healthy life because it enhances the performance of the residents in their domestic and economic environments (Singh, 1996).

Resident's opinions with dwellings were strongly affected by its type. The most satisfactory one was the ground floor house (project 1). Privacy, size, safety, water supply and refuse disposal were common elements in evaluating dwelling as satisfactory residences. The internal layout and space arrangements were another set of factors influencing the degree of satisfaction.

Therefore, the resident opinions with the dwelling units in the three public housing projects under investigation is affected by two sets of variables:

- Firstly, residents' attitudes towards the internal form of the dwelling units (size of the dwelling, maintenance, extension).
- Secondly, attitudes towards the external features of the dwelling unit (orientation and view).

The objective in this section however, to examine the residents opinion about their dwelling condition. In the present study, dwelling condition varies from one project to another. Observation by the researcher suggests that there was no maintenance by

the government. This is the case of project 2 and 3, where shared facilities such as stairs and the roofs are in need of maintenance. In project 1, the situation is different where the residents have undertaken some maintenance themselves, where families needed more privacy in ground floor houses and the condition better than other projects. Households were asked to state their opinions about their dwelling condition. Their response reported in Table 6.4

**Table 6.4: Residents opinions about their dwelling condition**

Condition	Project 1	Project 2	Project 3	All
Very Good	21%	--	--	6%
Good	66%	48%	32%	46%
Uncertain	3%	11%	25.5%	15%
Poor	10%	28%	25.5%	22%
Very Poor	--	13%	17%	11%
Total	100	100	100	100

As shown in table 6.4, more than 50 per cent of the respondents stated that their dwellings were in good condition. However, in general, project 1 appears to be in a better condition than the others, where 87 per cent of the households placed their dwelling condition between good and very good whereas 48 per cent in project 2 and 32 per cent in project 3.

Moreover, results showed that the highest percentage (33 per cent) of the respondent in the three public housing projects said it is very poor condition, 42.5 per cent in project 3 and 41 per cent in project 2. This clearly reflects to the bigger size of the

dwelling in project 1 (ground floor houses) relative to the size of project 2 and project 3 (flats).

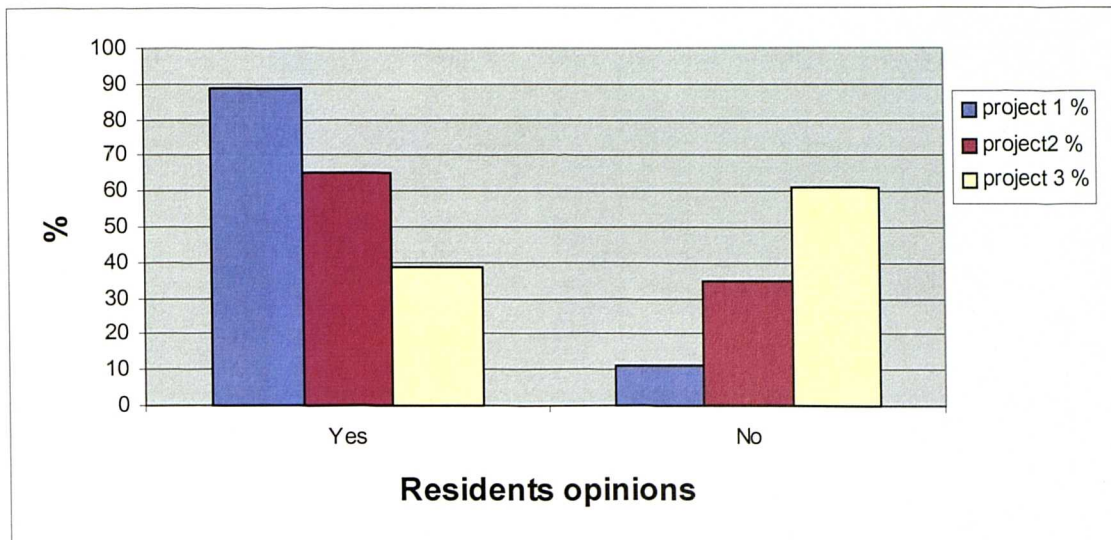
A wide variety of responses were obtained when residents were asked about their opinion with the dwelling units as a whole. Table 6.4 shows, the overall residents opinion on the positive side. The group of occupants that expressed their opinion with their dwelling condition constituted 85 per cent of the total sample of occupants in the study. However, clear differences were observed between the residents opinion in the three public housing projects under investigation.

The results above indicate that *Libyan people prefer houses than flats and traditional building than prefabricated.*

Management and maintenance of public housing projects has a special significance in relation to the housing conditions. However, the management aspects of housing have not received the attention they deserve nor has their importance been realised. Maintenance is a very important factor to the occupant's welfare and in expanding the life of the building. Proper maintenance and the continuous care of the existing resource of public housing are essential to prevent speedy physical and environment deterioration. All this will increase the level of occupant satisfaction in public housing.

Residents of the selected projects were asked to state whether they maintained their dwelling or not. Their response is summarised in Figure 6.7





**Figure 6.7: Maintenance undertaken by the occupiers**

Figure 6.7 shows, that the large majority (89 per cent) of the dwellings in project 1 have been maintained and 65 per cent in Project 2. All the maintenance of the dwellings is carried out by the occupiers. In the case of project 3, only 39 per cent have maintained their dwelling and 61 per cent have not maintaining their dwelling.

This is because of the type of building in project 3 (prefabricated building) and requires special skills and residents stated that cannot afford to repair this type of building. On the other hand, residents had some complaints about the maintenance; imported materials used in construction were not suitable for the Libyan climatic conditions or for meeting the requirements stipulated in the Libyan building standards and sometimes the materials are not available in the local market.

Table 6.5 shows the relationship between doing maintenance and type of tenure

**Table 6.5: The relationship between doing maintenance and type of tenure**

Maintenance	Owner		Non-owner		All	
	No	%	No	%	No	%
Yes	82	82	49	43	131	61
No	19	18	65	57	84	39
Total	101	100	114	100	215	100

Calculated Chi-square=215 > Test statistic (3.8)

Significant difference between proportion in owner-occupied housing who undertake maintenance and the proportion in non-owner housing who do so. The above table shows that there is a relationship between maintenance and type of tenure. 82 per cent of the owners had maintained their dwellings whereas 43 per cent of non-owners had maintained their dwelling.

Moreover, the majority of non-owners had not maintained their houses. This maybe due to the fact that tenant residents or those who living without allocation of public houses do not consider their dwellings to be permanent homes. This could lead to the low level of maintenance by these residents. Mokhtar, (1997) in his study of public housing in Libya and El Fortia, (1989) in his study of modern housing in Libya supported this view. The author saw several examples of walls cracking and broken taps, where the occupiers could not replace them and were unable to repair them. another problem that has arisen for the residents in project 2 and 3 is the maintenance of external and shared facilities An interview with the Director of the property department of the Real Estate Investment and Saving Bank (REISB) stated that the government policy is to sell public housing to the occupiers and they become responsible for their dwellings. Therefore, the housing authority needs to devise a way of solving the problem particularly to the prefabricated building system and



shared facility. Resident opinions about their maintenance dwelling are vary between the three projects. This may be related to the following:

- Household income
- Type of tenure

An appropriate system of maintenance should be broadly defined in the housing policy and adopted so as to avoid the deterioration of social and environmental qualities and to maintain a high level of satisfaction among public housing occupants.

The housing authorities should advise the public housing residents to maintain their dwelling and make regular inspections to *point out the areas that need to be* maintained.

## **6.6 Housing extensions**

Public housing represents a notable percentage of the housing stock in many developing countries. Its shortcomings have been identified and examined by many scholars and experts in an attempt to investigate the possibilities of improvements in future projects (Salama, 1994).

Yet, for many years and through their own initiative, public housing dwellers have been engaged in alteration and extension activities aimed at adapting their dwellings to better suit their needs.

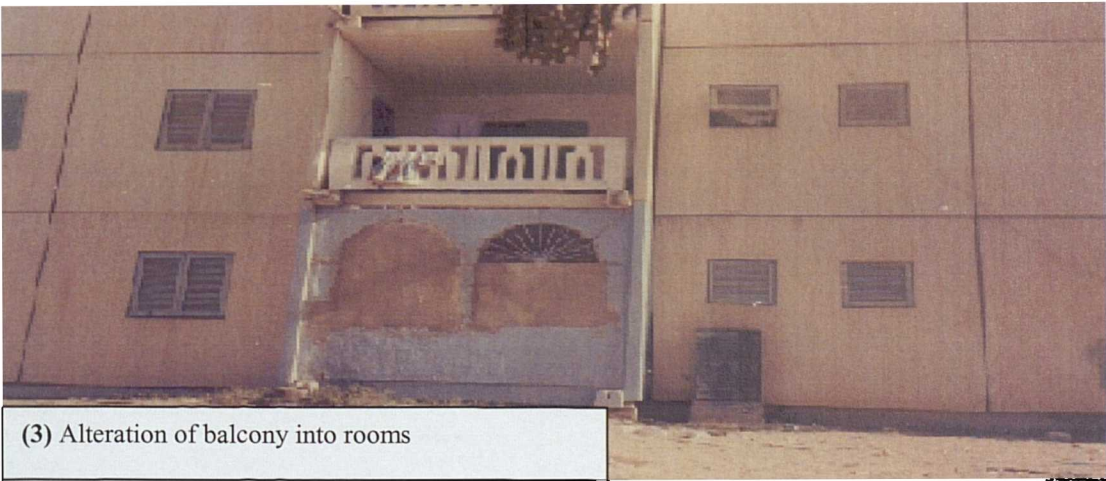
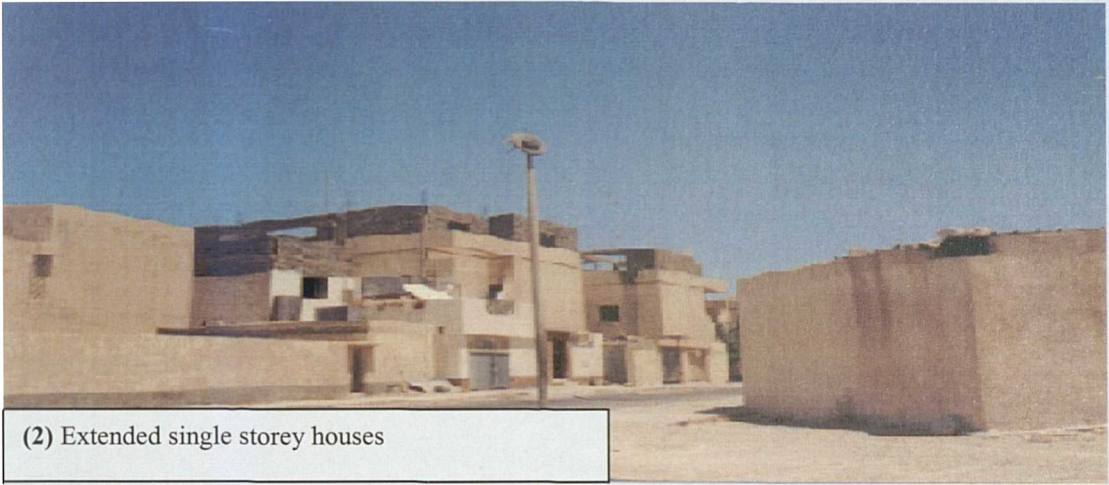
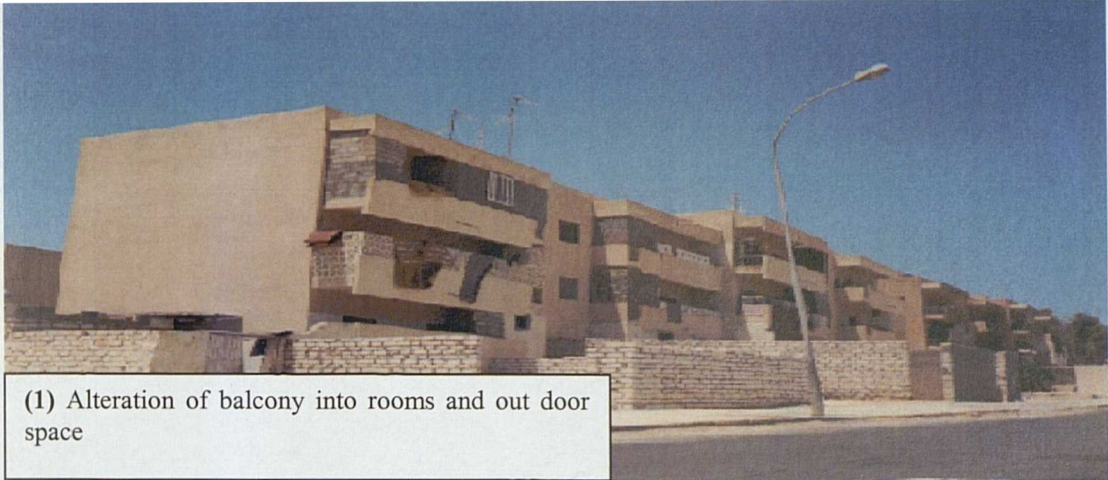
Understanding this phenomenon is a prerequisite to any attempt to provide better quality housing environments and to improve living conditions in existing ones. Expanding the size of the rooms, building new rooms or building another floor. This is because the existing dwellings do not meet the residents' needs (Salama, 1994).

Most observers of housing in developing countries will have noticed the phenomenon of self-help extensions to government-built housing. The (mostly small) single-household dwellings provided to the fortunate few, supposedly low-income, households are being extensively altered and extended.

Housing literature shows that this appears the feature of public housing dwelling in some developing countries. Many studies have been carried out at different times by different researchers in Sana'a by Al-Abed, (1969) Cairo by Salama, (1994) and Tipple et al (1985) and in Algeria by Angal (1991) and Bbehloul (1994).

In many developing countries, residents of public housing areas find themselves in similar circumstances. They are long-term occupants of well-built, badly maintained dwelling (often two or three rooms), paying low or no rent, but with little possibility of moving to a large dwelling. Their children are growing towards maturity, marriage, and childbearing, but can find nowhere to live. Extending their dwellings provides them with an opportunity to improve their own housing and/or provide somewhere for their children to live (Tipple, 1992).

**Photo 6.2: Housing Extension**



In public housing projects where the house or flat is completed with internal walls, doors, kitchen and bathroom fittings and is then subsequently expanded through the occupants own extensions and building additions, the resulting modifications are generally regarded as negative outcomes and are strongly disliked by the authorities. Extensions are legal where the alterations to existing developments are, allowed by a local authority. Extensions to existing dwellings are undertaken because the existing dwellings do not meet resident needs. In the present study, respondents were asked to state if they have made any extensions to their accommodation. Their responses summarised in Figure 6.8

**Figure 6.8: Extensions to the dwelling**

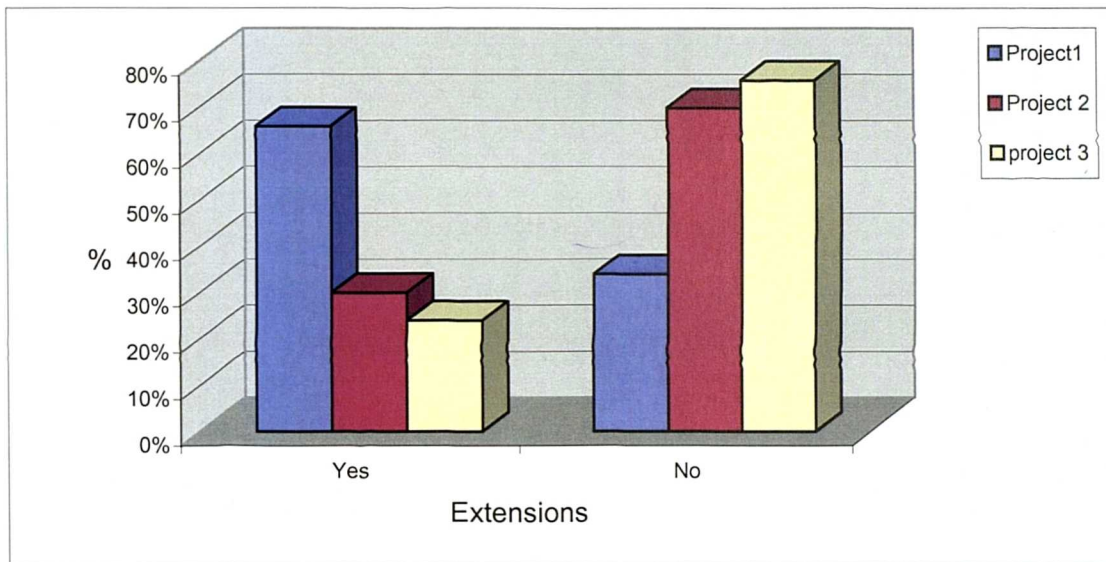


Figure 6.8 shows that 38 per cent of the respondents in the three public housing projects made extensions to their dwelling. The majority of the respondents who have made an extension live in a single storey house (project 1) see photo 7.2. However, the availability of open space around the houses is a major facilitating factor to transformation. For those who live in project 2 and 3 it appears from the

Figure 6.8 that 30 per cent of the households in project 2 and 24 per cent in project 3 have made extensions. Whereas 66 per cent of the households in project 1 have made extensions. In the case of project 2 and 3 flats were built with two or three bedrooms and the average size of the household is 7. The number of rooms is a cause of great distress. Residents had altered the kitchen into a sleeping room or moved it out to the balcony so that the former kitchen can be used as a normal sleeping room. Respondents were asked to give the reason for making extensions. Their responses were as follow:

- Increase the family size
- Looking for other income
- Private garage
- New storey

An interview with the Director of the property department of REISB identified some positive and other negative results of this phenomenon, according to his point of view stated two aspects:

- Firstly, the negative aspect of the extensions is the increase of stress over the already over-exhausted utilities (water, sewerage and electricity).
- Secondly, the positive aspect, utilising the user's own initiatives and cooperatives potentialities to solving their housing problems, especially the social problems caused by the over-crowding inside the dwelling, which in his opinion is getting more and more critical.

Moreover, an interview with the Secretariat of Housing of Tripoli municipality stated that all the households who made extensions had no permission from the government and all the extensions were illegal procedures. This means that there is no control over the public housing projects. Since, then, government recommended that new projects should take into consideration the possibility of future transformation activity from the early planning and design stages. The research result shows that a high rate of change has appeared in low-rise areas, the walk-up flats being far more difficult to modify. Extension activities take place outwards and upward, use public space or even hang from the original buildings. Extra space is used to meet household needs and the changing of lifestyles.

The survey results indicate that some households living in public housing are active in increasing the size and variety of their dwelling. The over development (extensions) of planned public housing has become an issue of concern with the debate revolving around their acceptability and how best to accommodate them. In many cases in developing countries they totally transform residential areas from the original plans.

## **6.7 Type of tenure**

The nature of tenure is important in determining the prevailing interests in public housing and how to plan and manage services. Since March 1978, Libya's new policy on home ownership has developed rapidly, when the Secretariat General of the General People's Congress issued Law No. 4 which sets out the guidelines for home redistribution, which indicates that all Libyan families have the right to own one home, and no one may own more than one, with certain exceptions: widows

whose only source of income is rent, and families with at least one son over eighteen years of age. In 1978, 41 per cent of the Libyan people live in rented private accommodation (Kshedan, 1984). In addition, rental housing has continued to dominate the tenure system in Tripoli city during 1970-1978, with the recession, which has made home ownership more difficult for the low-income households. Evidence from other developing countries cities (Gilbert, and Varley, 1988) stated:

*The number of tenant households is on the increase in spite of conscious efforts to encourage owner-occupation*

By 1979 the committees had completed the redistribution of the houses owned by the private sector or public sector in all municipalities. Since the late 1980s there is no one rented accommodation in the private sector. All Libyan people who stay as tenants rent dwellings from the public sector.

Housing redistribution benefits people who were previously tenants, while transfer of ownership title does not necessarily mean that housing is free, its cost is greatly reduced. New owners, in effect, have a mortgage, which is to be paid in monthly instalments, which are usually calculated according to the size of family income (Secretariat of Housing, 1981). Accordingly, households have the right either to own their dwellings or to stay as government tenants. At the present time, the government is encouraging the households of public housing to own their dwellings. For those who wish to own their dwellings, the amount paid as rent is deducted from the total dwelling cost and the outstanding amount is paid as instalments at an amount not more than 20 per cent of monthly income. In the present study, a question relating to whether respondents of the three public housing projects under investigation own their dwellings or pay rent of it.



The results reported in Table 6.6. The distribution of households by type of tenure on the three public housing projects summarised in Table 6.6

**Table 6.6: Households distribution by type of tenure**

Classification of tenure	P1		P2		P3		All	
	No	%	No	%	No	%	No	%
<b>Owners</b>	43	69	36	58	22	25	101	47
<b>Public Tenant</b>	12	19	18	28	19	21	49	23
<b>Private Tenant</b>	5	8	4	6	9	10	18	8
<b>Without Permission</b>	2	3	5	8	40	44	47	22
<b>Total</b>	<b>62</b>	<b>100</b>	<b>63</b>	<b>100</b>	<b>90</b>	<b>100</b>	<b>215</b>	<b>100</b>

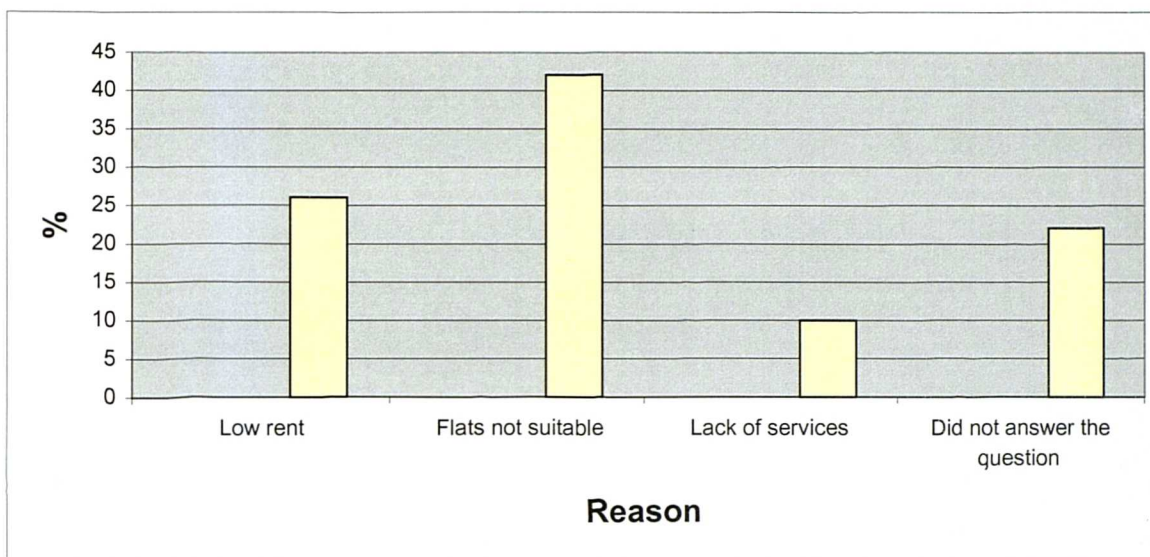
Table 6.6 shows that more than 45 per cent of the households in the three projects own their dwellings. There are variations between the three projects. For example, 69 per cent of the households own their dwellings in project 1, about 58 per cent in project 2 and 25 per cent in project1. The main reason given were the building system type and the social security such a property would afford the owner and the psychological satisfaction of living in one's own house and their interest in such schemes.

With regard to the tenants, the survey indicates that 23 per cent of the respondents pay rent to the authority and 8 per cent private tenants. Other differences were found between projects, with people who were neither owners nor tenants, and living without permission from the government contains 22 per cent of the respondents.

Figure 6.9 shows that 82 households (non-owners) stated that the major reason given was inability to afford the cost of home-ownership in Tripoli city. Out of this



number, 26 per cent would want to rent in public estates. This is based on their belief that rent would be lower in public than in private sector. Because respondents who indicated a preference for rental units were considering costs, while those who wanted to own may not have been. 42 per cent said that flats were not suitable for them, due to the problems of the construction system and number of bedrooms.



**Figure 6.9: Reasons given by respondents for not owning their dwelling**

Only 8 per cent stated lack of services, and 22 per cent did not answer the questions and the majority of these households who live under the allocation from the government (see Table, 6.5).

In interview the Director of Finance Department of (REISB) stated that home-ownership does not only represent a sound investment but also offers status, prestige, security and emotional satisfaction, which are not gained from the renting alternative. But the precipitate economic decline of the country has created a situation where entry into owner-occupation is becoming progressively more difficult and he identified the causes of this crisis, among other things, as:

- The absence of any effective finance mechanisms;
- The continued reliance on imported building materials and,
- Rising land prices

Moreover, Residential opinion with the housing policy and projects can provide an input into improved projects design and implementation to policy revision.

Therefore, as illustrated in Table 6.6, 25 per cent of the households who own their dwellings were living in project 3 whereas 69 per cent of households own their dwelling are living in project1 and 58 per cent were living in project 2. An important difference between project 3 and other two projects is the type of building system.

A cross tabulation will be used to consider the relation between the building system and type of tenure of the three projects under investigation.

**Table 6.7: The relation between type of tenure and building system**

Type of Building system	Type of Tenure				Total	
	Owner		Non-owner			
	No	%	No	%	No	%
<b>Traditional</b>	79	78	46	40	125	58
<b>Prefabricated</b>	22	22	68	60	90	42
<b>Total</b>	101	100	114	100	215	100

The above table shows 78 per cent of those who owned their dwellings were living in a traditional building construction system (project 1, 2). Most of them live in a ground floor house and 60 per cent of the non-owning households are living in a prefabricated building construction system (project 3). That is to say, a prefabricated

building system is not suitable for the Libyan family and environment for many reasons:

- Difficult to maintain
- Hot in summer and cold in winter
- Not suitable for making extensions

The previous discussion showed that most households prefer houses to flats. Hence it is expected that the dwelling type has affected household opinions about public housing. This clearly, indicates that Libyan people do not like to live in dwelling units built by a prefabricated building system.

## **6.8 Satisfaction with the dwelling unit and residential layout**

The objective of this section however is to examine whether the dwelling units built in the three schemes are really suited to the composition, size and the way of life of occupants in the three housing projects. Resident satisfaction with the housing policy, public housing programme, dwelling unit and building system could be useful in future housing programmes. Previous studies have found that housing satisfaction is influenced by variables such as users' characteristics, management, and environmental factor. The level of satisfaction is affected by two sets of variables:

- Firstly, residents attitudes towards the type of dwelling unit and building construction
- Secondly, residents attitudes towards the residential layout

It must be determined if the overall satisfaction level with the dwelling units in the three schemes is the same. If not, then the scheme in which the residents are the most satisfied with their dwelling units will be established. Finally the aim of this section is to identify the most important factors affecting the resident level of satisfaction with the dwelling units.

### 6.8.1 Residents attitudes towards the type of dwelling unit and building construction

To assess the type of dwelling provided by the public in Libya, residents were asked to state their opinion about the dwelling unit. The question was “Does your accommodation meet the needs of your family? A wide variety of responses were obtained when the residents were asked about their opinion with the dwelling units as a whole. The result reported in Figure 6.10

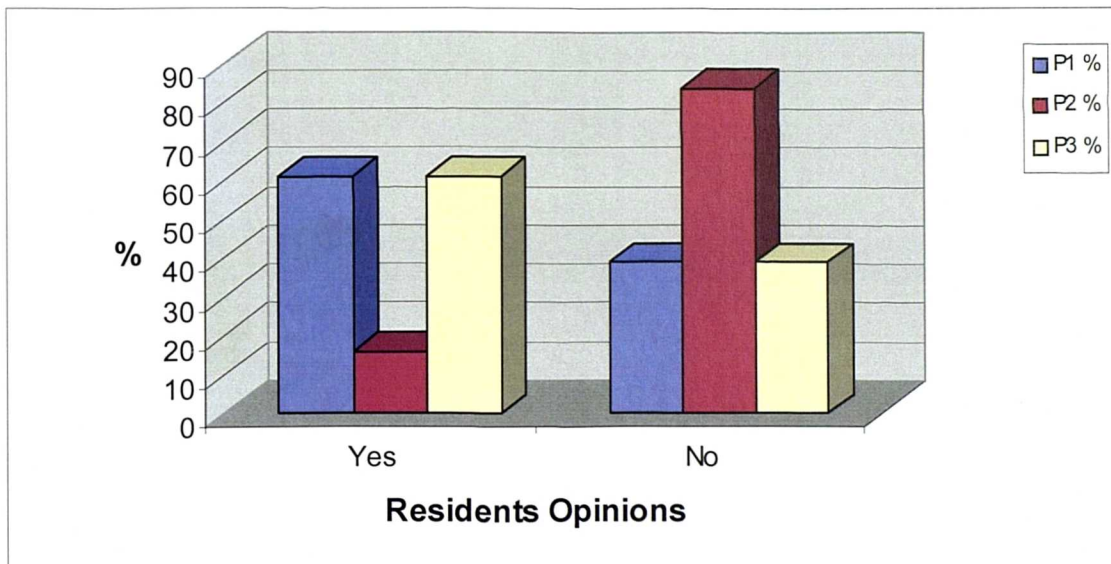


Figure 6.10: Residents opinions with their dwelling unit

Figure 6.10 shows, the group of occupants that expressed their opinions with their dwelling unit positively and stated that the dwellings meet their needs constituted 48 per cent of the total sample of the respondents in the study, whereas 52 per cent said did not meet their family needs.

However, clear differences in the level of satisfaction were observed between the residents in the different housing schemes. Residents in the project 1 and 3 observed the highest level of meeting needs some 61 per cent of each project 1, 3 stated that their dwelling meet their needs. In contrast the lowest percentage of satisfaction was found amongst resident in project 2, where only 16 per cent showed satisfaction with their dwelling unit.

Satisfaction levels in the three schemes are considered to be a reflection to the type of dwelling and building system construction. This indicate that Libyan people prefer houses to flats because flats do not provide adequate privacy and outdoor space to satisfy the traditional family (Mokhtar, 1997). The design and building of most of the public housing project were the responsibility of foreign contractors and were not familiar with Libyan society. In this respect El Fortea (1989) stated that:

*In the public housing areas, which the study investigated foreign companies were called in to build, or advise on with no background about the society, have failed to meet people's needs. P 209*

Results from respondent opinion about their dwellings indicate that public housing policy failed to provide an adequate dwelling type to meet family needs. From the above discussion it appears that there is a gap between the policy makers and the users in terms of housing needs. The government policy process built public housing

in the absence of the users. Accordingly policy makers should take into account the users view so that the users` satisfaction could be achieved.

The study revealed that there were certain aspects of the dwellings, which were considered unsatisfactory by a significant proportion of the respondents. The lack of space was found to be the most important factor that caused dissatisfaction with the dwelling units. This is clearly indicated by the fact that a high percentage of respondents (more than 50 per cent) were dissatisfied with the size of the dwelling units provided for them.

When data on satisfaction with the dwelling units were presented graphically against the three public housing projects, it was found that the highest level of satisfaction was with project 1 (ground floor houses). The results indicate that this is due to the size of the units in this scheme, which are larger than the units of the other two projects.

Another factor, which may affect resident satisfaction, is the building construction system. Two systems (traditional and prefabricated) have been used in the construction of the three housing schemes under investigation. These two systems have been assessed from the point of view of the residents who are living in the selected schemes. The traditional building system was used in project 1 and 2 whereas prefabricated system was used in project 3. Respondents were asked to state their opinions about the building system used for public housing projects.

The result indicates that all households are of the view that the traditional building system is suitable for the environment. Respondents stated the reasons that led them prefer the traditional building system can be summarised as follows:

- 44% stated “get used to the traditional building system”
- 34% stated “easy for extensions”
- 22% stated “suitable for the climate”

The prefabricated building system used in scheme has been used since the early 1980s. Respondents were asked to state their opinions about this type of building system. The large majority (90 per cent) of the respondents who are living in the three selected projects indicate this type of building is not suitable for the Libyan people and environment for many reasons:

- Not easy to maintain
- Hot in summer and cold in winter
- Difficult to make extensions

In conclusion, it appears from the above discussion that Libyan people prefer to live in ground floor houses built with traditional building system

### **6.8.2 Residents attitudes towards the residential layout**

The assessment of the residents` satisfaction level was established by examining residents` satisfaction with the residential layout`s efficiency factors, such as accessibility, safety and security, privacy and pedestrian movement



### 6.8.2.1 Satisfaction with accessibility

Accessibility is one of the most important factors to be considered in the selection of the residential areas, and it has a direct effect on the efficiency of the residential layouts. Consideration of accessibility in the project layouts was examined in the three selected projects. Data analysis results concerning accessibility indicated that the majority of the respondents were satisfied or very satisfied with vehicular accessibility in the projects layouts, the reason being that the three schemes under investigation connected with surrounding major roads

### 6.8.2.2 Satisfaction with safety and security

Safety and security have a direct effect on the efficiency of project layouts. The layout of the residential areas, which is vehicle-oriented, encourages vehicular movement by providing straight and wide streets. This however, resulted in the increase of car accidents inside the residential area, and affected children's safety while crossing the streets to and from the open spaces, which are surrounded by vehicular movement. Respondent level of satisfaction with safety and security in residential layout was examined in the three selected projects (See Figure 6.11).

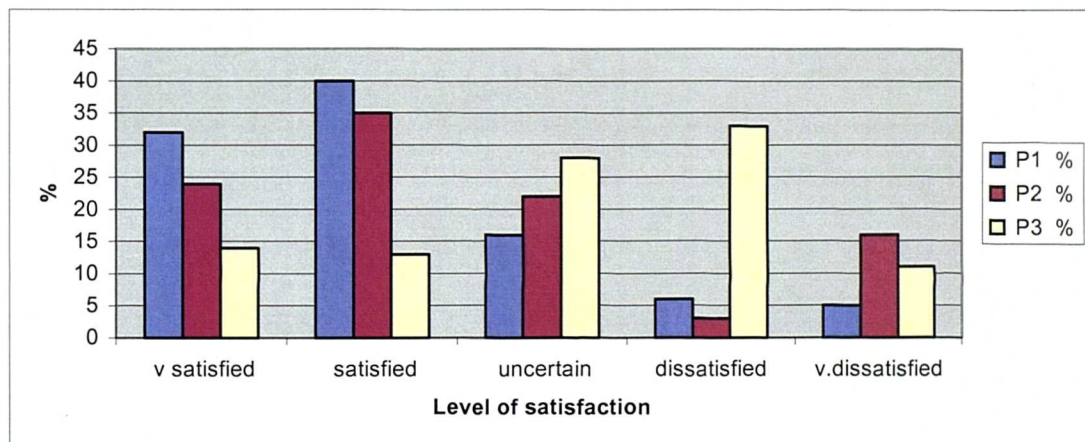


Figure 6.11: Satisfaction with safety and security



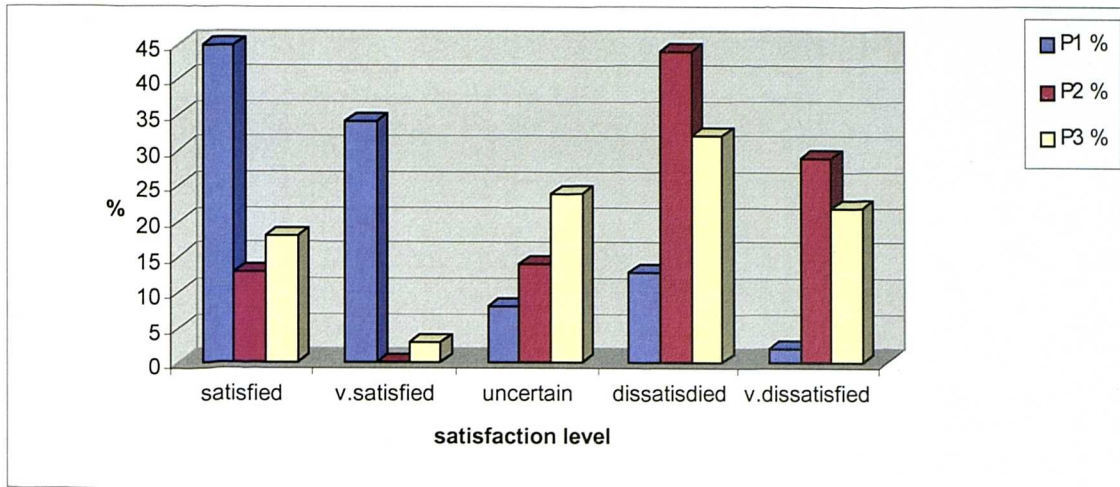
Questionnaire results (Figure 6.11) show significant differences between the three projects. The majority (72 per cent) of the respondents in the project 1 were satisfied and very satisfied with safety and security in the area layout, 59 per cent of the respondents in the project 2 were satisfied and very satisfied.

Only 11 per cent were dissatisfied or very dissatisfied in project 1 and 19 per cent in the project 2 whereas 44 per cent were dissatisfied and very dissatisfied in project 3.

The increase in the crime rate in most of project 3 is a direct result of the neglect of security factors in the residential layout of this area. This layout of project 3 can be described as an open one, which means that any person can pass through the residential area and there is no control. Most of the residents do not know each other, and this resulted in the lack of security in most of project 3 and the increase of theft, burglaries, etc.

### **6.8.2.3 Satisfaction with maintaining privacy**

The desire for privacy is a significant socio-cultural aspect influencing the built form since the basic need for privacy in the built form exists among all cultures and societies. However, the required levels and forms of privacy vary from one culture to another. Data analysis (Figure 6.12) shows a significant difference between the respondents from the three selected projects.



**Figure 6.12: Satisfaction with maintaining privacy**

The above figure indicates that the majority (79 per cent) of the respondents in project 1 (ground floor houses) were satisfied and very satisfied with maintaining privacy in the residential area layout. The orientation of the houses and the concept of private space maintained privacy in the project.

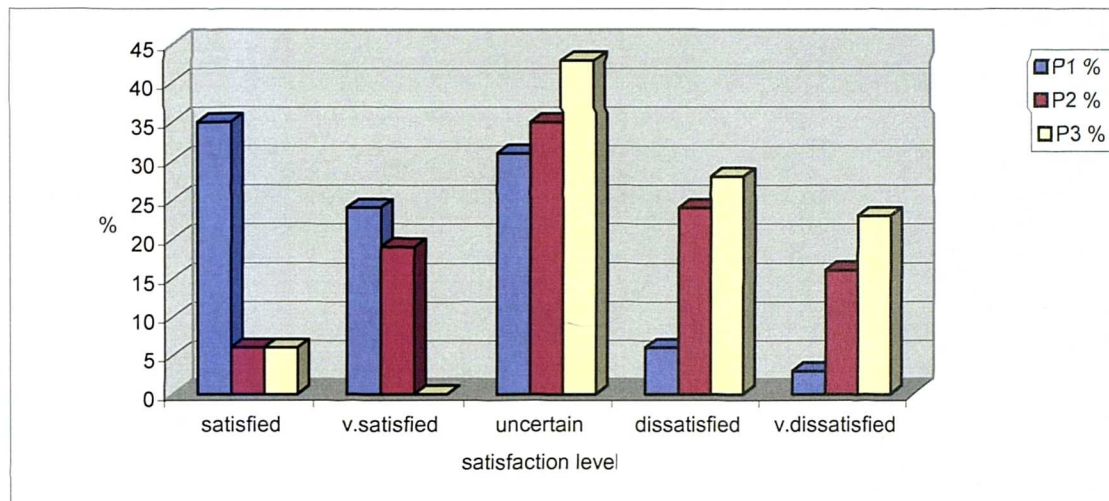
However, the majority (73 and 54 per cent) of the respondents in projects 2 and 3 (walk-up flats) traditional and prefabricated building system were dissatisfied and very dissatisfied with maintaining privacy in the residential area layout. The layout of these two projects did not maintain privacy by neglecting the arrangement of the flats, which resulted in their being overlooked.

The flat entrances and the openings face each other and the ground floor flats cannot use the space along side the dwelling. The different heights of the buildings, such as two-storey building facing four-storey building, and the different dwelling type are other important factors affecting the privacy of the residential area

#### 6.8.2.4 Satisfaction with pedestrian movement

Pedestrian movement is the major transportation mode inside the residential area. Therefore great attention should be given to it. Satisfaction with pedestrian movement was established in each project. Data analysis

(Figure 6.13) shows a significant difference between the three projects. Residents were asked to state their opinions about pedestrian movement and the result is reported in the Figure 6.13



**Figure 6.13: Satisfaction with pedestrian movement**

It appears from the Figure 6.13 that the majority (59 per cent) of the respondents in the project 1 were very satisfied and satisfied with pedestrian movement in the residential area. The layout of the project area encourages pedestrian movement by providing safe and comfortable alleyways. However, the majority (40 and 51 per cent) of the respondents of the project 2 and project 3 were dissatisfied and very dissatisfied with pedestrian movement in the residential area.

## 6.9 Factors that influence the selection of accommodation

The selection of the residential area is an important issue. Several factors influence the selection of an appropriate project for living. These vary from one person to another, depending on the family's preferences and circumstances. An analysis has been undertaken of the factors that households normally consider when looking for accommodation.

Five factors were identified and respondent were asked to rank them in order of importance.

**Table 6.8: Factors influence the selection of accommodation**

Factors	Households ranking (in %)					
	First %	Second %	Third %	Fourth %	Fifth %	Total %
<b>Proximity of workplace</b>	45	15	16	13	10	100
<b>Accessibility and good location</b>	22	50	7	6	16	100
<b>Type of dwelling</b>	24	16	38	15	6	100
<b>Cost</b>	13	6	19	48	15	100
<b>Availability of infrastructure</b>	28	22	17	3	29	100

- 143 household answered the question

The above table shows differences between the residents regarding the reasons for selecting their accommodation. The result indicates that proximity of workplace is the major factor influencing the selection of the accommodation. The workplace is the place the person visits daily, therefore the households prefer to be near it to save time and to avoid unsafe road junctions. Accessibility and good location are the second factor influencing the selection of the residential area. Accessible and good location of the residential area allows the residents to move easily and provides more flexibility for the residents. The type of dwelling was chosen by 38 per cent of the

respondents as the third factor that they considered when looking for a dwelling. This supports the results from this study, which show that most households prefer houses to flats. The fourth factor was cited by 48 per cent of the respondents and the last factor the availability of infrastructure. The above factors: proximity of workplace, accessibility and good location, and type of dwelling are the three most important reasons in the selection of the residential area.

### **6.10 Summary**

The finding of this chapter revealed that the age of the majority of the heads of households is in the economically active age group and most of them were employed and had achieved a good educational level, which gives them the ability to discuss their problems and to give clear opinions about housing policies

An assessment of respondent income showed that the majority of the respondents in the three projects were in the same level. The limited income of many households suggests that the household is likely to live in the unit for many years. Moreover, residents with high income in the three projects represent only 8 per cent

The housing estate examined in the study contains different types of building system and different types of dwelling. Residents' opinions with dwellings were strongly affected by its type. The most satisfactory one was the ground floor house

Resident's opinions about maintenance of their dwelling are vary between the three projects. The result indicates that the majority of non-owners had not maintained their dwelling-especially shared facilities and prefabricated facilities. That is to say prefabricated building system is not suitable for the Libyan family and environment.

This indicates that there is no management system controlling public housing projects. Regarding the extensions, the result shows that a high rate of changes has appeared in low-rise areas. Extension activities take place outwards and upward, uses public space to meet the household needs and the changing of lifestyles.

The greater influence to this study is the mean household size, at 7.6 persons among the sample population of 215 households. This reflects the housing shortage in the city and the rate of sharing and occupancy is still higher than the policy standards.

**CHAPTER SEVEN**  
**DATA ANALYSIS AND RESULTS**  
**SATISFACTION WITH HOUSING SERVICES**  
**AND LOCATION OF PUBLIC FACILITIES**

## CHAPTER SEVEN

### **DATA ANALYSIS AND RESULTS: SATISFACTION WITH HOUSING SERVICES AND LOCATION OF PUBLIC FACILITIES**

#### **7.1 Introduction**

Infrastructure and services are an important aspect of housing and should normally be planned and provided concurrently. The provision of essential infrastructure and services to settlement is, next to land, the most important obstacle to meeting the residents' demand for all income groups (Van Huyck, 1987). Due to pressing economic conditions, most public institutions have had problems of providing adequate and efficient services and during the last decade there has been a move to "contract out" services. Although this is still minimal in developing countries and has often covered mainly the areas of education, health, communication, urban transport, water and sewage (Roth, 1987).

This chapter examines the factors affecting satisfaction with social and physical infrastructure. Emphasis will be placed on the effects of residents' attitudes towards the quality of infrastructure facilities. The main concern of this discussion is the infrastructure within the three housing schemes under investigation. It also attempts to identify the facilities, which are urgently needed by the different socio-economic groups in the project and the quality of services. The object of this analysis is to provide guidelines, which may help in the design of new projects where facilities are easily and safely reached and may also help in defining the type of facilities needed



by residents with different socio-economic characteristics. This may help designing new housing projects, which may satisfy the majority of the residents. In the design of the housing projects, infrastructure divided into off-site and on-site infrastructure. In Tripoli city most of the off-site infrastructure, such as electricity power supply, road network, water storage facilities and sewage system have been provided. The physical infrastructure comprises education, health facilities, post office and shopping facilities.

## **7.2 Infrastructure and services**

The availability of infrastructure and services is one of the major factors affecting residents' satisfaction with the residential environment. At the same time, the lack of infrastructure and services could be a result of the inefficiency of the residential layout. In this study, the residential environment is the component of the physical and social environment in which people live.

The quality of housing or the quality of residential environment embraces education, health services and shopping facilities. The social environment here includes access roads, drainage, electricity, street lighting sanitation and refuse collection. These are judged sufficient for the assessment of housing and implication for physical improvement of a settlement. Each public housing project in Tripoli city is implemented with complete infrastructure services.

As these were available, the discussion of this research is to examine residents, satisfaction with these services.

## 7.2.1 Residents attitude towards the social infrastructure

Availability of social services is one of major factors affecting residents' satisfaction with the residential environment. Access to a wide range of social services, particularly education, health services and shopping facilities are important factors in evaluating the standard of living. The three housing schemes under investigation education, health and shopping facilities were available. Residents living in the three housing schemes have access to a range of facilities within walking distance.

### 7.2.1.1 Satisfaction with location of education facilities

The location of the education facilities should be carefully selected; it should be away from vehicular movement and within walking distance of the farthest dwellings. Most of the parents use their cars to take children to school, which creates a lot of traffic problems. Satisfaction with the location of education facilities in the residential area layout was established by examining the households of the public housing project. Respondents of the three housing schemes were asked to state their level of satisfaction with the availability of education facilities.

**Table 7.1: Satisfaction with location of educational facilities**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	19	11	14	15
<b>Satisfied</b>	65	65	66	65
<b>Uncertain</b>	5	13	11	10
<b>Dissatisfied</b>	6	7	9	7
<b>Very dissatisfied</b>	5	4	0	3
<b>Total</b>	100	100	100	100

Data analysis (Table. 7.1) shows different opinions between the respondents in the selected schemes. The majority of the households were satisfied and very satisfied with school location in the residential area. Only 10 per cent were dissatisfied. Most of the schools in the three schemes are in safe locations and within walking distance from the distance dwellings.

### 7.2.1.2 Satisfaction with location of shopping facilities

Shops are an important element of the residential area since most of the residents need to do daily shopping for their daily needs. Therefore they should be in a suitable location to serve most of the population. During the 1980s, all the shops were in central stores run by the government.

In recent years the government has given permission for people to open private shops throughout the city. Residents' satisfaction level with the site of shops in the residential area was established by examining the households of the three schemes.

**Table 7.2: Satisfaction with location of shopping facilities**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	6	0	12	6
<b>Satisfied</b>	60	53	78	63
<b>Uncertain</b>	15	17	6	13
<b>Dissatisfied</b>	15	17	4	13
<b>Very dissatisfied</b>	4	13	0	5
<b>Total</b>	100	100	100	100

Analysis of the data (Table 7.2) shows that the majority (66 per cent, 53 per cent) of the households living in project 1 and 2 were satisfied and very satisfied with the shops location in the residential area. A corner shop is considered, as one of the major

elements of these projects and it's located within walking distance from the distance dwellings. Modern residential layouts neglect the concept of the corner shop, or in other words the municipality forbids corner shops in the modern residential areas, which creates a lot of difficulty for residents to get their daily needs (Edrees, 2001). Also the majority of the project 3 respondents (90 per cent) were satisfied and very satisfied with the shops' location. Project 3 (2nd March Project) is considered a commercial area due to its position in relation to the city centre and surrounded by large population. As mentioned before, most of the facilities and services are available in this area.

### 7.2.1.3 Satisfaction with health services

A health clinic is one of the major elements of the residential area, which should be available and in a suitable location. Resident satisfaction with the health services was established by asking the households to state their opinions about the location and clinic services. Results are reported in Table 7.3.

**Table 7.3: Satisfaction with health services**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	5	8	6	6
<b>Satisfied</b>	52	51	76	59
<b>Uncertain</b>	19	13	11	15
<b>Dissatisfied</b>	15	16	6	13
<b>Very dissatisfied</b>	9	11	1	7
<b>Total</b>	100	100	100	100

The above table indicates that more than 60 per cent of the households were satisfied and very satisfied with health services. Only 20 per cent of the respondents were dissatisfied and very dissatisfied. This may relate to the unavailability of medication

in their centres. From the degree of satisfaction, it appears that there are enough health facilities within close proximity to the households.

#### 7.2.1.4 Satisfaction with the size of private outdoor space (Balcony and space)

The need for large and easily supervised playgrounds in Libyan society is due to large families (6 to 8 persons/family). Information and responses collected about private open spaces related to satisfaction with their size in the three housing projects.

Findings (Table 7.4) show the availability and size of the balcony and the available space for children to play can be considered a major problem to most of the residents of low-income housing schemes (See photo 6.2). In the designing of the public housing projects, outdoor space was taken into account but most of them were unserviced.

**Table 7.4: Satisfaction with outdoor space**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	0	0	0	0
<b>Satisfied</b>	32	0	0	11
<b>Uncertain</b>	24	29	34	29
<b>Dissatisfied</b>	24	55	46	42
<b>Very dissatisfied</b>	19	16	20	18
<b>Total</b>	100	100	100	100

As expected, the results indicate that children's play facilities are very poor. Table 7.4 shows the majority of the residents of the three housing projects were very dissatisfied and dissatisfied with the provision of a balcony and the space for children to play.

For those who live in ground floor houses they can manage that because they have a back open space, but the problem still faces those living in block of flats. In fact all the dwelling units in each scheme are provided with private balconies for children to play. But in most of cases the space has been used for conversion into a dining room or in other cases simply for extra storage space.

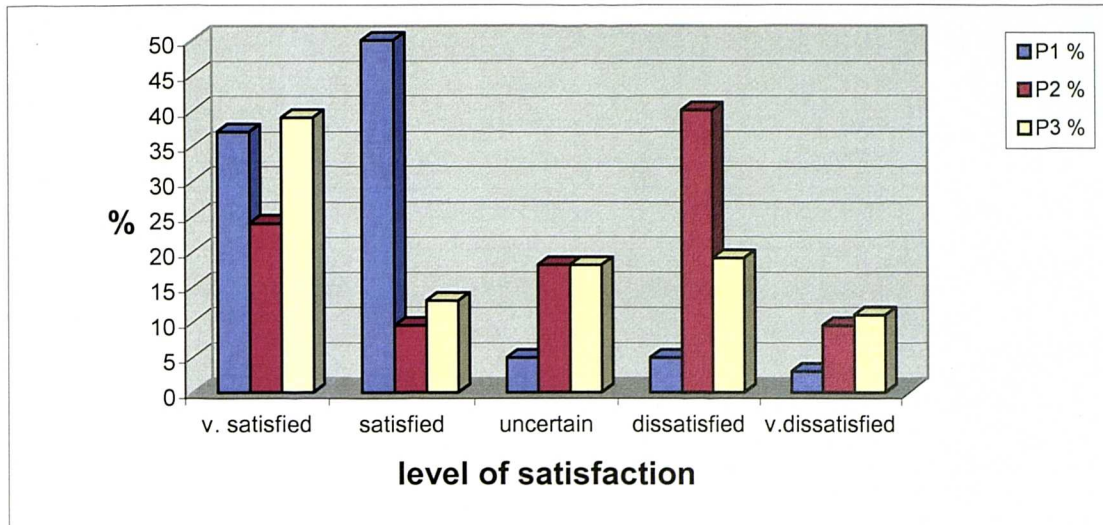
According to the current situation, the government failed to provide children's play grounds for low-income housing projects. Therefore, the authority is recommended to provide good services for the residents and their children.

In conclusion, *it appears that residents living in the three housing schemes were generally satisfied with the provision of facilities except the outdoor space, which is in need of further improvement.*

#### **7.2.1.5 Satisfaction with mosque location**

The mosque is the most important element in the Muslim community; therefore its location is very important and it has a direct effect on the satisfaction level. Respondents' level of satisfaction with the mosque's location in the three projects under investigation was established by examining each project.

Households were asked to state their level of satisfaction with the mosque location. Results are reported in Figure 7.1



**Figure 7.1: Respondents' satisfaction with the mosque location**

Figure 7.1 shows differences between the respondents regarding the mosque location. The majority (87, 52 per cent) respectively of the respondents of the project 1 and 3 were satisfied and very satisfied with the location of the mosque since it is within walking distance from all dwelling whereas, the majority (50 per cent) of the respondents of project 2 were dissatisfied and very dissatisfied with the mosque location. The unsuitable location of the mosque required a long walk or the use of the car for transportation inside the project and at the same time, made it very difficult for some of the elderly residents and children to pray in the mosque. There are several mosques in the three projects but the location was not studied or carefully considered.

Also, in some cases, there are two mosques close to each other, while some area suffered from the lack of a mosque. In conclusion mosques were available in the three projects under investigation but not in the appropriate places.

#### **7.2.1.6 Satisfaction with post office location**

The post office service is considered to be one of the major elements of the residential area. Most of the residents use the post office daily, especially in Libya, because the residents have to collect their mail from the post office (no home mail delivery). Residents' level of satisfaction with the location of the post office in the three selected projects was established by examining each of the three projects.

Data analysis indicated that all households (100 per cent) were very dissatisfied with the location of the post office. The lack of the post office in residential areas, and the unsuitable location of those available are the two major reasons for resident dissatisfaction. Every family must have a post box for mail, but due to the lack of post offices in the residential area they are required to drive for long distances to collect it. In some cases, there are shortage of post boxes, which creates a long delay, and the problem of by whom or where mail should be collected.

#### **7.2.2 Residents attitudes towards physical infrastructure**

Physical infrastructure services and facilities are considered the basic for human living. According to Kirke (1984), the major services which may reasonably be required to serve any existing or proposed low-income housing area and which particularly affect cost and residents satisfaction are: road and street lighting, storm water drainage, sanitation, refuse collection, sewage system, water supply and electricity.

These are examined here and their importance discussed.



### 7.2.2.1 Satisfaction with the road and drainage system

The streets of a settlement have important social and economic values, especially where they are spacious and in reasonably good condition. Access roads are part of the basic urban infrastructure. Roads and streets link up and enhance access to residential buildings and to other part of the city.

The three housing schemes under investigation are designed as a hierarchy and associated with storm water drainage system.

In project 1 and 2 the streets were tarred and serviced with lighting. The situation in project 3 was different with road and street development still inadequate and in poor condition. This situation affects the residents satisfaction with road services. Residents were asked to state their level of satisfaction with the road and street conditions. Their result reported in Table 7.5

**Table 7.5: Resident satisfaction with road and street conditions**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	35	16	0	17
<b>Satisfied</b>	34	19	17	23
<b>Uncertain</b>	13	17	24	18
<b>Dissatisfied</b>	9	32	34	25
<b>Very dissatisfied</b>	8	16	25	16
<b>Total</b>	100	100	100	100

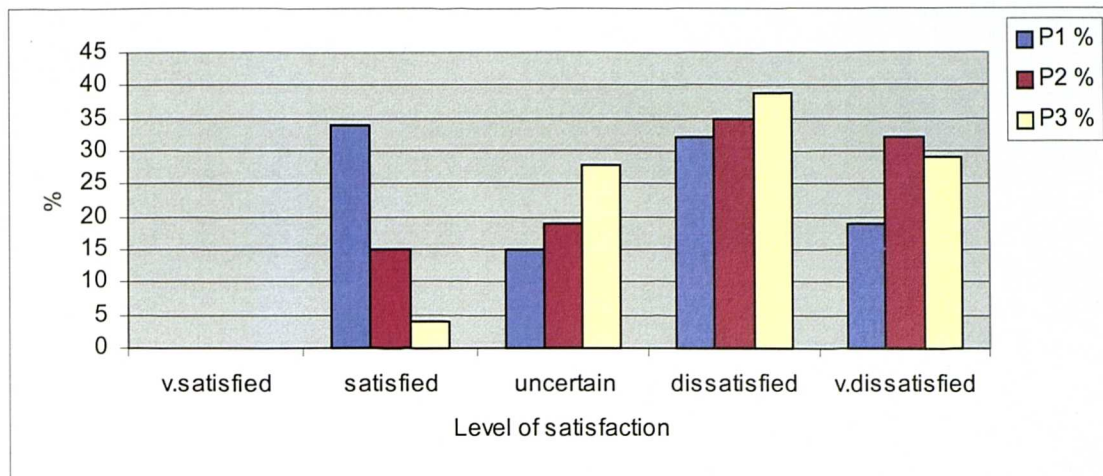
The above table indicates that the majority (69 per cent) of the respondents in project 1 and 35 per cent of the households in project 2 were satisfied and very satisfied with the road network. Whereas more than half of the respondents in project 3, and 17 per

cent of the project 1 were dissatisfied and very dissatisfied. This is because the road network services in this project were in poor condition and the streets were blocked by water during the wintertime. Most streets had been badly damaged by storm water, making them inaccessible to vehicles, which clearly affect the residents' satisfaction with the road network.

Drainage in urban centres implies the removal of unwanted water. Emphasis here is on storm water and floods. Storm water drains have often been considered as the most urgently needed urban infrastructure in low-income housing. Adequate drains help ensure a healthy, habitable environment and protect life and property against flooding in the urban settlements (UNCHS, 1992). Households of the three projects under study were asked to state their opinion about the drainage system. The findings reported in Figure 7.2.

Figure 7.2 indicates that the majority (62 per cent) of the respondents were dissatisfied and very dissatisfied with drainage system. The drainage scheme was prepared with good intentions but unfortunately the authority did not manage it well. Especially project 1 due to the untarred street with a blockage of some roads and people were unable to use it for sometime. A properly planned and implemented drainage system for the settlement as a whole would, therefore be necessary.

Street lighting is non-existent in most parts of the three scheme, it is non-functional as the poles have been standing along such streets for years without the bulbs and the actual electricity connections to make them function.



**Figure 7.2: Households opinions on the drainage system**

### 7.2.2.2 Satisfaction with refuse disposal services

Inadequate refuse waste disposal is one of the factors that affect residents' satisfaction. Inefficient refuse management could jeopardize other urban infrastructure services such as roads and storm water drains (World Bank, 1994). Collection and disposal of solid waste should therefore be the primary objective of any refuse service system.

In Libya, refuse services are largely poor and ineffective. Various organisations are responsible for the collection of refuse (Mokhtar, 1997). These are as follows:

- The General Cleaning Companies in the Cities (GCC)
- The Board of environmental protection and maintenance
- Private Sector

Respondents were asked to state their level of satisfaction with the refuse disposal service. The survey found that all households prefer to take rubbish themselves to the collection points and the GCC, then collects the rubbish from collection points This is due to the limited services provided by the GCC. The Refuse disposal is located near to the main access roads of every housing scheme. Unfortunately, the local municipality seems unable to cope with the clearing of these refuse points at the frequent periods demanded.

This resultant effect is that some of the areas are badly littered with waste. This presents ugly and unsightly scenes in these roads and affect residents satisfaction with the services. Ogu (1996) in his study of Benin City in Nigeria found a similar result. Therefore, the government service on refuse disposal clearly, will affect residents' satisfaction with rubbish disposal. Data analysis indicates that the large majority of the respondents were dissatisfied and very dissatisfied. The Libyan government should seek to make some improvements in the organisation involved in environmental cleaning.

### **7.2.2.3 Satisfaction with the electricity power supply**

In Libya almost every dwelling is connected to the electricity power supply network. All respondents had access to this facility in their dwellings. The Libyan government has given this a high priority during the last two decades. As a result of that, the electricity power is available everywhere in the city. The electricity power is supplied to the consumer through a continuously extending system of electric power network with voltage of: 220 kV, 30 kV, 11 kV (Mokhtar, 1997).

Respondents were asked to state their level of satisfaction about the electricity power supply. Table 7.6 summarises the findings.

**Table 7.6: Respondents satisfaction with electricity supply**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	55	48	46	49
<b>Satisfied</b>	24	40	32	32
<b>Uncertain</b>	0	0	9	4
<b>Dissatisfied</b>	15	9	8	10
<b>Very dissatisfied</b>	6	3	5	5
<b>Total</b>	100	100	100	100

Table 7.6 shows that more than 80 per cent of the respondents were satisfied and very satisfied with the electricity services. This indicates that the Libyan government has succeeded in providing this services for low-income people. For those people who stated that they were dissatisfied with this services, their reason was that the supply was disconnected many times during the winter time without any prior notice

#### **7.2.2.4 Satisfaction with water supply**

In Tripoli city the quality of water varies from place to place and all public housing is constructed with complete piped water network. Therefore, the discussion here will be about the level of service, and the quality of water provided to dwelling of the three schemes under investigation. However, there are some problems related to the low pressure in which water cannot reach the upper floors of buildings particularly during the daytime. In 1996, Tripoli city receiving water from the man-made river, and the water problem in the city was solved.

Households were asked to state their level of satisfaction with water supply.

Their responses are summarised in Table 7. 7

**Table 7.7: Respondents satisfaction with water supply**

<b>Level of Satisfaction</b>	<b>P1 %</b>	<b>P2 %</b>	<b>P3 %</b>	<b>All %</b>
<b>Very satisfied</b>	24	29	12	20
<b>Satisfied</b>	35	30	20	27
<b>Uncertain</b>	16	21	23	20
<b>Dissatisfied</b>	18	14	22	19
<b>Very dissatisfied</b>	6	6	22	13
<b>Total</b>	100	100	100	100

Data analysis of Table 7.7 shows the different level of satisfaction between respondents. 47 per cent of the respondents in three schemes were satisfied and very satisfied with water supply. The majority live in ground floor, dwelling whereas, 32 per cent of the respondents were dissatisfied and very dissatisfied with water supply.

Their reason was that the quality of water available in their dwelling is not suitable for drinking and other households stated that the water cannot reach the upper floor of the building during the day time. Gilbert (1993) in his study of Third World cities found that, few governments in the Third World have ever managed their cities very well. In general, water systems leak; there are frequent electricity power-cuts; there is a lack of component policing; there are holes in the roads.

### **7.3 Improvement and development priorities**

This research could contribute to establishing what people want in order to be satisfied with their residential environment; therefore respondents' preferences and

opinions are of great importance. The vast majority of the respondents of the three housing schemes would like to see an improvement to make positive contributions and take active part. This section seeks to find out which developments would be of priority concern to them. To find out this, four categories of developments were put forward:

### 7.3.1 Priority rankings for physical and environmental improvements

This consisted of roads and streets physical layout, drainage system and children play ground. Respondents were asked to select the priority for physical and environmental improvements. Results are reported in Table 7.8

**Table 7.8: Priority order ranking for physical and environmental improvements**

Ranking	Roads & streets		Physical layout		Playground		Drainage	
	No	%	No	%	No	%	No	%
No improvement	-	-	1	1	-	-	-	-
Highest rank	12	12	10	10	15	15	61	62
Second rank	41	42	13	13	28	28	19	19
Third rank	26	27	35	35	40	40	12	12
Fourth rank	19	19	39	39	15	15	6	6
Total	98	100	98	100	98	100	98	100

(98 households answered the questions)

In a analysis of Table 7.8, the ranking for this category shows that the top priority candidate for improvement and provision was the drainage system, scoring 62 per cent of all scores for the top rank. The second ranking was roads and streets improvement scoring 42 per cent, followed by children’s play ground (40 per cent scores for third priority) and the fourth item of priority was improvement to the physical layout.

### 7.3.2 Priority ranking order for basic infrastructure

These comprised electricity power supplies, water supply, refuse disposal and street lighting. Table 7.9 gives the results of the distribution of responses by the residents to the priority order ranking of basic infrastructure improvement.

**Table 7.9: Distribution of responses to priority ranking of basic infrastructure**

Ranking	Electricity supply		Water supply		Refuse disposal		Street lighting	
	No	%	No	%	No	%	No	%
No improvement	-	-	1	1	-	-	-	-
Highest rank	15	15	19	19	58	59	5	5
Second rank	19	19	36	37	11	11	11	11
Third rank	33	34	28	29	12	12	25	26
Fourth rank	31	32	14	14	17	18	57	58
Total	98	100	98	100	98	100	98	100

Data analysis of Table 7.9 shows that the provision and improvement of refuse disposal were the top ranking items they would want tackled as priority items, which score 59 per cent of the respondents as the highest-ranking priority.

Water appeared to be the next important item, with around 37 per cent and electricity came third with about 34 per cent. Street lighting appeared to be the lowest priority item, with 58 per cent. One per cent thought that there was no need for any improvement for the water supply.

The table thus reveals what residents would expect from basic infrastructure by way of emphasis in the event of any improvement programme for the project.



### 7.3.3 Dwelling unit priority rankings

The consideration here was on improving the existing housing stock and the provision of new housing. Respondents were asked to select the priority improvement for their dwelling unit. Their responses are summarised in Table 7.10

**Table 7.10: Respondents priority ranking for the dwelling unit**

	Dwelling priority	
	No	%
No improvement necessary	-	-
Improve dwelling facilities	28	28
Improve size of the dwelling	44	45
Provide new dwelling	26	27
<b>Total</b>	<b>98</b>	<b>100</b>

(98 households answered the question)

Table 7.10 shows distribution of the respondents' priorities. Improved size of the dwelling came as the top-most priority concern, scoring 45 per cent of all the responses in the three housing projects. This was followed by improvement to the dwelling facilities, which scored 28 per cent of the total respondents, then by the provision of new housing.

### 7.3.4 Public facilities priority rankings

This comprised the provision of primary school, health care access, local shop and local market. Priority preferences with regard to the provision of public facilities that are available in the project were also investigated. Households were asked to rank the priority order for improvement public facilities. The results are displayed in Table 7.11

**Table 7.11: Distribution of responses to priority ranking of public facilities**

Ranking	Primary school		Health care access		Local shops		Local market	
	No	%	No	%	No	%	No	%
No improvement	-	-	-	-	-	-	-	-
Highest rank	45	46	31	32	17	17	8	8
Second rank	22	23	43	44	19	19	18	18
Third rank	19	19	12	12	25	26	34	35
Fourth rank	12	12	12	12	37	38	28	29
Total	98	100	98	100	98	100	98	100

The above table indicates that the top option was the provision of primary schools, scoring 46 per cent from the respondents in the three schemes. Health care facilities were the next most important item, gaining the second position with 44 per cent of the respondents. The provision of local market is in third position with a score of 35 per cent.

As far as priority ordering was concerned with respect to the items discussed, it seemed the residents in general had a fairly good idea of the things they lacked and how importance would be attached to them in the event of any improvement and redevelopment programme.

#### **7.4 Housing aspirations and affordability**

In the private sector, the choice exercised by consumers are expected to give the providers of housing guidance as to what types of accommodation urban households are willing and able to pay for. However, the basis for housing policy and project design decisions by the public sector is more problematic. Many researchers have suggested that public opinion should take into account at the early stages of the planning process. One way of gathering relevant information is by means of

household surveys, which include questions on satisfaction with current housing and aspirations for the future (Oussadou, 1988; Awuor, 1996). Respondents were asked if they would like to move from their present accommodation if the opportunity arose. The results summarised in table 7.12. Some households will tend to be optimistic about their future circumstances, either by nature or because of expectations that their future income will rise, while others may have resigned themselves to their current situation or are pessimistic in their responses to the question.

**Table 7.12: Household preferences**

<b>Respondents</b>	<b>Households</b>	
	<b>No</b>	<b>%</b>
Households do not wish to move	107	50
Households preference for moving	99	46
Uncertain	9	4
<b>Total</b>	<b>215</b>	<b>100</b>

The result indicates that 50 per cent of the households thought that they would stay in the dwelling units whilst 46 per cent of the households would like to move. The latter can be taken to represent aspirations for a better house rather than a need for an adequate dwelling.

Households in high-density areas in Tripoli city who expressed a preference to move had similar characteristics to those that did not want to, with the exception of income. Those who were dissatisfied but who would not contemplate a move to better accommodation were those who recognized that their incomes were insufficient to satisfy their need for more space and other improvements.

Therefore, an attempt has been made to relate the intentions of respondents to their dwelling type to find out if there is any relationship. Table 7.13 examine the relationship between the dwelling type and household preferences.

**Table 7.13: The relationship between dwelling type and household preferences**

Household preference	House		Flat		All	
	No	%	No	%	No	%
Do not wish to move	57	97	50	34	107	52
Household wish to move	2	3	97	66	99	48
Total	59	100	147	100	206	100

(Calculated chi-square= 50.1 > Test statistic (3.8))

Significant difference between proportion in houses who wish to move and proportion in flats who wish to move. With a hypothesis that there is no difference between the proportion of house dwellers and flat dwellers, who wish to move, a chi-square test was carried out. It should that there was a significant difference.

In the present study, nearly half of the households (46 per cent) would like to move out of the housing they are currently living in. The problems, which have a bearing on household decisions to move out of the public housing projects have been analysed. Different problems associated with public housing areas were identified and 99 households who do not wish to settle were asked to choose the three most important problems.

Their opinions are reported in table 7.14

**Table 7.14: The most important problems facing households**

<b>The Problem</b>	<b>First %</b>	<b>Second %</b>	<b>Third %</b>
<b>Poor building construction</b>	<b>46</b>	<b>14</b>	<b>15</b>
<b>Lack of maintenance</b>	32	43	28
<b>Flats not suitable</b>	11	28	29
<b>Lack of basic infrastructure</b>	4	6	7
<b>Lack of health facility</b>	4	--	9
<b>Lack of education</b>	3	5	7
<b>Lack of religious</b>	--	--	--
<b>Lack of shopping</b>	--	4	4

The above analysis indicates that the main reasons for wishing households to leave were because of a poor building system (46 per cent of 99 households), lack of maintenance (43 per cent) and flats not suitable (29 per cent of the households). Moreover, the reasons given by households for their dwelling units not meeting their needs were for example, not enough bedrooms, not the right type of building and poor maintenance.

Hence it is expected that the dwelling type has affected resident opinion about public housing. Respondents were asked to state their opinions on the government policy programme. The results are reported in Table 7.15

**Table 7.15: Respondents opinion about public housing**

<b>Household opinion</b>	<b>No</b>	<b>%</b>
Suitable for low-income people	141	66
Not a good idea	74	34
Total	215	100

The above table shows that 66 per cent of the households stated that the public housing programme is suitable for low-income people, whereas 34 per cent of them said is not a good idea. It is clear that opinions about public housing are influenced by the present dwelling type. From the above analysis most of the respondents interviewed in the selected schemes prefer houses to flats. Planners and policy makers should take these factors into account in the planning of new housing development.

### **7.5 Housing policies and residential satisfaction**

It is clear that there are a number of major and quite often related variables that significantly affect the nature of the housing process and its products. The residents of public housing have no effective role in the nature of the system or its outcome, yet the success of the process and product depend greatly on the user's acceptance, satisfaction and willingness to create a home from that product.

The interpretation of housing needs of the residents, the ranking of his priorities and means and ways to meet them are made by the decision maker in the absence of the user. The user seeks desirable housing and the policy maker works for feasible housing. If the conceptual issues of housing are the same for both the decision maker and user, then a compromise between the decision maker's feasibility and the user's desirability can be reached. A great deal of compromise in this respect might be achieved through a comprehensive, flexible and practical housing policy. The focus on housing satisfaction as the prime objective of housing policy, the balance between the dwelling and the household needs can be expected to be easier to maintain in the private sector through a process of rapidly responsive adjustment to changes.

Therefore, satisfactory housing is a problem that depends on the current definition of decent housing. This in turn is highly related to the actual living conditions of people and to the prevailing socio-cultural perception of what an adequate dwelling should be. It has become evident that the building of housing alone does not bring a better residential environment or greatly improve the housing and living conditions of people of any socio-economic background.

Housing activities are likely to fail to be a success unless effective management concepts and procedures are established to *promote community development, social improvement, proper maintenance and appropriate financial arrangements*. It has become evident that it is as important to maintain housing as to produce it, and that maintenance is a primary tool for improving housing conditions and services.

However, a better living environment is attributed to a great extent to proper housing management, which in turn should form an inseparable part of good housing policy.

## **7.6 Housing adequacy**

Rapid urban growth has made the need for adequate housing for the low-income people a very important concern of the Libyan government, especially in the capital city of Libya. It has been a primary objective of the government since 1970 to provide decent housing to the citizen. The quality of housing is, determined by the shelter and contiguous facilities provided, as well as by the entire set of supportive and facilitative infrastructures and services.

Public housing schemes were perceived by the government as the way for low-income groups to own their houses and to live under better housing conditions by providing

minimum acceptable standards, amenities and facilities within and outside the dwelling units, thereby contributing to an improvement in the quality of life of the residents. However, the rush to respond to these needs seems to result in a low quality housing that does not adequately match the needs of these people.

Comprehensive research work has been carried out to compare the effectiveness of three major housing projects for the low-income people in Tripoli city. As reported earlier in this chapter and the previous chapter (Chapter Six) findings revealed that when the subjective measurement (satisfaction), which is the first predictor of effectiveness, was applied to evaluate the three low-income housing types. The residents of project No.1 (single storey houses) demonstrated the greatest level of satisfaction with the housing environment.

This section however, aims to measure the housing adequacy and to conclude by measuring housing effectiveness.

This part of the analysis weights the two housing quality indicators (interior and exterior). This part concentrates on the subjective measures to assess the level of satisfaction of the occupants with the three schemes. It is anticipated that the outcome will provide some useful guidelines to the government of Tripoli regarding the appropriateness of its housing strategies and the best way to customise its housing schemes.

The satisfaction with dwelling units was strongly affected by the type and the building system of the dwelling unit. The most satisfactory one was project 1 (single storey



houses). The size, indoor privacy and orientation were important factors in evaluating units as satisfactory by residents. The lack of space was found to be the most important factor that caused dissatisfaction with the dwelling units.

This is clearly indicated by the fact that a high percentage of respondents more than 50 per cent were dissatisfied with the size of the dwelling units provided for them. It was found that the highest level of satisfaction was with project 1 (single storey houses). This is due to the size of the units in this scheme, which are larger than the units of the other two projects (see Section 6.8.1). The internal layout was another variable influencing the degree of satisfaction.

The provision of outdoors space for children to play was unsatisfactory in most cases.

However, clear differences in the level of satisfaction were observed between the households in the three selected schemes. Respondents in project 1 and 2 observed the highest level of meeting needs 61 per cent in each project. In contrast the lowest percentage of satisfaction was found amongst residents in project 3, where only 16 per cent showed satisfaction with their dwelling unit.

With regard to the dwelling condition, the situation in project 1 is different where residents have undertaken some maintenance themselves, where families needed more privacy in ground floor houses and the condition was better than in other projects. In projects 2 and 3, the author saw several examples of walls cracking and broken taps, where the occupiers could not replace them. Most of the units in project 2 and 3 have serious cracks in walls and ceilings. In fact many original units have been extended

upwards and outwards. The extensions are separate structures covering the original ones.

It is clear from these findings that the residents of the project 2 and 3 have suffered seriously from the inadequacy of the original dwelling unit.

The availability of the necessary infrastructure was a major source of residents' dissatisfaction, particularly where emphasis was put on providing dwelling units rather than developing a complete housing schemes. Specific services such as water supply face problems of low pressure. This means that the water does not reach the upper floors. This is the case of project 2 and 3 with traditional and prefabricated flats.

## **7.7 Housing effectiveness**

To assess the effectiveness of the implementation of low-income housing policy in Tripoli city, five research questions were posed in Chapter One and have been answered in this study. In the previous chapter (Chapter 6) it was demonstrated that the residents of the project No. 1 (single storey houses) were the most satisfied with their housing scheme (see Table 6.4).

The housing effectiveness concept, as used in this study, is based on the resident satisfaction indicators. Project No. 1 is the most effective scheme (see Figure 6.10; Figure 6 .12) followed by project 2 and project 3.

Many neighbourhood variables affect the satisfaction of the residence. The privacy of the outdoor space, suitable places for children's activities, location of the residents' work places and neighbourhood facilities were found to be significant factors affecting the residents' satisfaction.

The findings revealed that the most important factors affecting satisfaction were the dwelling unit (type of dwelling and building system), community services and location of public facilities. These findings suggest that the provision of adequate services and other essential requirements are not given sufficient consideration in the low-income housing schemes. The dwelling unit, in project No. 1 (single storey houses) were of superior quality and hence produce a better adequacy rating than those of the other two schemes. The involvement of the user in finance, design, construction and management makes the individual have an actual stake in his surrounding, produce a greater sense of ownership and a higher degree of satisfaction. However, the user seeks adequate and satisfactory housing and the policy maker works for feasible housing.

If the conceptual issues of housing are the same for both the decision maker and user, then a compromise between the decision maker's feasibility and user's desirability can be reached. This comprehensively can achieve a flexible and more effective low-income housing policy.

## **7.8 Summary**

The chapter provides a descriptive assessment of housing services and occupant priority ranking. The results indicate that the level of satisfaction with the housing

services in the three housing schemes is different. The respondents of the project No. 1 were the most satisfied with housing services. Generally the residents were satisfied and very satisfied with the education, health services, electricity, water supply and shopping facilities, but there are some problems related to the outdoor space, refuse collection, storm-water drainage system and unsuitable location of the post office and religious services. The provision and improvement of refuse disposal were the top ranking item, residents want tackled as priority items

Findings reveal that involving residents in the planning of new housing projects is of great importance. People with different socio-economic characteristics and backgrounds have different needs and goals. Designers should plan with people and discover their requirements and expectations. This can be achieved through a survey of the future residents' opinions concerning the housing project, such as their preferences regarding the arrangements of the dwelling type and location of the school, shops and other facilities.

**CHAPTER EIGHT**  
**SUMMARIES OF RESEARCH FINDINGS,**  
**CONCLUSION AND RECOMMENDATION**

## **CHAPTER EIGHT**

### **SUMMARY OF RESEARCH FINDINGS, CONCLUSION AND RECOMMENDATION**

#### **8.1 Introduction**

The housing problem is reflected in the continued development of low-income housing. The purpose of this study was to examine trends in the provision of public housing with special reference to factors, which contribute to the level of housing satisfaction in the light of family and community needs. The method of inquiry employed enabled an examination of a wide range of variables, which are related to the residential and social functions of housing development. This provided a perspective of various factors that affect people's evaluation of their housing needs and environment.

The introductory chapter stated the problem, noting that the mere development of additional units in the name of low-income groups has not led to the units being accessible to them. Areas lack basic services, and since 1970 the government has been trying to support but did not satisfy low-income groups. As result, most of the developing countries are not able to meet the housing needs. This study has assessed the effectiveness of public housing policy in Tripoli city.

Any proposals or recommendations for improvements in public housing policy must be based on an analysis of known deficiencies and failures in the existing process and

its products. This study incorporates an examination of positive and negative aspects of the situation.

This chapter is divided into three parts: the first part aims to explain and summarise the research findings. The second part focuses on the main findings from the research and the third part concerns recommendations arising from the study presented.

## **8.2 Summary**

The focus of the study was to assess the effectiveness of the implementation of low-income housing policy. The appropriateness of housing has been assessed according to affordability, building system and dwelling type. The adequacy of housing has been assessed with regard to the provision of services and infrastructure. This study attempted to understand housing programmes for low-income groups in Tripoli city.

Housing provision in developing countries shows the failure of public housing programmes, particularly direct housing provision, and most of the developing countries are unable to provide accommodation for all residents particularly in urban areas. The vast majority of the urban population are, therefore, being housed through the formal and informal private market mechanisms. Consequently, it is now recognised that in the face of one billion people living in severely inadequate housing conditions, it is not possible to meet the full housing requirement of such a large number of people through project based policies which have dominated public housing policies in developing countries.

The research programme has focused on past and present trends of housing policy and practice in Libya with particular reference to Tripoli city. An attempt has been made

to identify the relationship existing between physical elements of and conceptual perspectives on housing functions.

An assessment has been made of housing systems to include measures not only of quantity, but also of qualitative performance in relation to the needs and desires that families and society place upon housing. Finally, the research has been designed to show how better assessment and definition of priorities and of the relationships between major aspects of housing policy might be articulated to achieve a higher degree of public satisfaction and improved environmental quality.

It appears that housing policies have been integrated into the national development plans of the country and changed to reflect changes in the socio-economic situation of the country. During 1951, Tripoli city has received large number of migrations and the economic development was low. The Libyan government created new residential areas on the periphery of the city that were mainly shanty towns and the implementation of housing policy during this period was unsuccessful.

In viewing steps taken by the government it can be said that the housing problem has been relieved in certain aspects, but the housing sector is still facing a number of problems. In the post revolutionary period, the government established a new development programme made provision for clearing the shantytowns and building a large number of public housing mainly for the slum dwellers and private housing developments were financed through bank loans to individuals.

After the production of oil, since 1970, the new government gave more attention to the housing sector and providing decent dwelling for each family regardless of their



ability to pay for housing. The implementation of this policy was through the direct construction of public housing and the private sector, mainly by bank loans to individuals. The increase of the population within Tripoli city, the absence of an effective planning system and unavailability of residential land has meant that some private land owners (i.e. of agricultural land) have sub-divided their land without permission and sold it to the people to build their own houses.

During 1980s, the government has been successful in accommodating the city population and shantytowns were removed. Housing provision has shown that the city is free from the slums and squatter areas and the housing shortage remaining within the city during 1995. The city infrastructure appears not to be providing adequate services, particularly in relation to the refuse collection, local streets within the residential area which are untarred, drainage and sewage system. Other services like water supply and electricity seem to be satisfactory.

Housing finance in Libya is available to both public and private sectors. Public housing finance is supported by the budget and some public organisations involved directly or indirectly in housing construction. Private housing finance operates through loans from the banks to individuals, and personal and families saving. Private investment companies also provided dwellings for sale. The amount of private housing finance particularly the bank loans, were insufficient to meet the demand. The necessary institutions and housing agencies concerned with the construction and financing of housing development have been established. The study shows there have been many changes in the administrative structure of the housing sector. This caused a

lack of stability and continuity of these organisations. As a result, problems with housing management have affected the housing programmes.

This study set out to provide answer to five research questions relating to the housing policy adopted by the Libyan government, achievements of the policy, its appropriateness and adequacy and the attentions and preferences of the residents. To provide answers to the research questions both secondary and primary data were collected. Secondary data was obtained mainly from government reports, documents and census of population, articles and housing journals. Primary data was collected through questionnaire survey of households and guided interview with government officials.

A number of variables were considered in the selection of the three housing projects, which were chosen to be the sample. Each one chosen was as homogeneous as could be found with respect to its general socio-economic, dwelling type and physical characteristics.

All public housing projects chosen represent the features and types of public housing in Libya. The size of the total sample is 215 units. The sample is calculated by dividing the sample frame by the sample size. The numbers of respondents selected from the three schemes are 215 dwelling units. These units represent around 25 per cent of the total population. Therefore, the total selected size out of the total, was 860 dwelling units.

### **8.3 Research findings**

Based on the comprehensive literature review concerning public housing policy and the three public housing projects in Tripoli city the following part of the chapter will summarise the findings of the research (empirical work).

The summary of finding will be adopt the following sequence:

#### **8.3.1 Satisfaction and its implication to low-income housing policy**

##### **8.3.1.1 Satisfaction with the dwelling units**

The study revealed that the degree of unsuitability of the dwelling units in the three public housing projects under study is high since more than 50 per cent (Section 6.8.1) of the respondents indicated that the dwelling units were unsuitable for their family needs. Satisfaction levels in the three schemes are considered to be a reflection of the type of dwelling and building system construction. The lack of space was found to be most important factor that caused dissatisfaction with the dwelling units (Section 6.8.1). It was found that the highest level of satisfaction was with the single storey houses (project 1). This is due to the size of the units in this scheme, which is larger than the units of the other two schemes.

The building system construction has been assessed from the point of view of the residents in the selected schemes. The result indicates that the large majority of the respondents are of the view that the traditional building system is suitable for the environment whereas, 90 per cent of the respondents stated that the prefabricated building system is not suitable for the Libyan environment. Residents stated the

reasons that led them not to prefer the prefabricated system are that it is not easy to maintain, hot in summer and cold in winter and difficult to extend.

The above results indicate that Libyan people prefer ground floor houses built with a traditional building system. Despite the fact that the government is not involved in maintaining public housing, most of the dwellings appear to be in acceptable condition particularly the ground floor houses. Respondents from projects 2 and 3 pointed out that they are facing the problem of maintaining the external and shared facilities.

Respondents also gave their opinions about maintaining privacy. The separation of the dwelling units into two differentiated areas has been and will continue to be one of the most significant features of the Libyan house. One part is exclusively for family use and the other is reserved mainly for visitors on special occasions or as a living area for some members, mainly male, of the household.

The results (Figure 6.12) showed that the majority (79 per cent of the respondents in the project 1 single storey houses) were satisfied and very satisfied with maintaining privacy in the residential area layout. The concept of private space maintained privacy in the project 1 whereas, 73 and 54 per cent of the respondents in the project 2 and 3 (walk-up flats) were dissatisfied and very dissatisfied with maintaining privacy in the residential area layout (Section 6.8.2.3). The different heights of the buildings, such as a two-storey building facing four-storey buildings, and the different dwelling type, size are important factor affecting the privacy of the residential area. However, respondents believe that existing dwellings should be improved to meet their needs.

Lessons from the past should equip us to deal with the future and give confidence to planners and designers, and the authorities should accept that the present policy has failed and that a change of direction is necessary.

Moreover, safety and security have a direct effect on the residential satisfaction. Respondents level of satisfaction with safety and security was examined in the selected projects. The result shows that the majority (72 and 59 per cent) of the respondents in the project 1 and 2 were satisfied and very satisfied whereas, 44 per cent in project 3 were dissatisfied. This was due to the layout of the project 3, which can be described as an open one. This however, resulted in the increase of car accidents inside the residential area, and affected children's safety while crossing the streets to and from the open space.

Planners therefore should consider residents opinions, preferences and needs regarding the essential factors to be considered in the design and allocation of the project by identified suitable location, safety and security, and privacy.

Another factor, which may affect resident satisfaction is pedestrian movement. Respondents were asked to state their level of satisfaction with pedestrian movement. The results (Figure 6.13) indicate that the majority 59 per cent of the respondents in project 1 were satisfied and very satisfied whereas, 40 and 51 per cent of the respondents of the project 2 and 3 were dissatisfied and very dissatisfied with pedestrian movement in the residential area. The layout of the project 2 and 3, which is vehicle-oriented, neglected walking as a transportation mode inside the project. This reflects negatively on the use of the private cars inside the project as a major

transportation mode. The lack of safe pedestrian corridors requires pedestrian crossings. Also there was an unsuitable and distant sitting of facilities and services, which did not consider an acceptable walking distance.

It appears that there is a gap between the policy makers and users in terms of housing needs. The government policy process built public housing in the absence of the users. Accordingly, policy makers should take into account the user view so that users satisfaction could be achieved.

### **8.3.1.2 Satisfaction with the community services**

The most important factor influencing people's attitude towards community services was the level of provision of the physical and social infrastructure. These services comprise education, shopping facilities, health services, mosque location and post office services and other services like road and drainage system, refuse disposal, electricity and water supply.

Satisfaction with the social and physical infrastructure facilities in the residential area was established by examining the households of the three selected schemes and interview with government officials. The main findings regarding the availability of these utilities were as follows:

- **Physical infrastructure**

Access to a wide range of social services, are important factors in evaluating the standard of living of the inhabitants of any area. The results of this study shows that all public housing were connected to the sewerage system and most of the services are

working properly, which led to a high level of satisfaction among the residents in the three selected projects. With regard to the storm water drainage system it was observed that some drainage pipes were not cleaned which caused traffic problem especially during the wintertime.

The study indicated that most of the residents take their rubbish to collection points once every two weeks due to the limited services provided by the General Cleaning Company which led to piles of rubbish every where in the projects. This caused a highly level of dissatisfaction with rubbish disposal among the residents. The government should seek to make some improvement in the organisation involved in environmental cleaning.

Streets and the lighting of the settlement had an important social and economic value and formed part of the basic human infrastructure. In assessing this services, the findings show that the level of satisfaction between residents in the three-selected project are different. 69 per cent of the respondents in project 1 were satisfied and very satisfied with this services and 35 per cent in project 2 where the streets were tarred and services with light were provided. Whereas, nearly 60 per cent of the respondents in project 3 were dissatisfied and very dissatisfied with this services (see Table 8.5). This was because the road networks in project 3 were in poor condition and streets were blocked by water during the wintertime making them inaccessible to vehicles. The government should improve the road condition by servicing the streets within this project.

Also the results revealed that the large majority (more than 80 per cent of the respondents) were satisfied and very satisfied with the electricity supply (see Table 7.6). The Libyan government has given this a high priority during the last decades. As a result of that, the electricity power is available everywhere in the city. This means the government succeed of in providing this service for low-income people. Only 15 per cent of the respondents were dissatisfied with this service. Their reason was that the supply was disconnected many times without prior notice.

Infrastructure service development and management in Tripoli city has some salient characteristics, which are in many ways relevant to policy for urban services in developing countries. Firstly, provision of infrastructure services is inadequate, and has not kept pace with the spatial growth of the city. Secondly, public funds are inadequate. Thirdly, there is over-dependence on publicly funded service provision and the public sector is unable to discharge this responsibility adequately. Fourthly, local generation of financial resources for service delivery and management is poor. Lastly, the participation of private entrepreneurs is still in its infancy and lacks appropriate incentives.

The study argues that the involvement of the public sector in certain services is inescapable. However, it is further argued that the public sector should emphasise services, which the private sector cannot easily undertake. As a recent World Bank study on urban infrastructure services in Nigeria stresses, it is inevitable that government funds are used in purely public or not usually profitable services (World Bank, 1996).



The study stresses that the government require more competent internal resource generation mechanisms. As Steinberg (1991) points out in the case of the Integrated Urban Infrastructure Development programme (IUIDP) in Indonesia, operational measures to enhance local governments capacities in the mobilisation of resources is crucial to public service efforts in developing countries.

Before the 1960s, the rate of economic development was low and the implementation of housing policy was unsuccessful. Since the early 1970s, the study shows that there have been many changes in the administrative structure of the housing sector. This caused a lack of stability and continuity of the housing institutions and organisations.

Despite the government's efforts since 1970, still the housing and service issues are made complex by a wide range of factors such as limited enterprise, poverty among many residents and socio-cultural dynamics and processes in the city. There is still a housing shortage, the quality of housing is far from satisfactory and there is a lack of housing management. The study gives some insight into policy and services. For instance, the spatial dimension of service improvement as recommended for Tripoli city is a strategy, which could ensure that environmental improvement benefits many urban residents who often live in low-income public housing in many of the developing countries.

The analysis of empirical data from the case studies indicates that the government has achieved some success in providing a large number of public dwellings for low-income peoples. These dwellings have had little success in meeting the Libyan family's requirements in terms of dwelling type and building construction type. The

results also show that the public housing projects under investigation lack some essential services. Therefore, better quality of services are needed to satisfy the occupants.

### **Location of public facilities**

The location of facilities and services in the public housing project is a major factor, which enhances their use. Therefore, these components of residential area should be within walking distance of all dwellings. In this respect the research findings can be summarised as follows:

*Education facilities:* In assessing the education facilities the results show the level of dissatisfaction with school facilities is very low, only 10 per cent, whereas, 80 per cent of the respondents of the selected projects were satisfied and very satisfied with this services (see Table 7.1). Most of the schools in the three schemes are in safe locations and within walking distance from the distance dwelling. It is appropriate to point out that the Libyan government has given full attention to provide free school facilities the elementary schools are usually the first to be built after the dwelling units.

*Health services:* The findings of this study indicate that the majority of the respondents in the three housing schemes were satisfied and very satisfied (see Table 7.3). Therefore, the study suggests that there are enough health facilities within close proximity to the households.

*Shopping facilities:* It appears that this service is available everywhere in the selected projects. The analysis shows the majority of the respondents were satisfied and very satisfied with shopping facilities. Therefore, the government has been successful in providing social facilities in the selected projects.

*Private outdoor space:* Information and responses collected about private open space related to satisfaction with size and use in each scheme. As shown in Table 7.4, the availability and size of the balcony and the available space for children to play can be considered a major problem to all the residents of low-income housing schemes. As such, the majority (60 per cent) of the respondents of the three schemes were very dissatisfied with the provision of a balcony and the space for children to play. However, it has been found that the residents in project No. 1, who have garden, are the most satisfied in this respect. Real problems have been found in particular in project 2 and 3. Therefore, the local authority recommended providing good services for the residents and their children.

*Mosque Location:* The mosque is the most important element in the Muslim community. Therefore, the level of satisfaction varies between residents (see Figure 7.1). The mosques were available in the three schemes under investigation but not in the appropriate place. The research suggests the planners should consider the location of the mosque carefully

### **8.3.2 Effectiveness and its implication to low-income housing policy**

In Tripoli, it is clear that there has been a tremendous growth of housing investment in general and in public housing in particular. Effective public housing has been suffering far too much from the imposition of instant remedies to ill-defined problems. The results have shown that the ground floor houses (project No. 1) were the most effective scheme. It implies that public housing policies cannot be formulated solely on the judgements of policy-makers, professionals or administrators. User satisfaction and preferences must become a major concern of housing authorities.

The research finding is supported by Tipple (1996) who stated that:

*“No one can live satisfactorily in an environment in which they have no input dwelling is building.... To build is to exercise power, and to change the environment... Only when users themselves exercise power, by directly influencing and controlling a part of the physical environment, can we expect healthy, vital, steadily improving environments”*

Users have to be involved in the planning and implementation of the construction process. The extension to the dwelling units in project 2 and 3, which were needed because of the inappropriateness of the initial units to the clients need accelerate the deterioration of the initial units and will spoil the whole surrounding environment.

### **8.4 Housing policies and strategies**

The investigation and analysis made it clear that the current housing policy must be revised if public housing is to fulfil social and economic goals. A rational housing

policy could be found through a number of changes to the major parameters governing the formulation of housing strategies.

Housing policy should be designed to fit the objectives of society and be appropriate to its needs within prevailing cultural concepts and local physical conditions. Progress of housing cannot be measured purely in terms of dwelling units constructed nor can success be judged solely by the number of families housed. Account must be taken of the impact of dwelling units on different sections of society and people's aspirations.

The provision of public housing should be conceived, similarly to private housing, as an activity in which the users may play a major role at any level and in every aspect. Since housing provision forms part of a comprehensive national policy, social and economic strategies must recognise the needs of housing strategies and be fully co-ordinated with them. Housing policy should include provision for renovation to cater for home improvement. A balance should be maintained between investment in new housing and the improvement of the old stock in order to reflect individual and community needs as well as cost considerations.

It is important to maintain a monitoring capacity in the housing process, because this can alert policy-makers to the development of potential housing problems, give guidance in future housing policy formulation and be used to measure progress and satisfaction in housing.

Land development, planning and subdivision should be comprehensibly organised so as to ensure a balance between the needs of the physical and social structure of

society and to help in the development of a community spirit with a sense of pride in belonging. Housing design and layout contribute greatly to the level of occupant's satisfaction. Space should be organised in such a manner as to provide for the domestic and social needs of the user in the most economic and efficient way.

Physical measures and standards should be based on appreciation of the traditional social and cultural values. They should provide for a household's need of privacy and for the essential visual and functional distinction between private and public space. High quality housing design allowing flexible use of space could meet the principal requirements in terms of both functional flexibility and adaptability.

More attention should be paid to the appearance of public housing and its integration within its locality. Housing location should be decided on basic planning criteria such as residential density, accessibility and environmental amenities and providing basic services economically. The basic features of dwelling design should not be determined solely on an economic basis. Size, type and components of a dwelling unit should also accord with other criteria such as climatic factors and social interests. Importance should be given to the need to attain a high degree of user satisfaction in relation to the various aspects of design and space arrangement.

Better co-ordination and stronger ties should be maintained between different institutions with public housing responsibilities in order to secure a better match between housing progress and housing needs in terms of people's preferences. Public housing authorities should be more aware of the unbalanced situation and lack of co-ordination in decision-making by institutions participating in the housing process.

Positive intervention of local authorities should be practised to ensure co-ordination and adoption of reasonable physical measures and acceptable standards in public housing planning, design and construction.

### **8.5 Contribution to knowledge**

The research will offer the following contribution to knowledge:

- a) Developing greater knowledge about housing policy in Libya.
- b) Offer proposals, suggestions to the government on how to make decision to implement housing policy
- c) To point out how socio-economic and political changes affect the housing market.
- d) To offer more suggestion to the government how to encourage private developers to invest in public housing
- e) To estimate maximum and minimum level of housing in Tripoli in the future

### **8.6 Policy recommendations**

This section aims to formulate recommendations for the improvement of housing schemes for low-income groups and for creating an effective well being with the housing environment. The housing environment can be improved by ensuring appropriate allocation of units to occupants. In this respect, the following should be considered:

- a) The provision of sufficient space for family activities. As such, it is important that housing authorities ensure allocation of appropriately sized units in relation to the number of occupants. In this regard, the study of the three public housing schemes showed that (with the exception of project 1 ground floor houses) there was a mismatch between the size of the dwelling units and the numbers of people living in them.
  
- b) User participation in the housing process. It is therefore, recommended that emphasis should be given to user participation in the housing process, not just in the construction of individual units but also in all other aspects of a housing development. Designers must pay attention to the residents' experiences by giving them the opportunity to co-operate in the choice of physical components such as the type of building system, type of dwelling, size, location and layout.
  
- c) The local authority should make available facilities with adequate but flexible standards and in suitable locations, within walking distance from the dwellings, so that they could serve the required population and provide the advantages of the availability of facilities in the public housing projects.
  
- d) This study shows accessibility as a major factor in the design stage by providing clear access to and from the residential area and inside the residential area to the necessary elements.
  
- e) Safety and security are a major concern of the users of the public housing project. Therefore, these should be carefully considered and safety standards adopted.



- f) This study has shown that, housing management in Tripoli is not effective, and this has created a number of problems in the housing sector. Further research is needed to provide an appropriate model for housing management within the city.
  
- g) It is strongly recommended that the local researcher should be linked with other related institutions in Libya and other countries which have more housing experience, particularly those which have similar socio-cultural values.

# LIST OF REFERENCES

## REFERENCE

Abbs, H. W., (1987), *Industrial Development and migrants Labour in Libya*, unpublished Ph.D Thesis, Manchester University

Abelti, G et al (2001) *Housing Conditions and Demand for Housing in Urban Ethiopia*, Central Statistical Authority (CSA) Addis Ababa, Ethiopia

Abuarroush, M. M (1996) *A Cross-Cultural Study of Locus of Control and Self-Esteem as Related to Socio Cultural Factors Among Libyan and British Postgraduate Student*, Unpublished Ph.D Thesis Manchester University

Abu-Lughod, J. (1975), "A Comparative Analysis: Cairo, Tunis and Rabat – Sale" *Ekistics* Vol. 233

Addae-Dapaah & Leong, K.M (1996) *Housing Finance for the Ageing Singapore Population: The potential of the home equity conversion scheme*, *HABITATINTEL*, Vol. 20, No. 1, pp. 109-120

Adeokun, L, A (1990) *projection of Urban Housing needs in Onibokun*, A. G (Ed), *Urban Housing in Nigeria* (Ibadan: NISER, pp. 141-173)

Allan, J.I (1981) *Libya: The Experience of Oil*, London: Croom Helm

Almuakkaf, A (1976) *Public Housing Policy in Libya*, unpublished Ph.D Thesis, Indiana University, USA

Al-Nuaim, A, (2000) *Housing Policies and Strategies: The Experience of the Kingdom of Saudi Arabia*, *Proceedings of the XXVIII IAHS World Congress on Housing, Challenges for the 21st Century*.

Altumi, A. A (2001) *A Decision Support System for sustainable urban development of the Tripoli agglomeration- Libya*, unpublished Ph.D thesis, Dundee University, UK

Amis, P (1996) *Long-Rum Trends in Nairobi's Informal Housing Market*, *Third World Planning Review*, 18 (3) pp. 271-285

Anderson, J. et al (1983) Using residents' Satisfaction to Obtain Priorities for Housing Rehabilitation, in *Renewal Rehabilitation and Maintenance*, Vol. 1. Galve, Sweden: National Swedish Institute for Building Research

Angal, A (1991) "The Conflict between the Built Environment Created by the Recent Housing Schemes in Algiers and the Expectations of those for whom they are Designed", unpublished Ph.D thesis university of Newcastle, Upon Tyne, UK

Arab Oil & Gas Directory (1996) Arab Petroleum Research Centre, Paris

Asian Development Bank (1993) Annual Report ADB, Manilla, Adition

Attir, M. O (1983) Libya's Pattern of Urbanisation, *Ekistics*, Vol, 50, No. 300. PP. 157-162

Awotona, A (1990) Housing in Libya: 1950-1980, *HABITATINTL*. Vol 14, No. 1, pp. 55-85

Awuor, R (1996) Urban Land Use Planning Process and Practice in Kenya, Unpublished Ph.D thesis, UWCC

Babbie, E (1979) *The Practice of Social Research*, Belmont, C.A: Wadsworth

Baken, R, J., Van der Linden, J (1993) Getting the Incentives Right: Banking on the Formal Private Sector, *Third World Planning Review*, 15 (1), pp. 1-22

Balchin, P; Isaac, D & Chen, A (2000) *Urban Economics, A Global Perspective*, Creative Print & Design (Wales), Ebbw Vale

Batly, R (1988) National Housing Banks in India and Brazil, *Third World Planning Review*, Vol. 19. No. 2. PP. 203-209

Behloul, M (1991) "Space Use patterns and Coping Mechanisms of Algerian Households in Mass Housing Dwellings", In proceedings of an international symposium on people, place & development, Centre for Architectural Research and Development overseas (CARDO) < university of Newcastle, Upon Tyne

Behloul, M (1993) The Environment Outside dwellings Residents, Reaction in Four Housing Estates in Algiers, *Open House International*, Vol. 18, No. 4, pp. 27-34

Bell, J (1993) *Doing Your Research Project*, 2nd edn, Open University Press  
Buckingham

Berry, M (2000) Investment in Rental Housing in Australia: Small landlords and institutional investors, *Housing Studies*, 15 (5): 661

Bohland, J. and Davies, L (1979) Sources of Satisfaction among the Elderly, in Golant, S., (ed) *Location and Environment of Elderly Population*. New York: V. H. Whiston

Boleat, M and Coles, A (1987) *The Mortgage Market (Theory and Practice of Housing Finance)* Allen and Unwin, London

Brennan, E (1993) Urban Land and Housing issues Facing the Third World, in Kasarda, J and Parnell, A (eds) *Third World Cities- problems, Policies and prospects*. Sage publications, Newbury Park. London

Burgat, F., (1987), The Libyan economy in crisis In Khader, B. & El- Wifati, B. (eds), *The economic Development of Libya* croom Helm, London

Burgess, R (1992) Helping some to help themselves: Third world housing policies and development strategies. In K. Mathey, *Beyond self-help housing* (pp. 75-94), London: Mansell Publishing

Campell, A., et al (1976) *The Quality of American Life*, New York: Russell Sage

Cassell, C & Symon G (eds) (1994) *Qualitative Methods in Organisational Research*, Sage Publications, London

Central Bank of Libya, (1976) *The Development of The Banks in Libya*, Tripoli-Libya Government Preep.20

Central Bank of Libya, (1978) *The Development of The Banks in Libya*, Tripoli-Libya Government

Central Bank of Libya, (2002) *Economic Bulletin*, Research and Statistics Department, Tripoli-Libya

Choguill, C. L (1985) Third World Shelter Policy Solutions and problems for Housing the poor in Singapore. *Third World planning Seminar, UMIST, Cardif*, September 1985

Christian, J, W (1981) *Housing Finance for Developing countries*, International Union of Building Societies and Saving Associations, Chicago-Illinos

Christian, J, W (1991b) *Designing the Housing Finance System*, Housing Finance International, Vol. Vi, No. 1 pp. 2-26

Chua, B (1991) Not Depoliticised But Ideologically Successful: The Public Housing programme in Singapore, *International Journal of Urban and Regional Research*.15, (1) pp. 24-41

Churchman, C, W (1968) *The System approach*, Dell, New York

Culyer, A. J (1980) *The political Economics of Social policy*: Oxford; Maitain Robertson. Oxford

Dale, B (1978) Subjective and objective indicators in studies of regional social well-being, *Regional Studies*, Vol. 14, pp. 503-515

Davidson, A (1999) Alternative Models of Social Housing: Tenure Patterns and Cost-renting in New Zealand and Sweden, *Housing Studies*, 14 (4): 453

Day (1992) *Libya, Economy: Middle East and North Africa*. World Information; Essex. UK

Desai, V (1996) Access to Power and Participation, *Third World Planning review*, 18 (2), pp. 217-242

Doxiadis Associates (1964) *Housing in Libya Problems, Policies and Programmes* Vol. 2

Awotona, A (1990) *Housing in Libya: 1950-1980*, HABITATINTL. Vol 14, No. 1, pp. 55-85

Drakakis-Smith, D (1979) Low-Cost Housing provision in the Third World; some theoretical and practical alternatives, In Murison, H & Lea, J (eda) *Housing in Third World Countries, prospective on policy and practice*, London: Vantage Photostatting Co. Lid

Drakakis-Smith, D (1981) *Urbanisation Housing and the Development process*. London, Croom-Helm

Dunlevy, P (1981) *Politics of Mass Housing in Britain, 1945-1975: A study of Corporate Power and Professional Influence in the Welfare State*, Oxford: Clarendon Press

Edrees, A. M (2001) *Urban Change in the Residential Layouts in Makkah City, Saudi Arabia*, unpublished Ph.D thesis Cardiff University of Wales

Edwards, M (1990b) *Renting Housing and Urban Poor: Africa and Latin America Compared*, in Aims. P & Lloyd, P (eds) *Housing Africa's Urban Poor*. Manchester: *Manchester University Press*. pp 253-271

EIU (The Economic Intelligent Unit) (1994) *Country profile: Libya*, London EIU 3rd quarter

El-Fathaly, O. I (1977), *Political Development and Bureaucracy In Libya*: Toronto, Lexington Books

El Fathaly, O.I, Palmer, M., (1980), *Political Development and Social Changes in Libya*: D.C Heath and company, Lexington

Elfortia, M (1989) *An Investigation of Appropriateness Relative to indigenous and Modern Housing in Libya* Unpublished Ph.D thesis, Heriot-Watt University, Edinburgh

El-Jehaimi, T., (1987), *Industrial Development In Libya around The Year 2000 In the economic development of Libya* (eds) Khader, B. & El-Wifati, B. Croom Helm Ltd, London

England, R & Alwrick, D (1982) *What Can Low-income Families Afford for Housings, The Cost of Basic Nutrition in Urban Kenya*, HABITAT INTEL 6, 4 pp. 507-534

Essayed, N. M (1981) *Publicly provided Housing in Libya, with Special references to Tripoli: An Analysis of residential Satisfaction*. Unpublished Ph.D thesis, University of Liverpool

Evens, K. M (1984) *Planning Small Scale Research*, London: FEP, Nelson Publishing

Eyles, J (1998) *Research in Human Geography: Introductions, and Investigations*, Basil Blackwell Press, Oxford

Filstead, W. J (1978) "Qualitative methods: a needed perspective in Evaluation Research" In Cook, T. D and Reichardt, C. S (eds), *Qualitative and Quantitative methods in Evaluation Research*, Sage, Beverly Hills, CA

Fisher, W. B., (1990), *Libya The Middle east and North Africa Report*, 36<sup>th</sup> Edition: Europe Publications Limited, London

Francescato, G., Weideman, S., & Anderson, J., (1987) *Residential satisfaction: It uses and Limitations in housing research*, In Van Vliet, W., *Housing and Neighbourhood, theoretical and empirical contributions*, Greenwood Press, New York

Ghanem, S., (1987), *The oil industry and Libyan economy: the past the present and the likely Future*. In Khader, B. & El Wifati, B. (Eds.), *the economic development of Libya* Croom Helm, London.

General Housing Corporation (1994) *The three Years Housing programme 1995-1997*, Unpublished Report

Ghauri, P. G & Krit, I (1995) *Research Methods In Business Studies*, Prentice Hall, New York

Gibb, K & Munro, M (1991) *Housing Finance in UK*, Macmillan, London

Gilber, A. G (1993) *Third World Cities: Housing, Infrastructure and Services*, in *International perspective in Urban Studies*

Gilbert, A & Varley, A (1991) *Landlord and Tenant: Housing The Poor in Urban Mexico* (New York: Routledge)

Gilbert, A (1990) *Rental Housing in Third World: What we Know and What we need to Know*, in UNCHS, op. cit. pp. 12-49

Gilbert, A (1994) *The Latin American City*, London

Giurnaz, A., (1985), *Economic of Oil: A Case of Libya*, unpublished Ph.D Thesis, University of Keel.



Gordon, R. J (1984) *Macroeconomics*-Boston

Gown, P (1995) Neo-Liberal theory and practice for Eastern Europe, *New Left Review*, 213, September/October

Gray, G & Richardson, E (1985) Users and Their Needs: A Review of Two Recent Housing needs Assessment Methodologies, *Third World Planning Review*, Vol. 7. No.3. pp. 193-202

Grime, O (1976) *Housing for Low-income Urban Family*, John Hopkins, University press, Baltimore

HABITAT (1996) *An Urbanising World: Global Report on Human Settlements 1990*, Oxford: United Nations Centre for Human Settlement and Oxford University Press

Hakim, C. (1987) *Research Design Strategies and Choices in the Design of Social research*, Routledge, London

Hamel, J. D. S & Fortin, D (1993) *Case Study Methods*, Sage Publications, Newbury Park

Harrison, R (1965) *Miigration as a factor in the Geography of Western Libya (1990-1964)*, unpublished Ph.D thesis, University of Cambridge

Hartley, J. F (1994) "Case Studies in Organisation Research", in Cassel, C and Symon, G. (eds) *Quantitative Methods in Organisational Rcsarch*, a practice Guide, London, Sage Publications

Heinnrich, E (1964) *The Japanese House: A Tradition for Contemporary Architecture (Tokyo)*

Hourihan, K (1984) Residential Satisfaction, Neighbourhood Attributes, and Personal Characteristics: An Exploratory Analysis in Cork, Ireland, *Environment and Planning*, Vol. 16, pp. 425-436

Huang, H, C (2000) *Housing policy in Taiwan, the Republic of China: A case study of Taipei*, unpublished Ph.D theses, University of Missouri-St, Louis

Huang, Y; Clark, V (2002) Housing Tenure Choice in Transitional Urban China: A Multilevel Analysis, *Urban studies*, Vol. 39, No. 1, pp. 7-32

Italconsult (1976) Settlement Pattern Study, Report proposed for the Ministry of Planning: Tripoli, Libya

Kalabamu, F, T (1994) Land Registration and Housing for the Urban Poor in Botswana, ENHR Conference in Birmingham 1994

Kamara, S; Essyed, N & Shembesh, A (1987) Socio-Cultural Influences on Housing in Benghazi, in *Third World Planning review*, Vol. 9. No. 1, pp.65-75

Keivani, R & Werna, E (2001) Modes of housing provision in developing countries, *Progress in Planning*, 55, pp. 65-118

Kidder, L. H (1981) Research Methodology In Social Relation, New York: Halt Reihart and Winston

Kilani, K. A., (1987), The Evolution and Status of Accounting in Libya, Unpublished Ph.D Thesis The University of Hull

Kim, K, H (1997) Housing finance and urban infrastructure finance, *Urban studies* 34 (10), pp. 1597-1620

Kirke, J (1984) The provision of Infrastructure and Utility Services: in Payne, G (eds) , *Low income housing in the developing countries* (Chichester, John Wiley pp. 233-248

Kshedan, H. S (1984) The Spatial Structure of Tripoli City As Example of A Third World Socialist City, unpublished Ph.D thesis, university of Oklahoma, Graduate College, USA

Lansing, J et al (1970) Planned Residential Environments, *Institute for Social Research*, Michigan

Laquian, A. A (1983) Basic Housing Policies for Urban Sites and Services and Shelters in Developing countries. *International Development Centre*, Attawa

LAR (1970) The Official Gazette, No. 69, November, 1970

Larbi, N, K (2001) A proposal for low-income urban housing and environment improvement and development in Ghana, unpublished Ph.D theses, University of Glasgow

Lee, S. K. J (1992) "Quantitative Versus Qualitative research Methods – Two approaches to organisation studies" *Asia Pacific Journal of Management*, Vol. 9 No.1, pp. 87-94

Lee, S. L & Yuan, L & Poh, T. K (1993) Shelter for All, *HABITATINTEL*, Vol1, 17, pp. 85-102

Linden, J and Baken, R (1993) getting the Incentives Right, *Banking on the formal private sector: a critique of current World Bank Thinking on low-income housing delivery in Third World Cities*, *Third World planning Review*, Vol. 15, No. 1, pp. 1-22

Linneman, P & Megboluge, I (1993) Housing Affordability: Myth or Realty; in Puddison, R; Lever, B and Money, J (eds) *International Perspective in Urban Studies 1*. London: Jessica Kingsley publishers.

Malik, H, T (1994) Housing finance in the developing countries: A case study of Lahore, Pakistan, unpublished Ph.D theses university of Central England in Birmingham

Malpazzi, S (1989) Cost and benefits of Rent Control in Kumasi, Urban Development Division, *World Bank*, Washington DC.

Malpezzi, S (1990) rental Housing in developing countries issues and constraints in UNCHS, op.cit, pp. 104-122

Malpezzi, S, et al (1982) Planning and Urban Housing Survey: Key Issues for Researchers and Programme Managers in Developing Countries, *World Bank Urban Development Department Discussion Paper UDD-44* (Washington D. C The World Bank)

Marans, R. W., and Rodgers, W (1975) Towrd an Understanding of Community Satisfaction, in Hawley, A. and Rock. V. (eds) *Metropolitan American in Contemporary Perspective*. Halstead Press, New York. pp. 299-352

McClintock, C. C (1983) "Applying the Logic of Sample Surveys To Qualitative Case Cluster method" In maanen, John Van (ed), *Qualitative Methods*, Sage Publication, Beverly Hills

McCray, J. W. and Day, S. S (1977) Housing Values, Aspirations, and Satisfaction as Indicators of Housing Needs, *Home Economics*, Vol. 5, No. 4, PP. 244-254

McGough, D, T (1980) Housing Needs and Housing Supply: The Effectiveness of Estimates and Responses, in Proceedings of Symposium on the Housing Delivery System (Ohio State University: Centre For Real Estate Education and Research

Meekya, U (1986) Housing and Urban Development Policy for Small Towns in Nigeria, unpublished Ph.D thesis, UWIST

Merrett, S (1984) The assessment of Housing Consumption Requirements in Developing Countries, *Third World Planning Review*, Vol. 6, No. 4, pp. 319-329

Mogherbi, M.Z., (1998), Civil Society and Democratization in Libya: 1977-1994. *Unpublished.*

Morris, E. W and Winter, M (1978) Housing Family and Society, New York, John Wiley & Sons

Morris, E. W et al (1976) Housing Norms, Housing Satisfaction and the Propensity to Move, *Marriage and Family*, Vol. 38. pp. 309-320

Moser, C & Kalton, G (1972) Survey Methods in Social Investigation Heinmann Educational Books, London

Mosha, A, C (1995) Squatter Slum Settlements in Tanzania, in Brain, A & Ranvider, S (eds) *Housing the urban Poor policy and practice in developing countries*, Zed Books; London, pp. 339-357

Mukhtar, A. N (1997) Housing Policy In Libya Study of Public Housing Project In Tripoli City, Unpublished Ph.d Thesis, University of Wales Cardiff

Mukhtar, N (1993) Development Planning and population Distribution in Libya Unpublished M.Phil thesis UWCC

Mumtaz, B. K (1991) Housing Finance Manual for developing countries ABC Associates-USA proposal by PICIC

Mustafa, F (1990) Who are the Effective Construction Site Manager and What Skills Do They bring to their Work, unpublished Ph.D theses, University of Bath, School of Architecture and Building Engineering

Nachmias, J, C & Nachmias, D (1992) Research Methods in the Social Sciences

NAID (1995) national Agency of Information and Documentation

Naur, M., (1986) Political Mobilization and Industry In Libya Akademisk Forlag Denmark

Nerfin, M (1965), "Housing In Libya: Brief remarks on situation and problems", Economic Commission for Africa. Tripoli, Libya

Ogu, V (1996) "Enabling Strategies and Sustainable Infrastructure Development: insight to limitations in Benin city, Nigeria", Regional Development Studies, Vol. 3, Winter (Forthcoming)

Okpala, D, C. I (1992) Housing Production System and Technologies in Developing Countries: A review of the experiences and Possible Trend/ reports. *HABITAT INTL.* Vol 16. No. 3 pp. 9-32

Onibokum, A. G (1974) Evaluating Consumers` Satisfaction with Housing: An Application of a System Approach, *Journal of American Institute of Planners*, Vol. 40, No.3

Onibokun, A. G (1989) Urban growth and Urban Management in Nigeria, in Stren, R. E and White R (eds) African Cities: Managing rapid urban growth. London. Westview press pp. 69-112

Oppenheim, A. N (1992) Questionnaire Design, Interviewing and Attitude Measurement, London: Printer Publishing Ltd.

Otiso, M, K (2003) State, voluntary and private sector partnerships for slum upgrading and basic service delivery in Nairobi City, Kenya, *Cities*, Vol. 20, No. 4, pp. 221-229

Oussaddou, A (1988) Residential Satisfaction in the New Urban Housing Projects in Algeria, unpublished Ph.D thesis university of Nottingham

Parmer, V, A (1991) *Urbanization in the Third World Countries*, Social Change 21. pp. 10-21

Phang, S, Y (2001) Housing Policy, Wealth Formation and the Singapore Economy, *Housing Studies*, Vol. 16, No. 4, pp. 443-459

Piel, M (1982) Social Science Research Methods. An African Hand Book. London: Hodder & Broughton

Planning Department in Tripoli (1989) Statistical Information about Tripoli, Tripoli-Libya

Potter, R & Lloyd-Evans, S (1998) The City in the Developing World, Longman, Harlow

Pugh, C (1994) A Review of the Institutional Housing Finance situation in the Urban areas of Bangladesh, *TWPR*, 16, 1, pp. 71-85

Pugh, C (2000) Squatter settlements: Their sustainability, architectural contributions, and socio-economic roles, *Cities*, Vol. 17, No. 5, pp. 325-337

Pugh, C (2001) The Theory and Practice of housing sector development for developing countries, 1950-1998, *Housing Studies*, 16 (4) pp. 399-423

Quigley, J (1991) Planning and Markets in the Housing System. Berkeley Centre for Real Estate

Quin, R (1961) Libya: Brief Political and Economic Survey, *Royal Institution of Information Affairs*, Oxford

Rakodi, C (1986) Housing and urban development in Lusaka, unpublished Ph.D theses. UWIST

Rakodi, C (1992) Housing Markets in Third World Cities: Research and Policy into the 1990s, *World Development*, Vol. 20. No.1 pp.39-55

Rakodi, C and Withers, P (1995) Housing Aspirations and Affordability in Harare and Gweru, *Cities*, Vol. 12, No. 3 pp. 185-201

Ramirez, R., Fiori, J., Harms, H., Mathey, K (1992) The Commodification of Self-Help Housing and State Intervention: Household Experiences in the Barrios of Caracas, In Mathey, K (Ed), Beyond Self-Help Housing, *Mansell, London*, pp. 95-144

Roberts, B (1980) The Capital Costs of Urban Development: The need for a standardised summary diagram. *Third World Planning Review* 2, pp. 26-44

Robson (1994) Real World Research, A Resource for Social Scientists and Practitioner Researcher, Blackwell, Oxford, UK

Rodell, M, J (1990) Reviving Affordability Theory, in Raj, M and P. Nientied (Eds), op. cit. p. 81-92

Rogerson, R, J Findlay, A, M., Morris, A, S & Coombes, M, G (1989) Indicators of quality of life: Some methodological issues, *Environment & Planning*, Vol. 21, pp. 1655-1666

Rossi, P (1980) Why Families Move (Illions: Free Press)

Rotenberg, J& John, P & Galster, R (1991) The Maze of Urban Housing Markets (The University of Chicago Press)

Roth, G (1987) The Private Provision of Public Services In Developing Countries< New York, Oxford University Press for the World Bank

Salama, R (1994) "The Phenomenon of User Transformation of Public Housing in Egypt", in proceedings of International symposium on people, place & development, Centre of Architectural Research and Development overseas (CARDO), University of Newcastle, Upon Tyne, UK

Sarif, A. A (1973), Tripoli Municipality in One Hundred Years, Tripoli

Satsangi, M & Kearns, A (1992) The use and interpretation of tenant satisfaction survey in British social housing, *Government and Policy, Environment and Planning*, Vol. 10, No. 3, pp. 317-331

Secretariat of Housing (1975), Housing Directory for 1969-1975, Tripoli, Libya (Arabic)

Secretariat of Housing (1981) The Libyan Arab Jamahiryia, General Report of Libyan Settlements, Tripoli, (in Arabic)

Secretariat of planning (1968) population Census (1968), census & Statistical Department, Tripoli, (In Arabic)

Secretariat of Planning (1976) The Five-Year Plan for Economic and Social Development (1976-1981), Tripoli. (in Arabic)

Secretariat of Planning (1980) Socio-economic evolution in Libya, Cited in Giurnaz, 1985

Secretariat of Planning (1981) The Five-Year Plan for Economic and Social Development (1981-85), Tripoli, Libya. (in Arabic)

Secretariat of Planning (1984) The basic results for building, housing and institutions, Census Department Press, Tripoli

Secretariat of Planning, Trade and Treasury, (1993), Summary of the three Year Programmers (1994-96) Libya

Secretariat of planning (1997) An Evaluation of Housing Strategies, SOP Press, Tripoli-Libya, (in Arabic)

Secretariat Of Planning (1997) *The basic Results for Building, Housing and institutions through 26 Years 1970-1996*, Tripoli: SOP press

Secretariat of Planning (1999) Socio-economic growth during the period 1962-1998, Social and Economic Planning Department, Tripoli-Libya (in Arabic)

Secretariat of Planning (1973) The Three Year Plan for Economic and Social Development (1973-75), Tripoli, (in Arabic)

Secretariat of Utilities (1985) National Physical Perspective Plan 1980-2000, report No. TF-20, By Polservice, Consulted Office, Warsaw, Poland

Secretariat of Utilities, Tourism and Housing (1993) Report about the general Cleaning and Environment protection, Tripoli, Government Press

Segre, C (1974) Fourth Short: The Italian Colonization of Libya, The University of Chicago Press, Chicago



- Seik, F, T. (1992) The Provision of Low-Cost Housing By Private Development in Bangkok, 1987-89. The Result of An Efficient Market? *Urban Studies* 29 (7): 1137-1146.
- Sekaran, U (1992) *Research Methods for Business: a skill building approach*, (2nd edition), Wiley
- Sharnnana, F (1976) Public housing programme in the Libyan Arab republic. Unpublished Ph.D Thesis, Oklahoma state University
- Shembesh, A., (1975) The analysis of Libya's foreign policy: 1962-73: A study of the impact of environmental and leadership factors, Unpublished Ph.D thesis, Political Science Department, Emory University, USA
- Sidi, N (1991) Towards a More Sustainable Housing for the Low-income Group: a study of the dwelling units of public low-income flats n Kuala Lumpur, Malaysia, unpublished Ph.D theses Nottingham
- Singh, A, L (1996) Income, Environment and Health, A household level study of Aligarh City, India, *Habitant*, Vol. 20, No, 1, pp. 77-91
- Sivam, A (2002) Constraints affecting the efficiency of the urban residential land market in developing countries: a case study of India, *Habitat International*, 26, pp. 523-537
- SOP (1967) Statistical abstracts, Census & Statistics Department Tripoli-Libya. 1958-1962 (in Arabic)
- Statistical Book (1998) National Corporation for Information and Documentation
- Stone, R. A and Simons, J. (1976), *Change in Tunisia, studies in the social science*, State University of New York Press, Albany, New York
- Stren, R & White, R. (1989) *African Cities in Crisis: Managing Urban Growth*. London, West view Press
- Stroller, H (1962) *Construction in Libya, a Report Prepared for the Government of Libya*, Tripoli 1962
- Struyk, R, J (1996) Housing Privatisation in the former Soviet bloc to 1995, in Andrusz, G Harlo, M and Szelenyi, I (eds), *Cities after Socialism*, Oxford: Blackwell

Sulaiman, H. and Nurizan, Y. (1987) "Housing provision and Housing Satisfaction of Low-Income Households in Kuala Lumpur", *Habitat International*, Vol. 11, No. 4

Sundaram, P. A (1990) options for Public and Private Collaboration on rental Housing provision and Management in India in UNCHS, op. cit., pp. 126-131

Tan, H and Phang, S (1991) *The Singapore Experience in Public Housing (Singapore: Times Academic press)*

The Official Gazette, (1978) *The Socialist People's Arab Jamahirya*, No. 7, p. 295

Tipple A, G (1991) *Self-help Transformations of Low Cost Housing. An Introductory Study*, CARDO, University of Newcastle-upon-Tyne, UK

Tipple, A, G., Korboe, D., Garrod, G., Willis, K., (1999) Housing Supply in Ghana: a study of Accra, Kumasi and Berekum, *Progress in Planning*, 51 (4), pp. 253-324

Tipple, A. G (1992) *Self-Help Transformations to Low-Cost Housing, international impretions of cause, Context and Value TWPR Vol. 14 No.2. PP 167-192*

Tipple, A., Wilkinson and M'nour (1985) "The Transformation of Workers City, Hellwan: Multi-story Extensions Observed"; *open International*, 9, 2, pp. 25-38

Todaro, M (1985) *Economic Development in the Third World* (3rd edition) New York, Longman

Tripoli Municipality (1972) *Tripoli in 100 Years: 1870-1970*, Dar Etebah Al-Haditha, Tripoli

Turner, B (1992) *Housing reforms in Eastern Europe*, in Turner, B., Hegedus, J and Tosics, I (eds), *The Reform of Housing in Eastern Europe and the Soviet Union*, London: Routledge

UNCHS (1982) *Survey of Slum and Squatter Settlement, Typology international*, pub Ltd, Dublin

UNCHS(1996c) *An Urbanising World: Global report on Human Settlements 1996*, Oxford University Press, Oxford

UNCHS, (1986) *Global Report on Human Settlements*. Oxford University press for UN

UNDP (1977) Housing Development in Libya, *Project findings and recommendations*, a report prepared for the government of the People's Socialist Libyan Arab Republic, New York

UNDP (1977) Housing Development in Libya, *Project findings and recommendations*, a report prepared for the government of the People's Socialist Libyan Arab Republic, New York

UNDP (1996) *Gender, Urban Development and Housing*, New York, UNDP Press

United Nations (1974) *World Housing Survey, 1974* (New York: The UN)

United Nations Centre for Human Settlements (1992) *Delivery of Basic Infrastructure to Low-income Settlements: Issue and Opinions*, HABITAT, Nairobi

United Nations Centre for Human Settlements (1987) *Global Report on Human Settlements*, Oxford University press

United Nations Centre for Human Settlements (1989) *Mobilisation of Financial Resources for Low income Groups*, Nairobi

United Nations Centre for Human Settlements (1993) *Support Measures to promote Rental Housing for Low-income Groups*, HABITAT. Nairobi

United Nations Centre for Human Settlements (1996) *An Urbanising World Global Report on Human Settlements*, Oxford University Press

United Nations Mission for Housing in Libya (1969) *Report of the Housing design Advisor, Appendix 3*, Tripoli, January-February 1969

United Nations, (1987) *The Prospects of World Urbanization*. New York, UN United Nations.

USAID (1984) *Preparing a National Housing Needs Assessment*, (Washington, D.C: USAID)

Vandewalle, D., (1998), *Libya since Independence: oil and state building*. Cornell University Press Ithaca

Van Huyk (1987) 'New Directions for National Shelter Policies', in Rodwin, L (ed), *Shelter Settlement and Development*, op.cit

Van Hyck, A. P (1977) 'Percentage Completeness As a Tool for Housing the Low-income Farmers'; in Pama, R. P (eds) *low-income Housing-Technology and policy proceedings of International Conference in Bangkok, Thailand, Vol. III*

Varady, D (1983) 'Determinates of Residential Mobility Decisions', *Journal of the American Planning association*, Vol. 49, pp. 184-199

Vliet, V. W (1990) *Government and Housing: Developments in seven Countries*. Vol. 36, *Urban Affairs annual review*

Wakely, P (1988) 'The Development of housing Through The Withdrawal from Construction: *changes in Third World housing policies and programmes*', *HABITAT INTERNATIONAL* Vol. 12, No. 3, pp. 121-131

Wakely, P (1995) *National Housing Policies and Strategies: The New Paradigm, the urban and rural reconstruction of Palestine: Issues, Options, Policies and Strategies*, November 24-27, 1995 Amman, Jordan

Wedley, W. C (1968) 'progress and Problems in the Economic Development of Libya'. *Libyan Economic Business Review*, Vol. IV, No. 1

Wegeners, R. H (1982) 'Low-income Housing Finance, An integrated Approach', *HABITAT INTERNATIONAL* Vol,6 No. 4 pp. 425-439

Williams, A (1978) 'Need as a Demand Concept with special reference to healthy', in Culyer, A. J (eds), *Economic Policies and Social Goals* (London, Martin Robertson)

Willis, K. G and Tipple, A. G (1991) 'methods of Analysis and policy', in Tipple, A, G and Willis, K (eds) op.cit, pp. 258-278

World Bank (1988) *Pakistan Shelter Review*, Report No. 7214 PAK, *Country department 1, Europe, Middle East and North Africa Regional office*

World Bank (1993) Housing Enabling Markets to Work with Technical Supplements, Washington D. C., USA

World Bank (1994) World development Report: Infrastructure for Development, Oxford University press for The World Bank, New York

Wright, J., (1982), Libya, A Modern History, Croom Helm, London

Yap, K (1996) Low-Income Housing in a Rapidly Expanding Urban Economy: Bangkok 1985-1994, *Third World Planning Review*, 18 (3), pp. 307-323

Yassin, A. A (1977) Housing Development Project, Un Report LIB/77/005, Ministry of Housing, Tripoli, Libya

Yin, R. K (1989) Case Study Research: design and methods, Sage Publications, Newbury Park, London

Yin, R. K (1993) Applications of Case Study Research, Sage Publications, Newbury Park

Zuhri, Z, M., (1978) Socio-Economic Transformation and the Problem of Migration in Libya: A Case Study of Benghazi, Ph.D thesis, the university of Hull, UK

# APPENDICES

## Appendix 1: Questionnaire

### Housing Policy in Libya Study of public housing in Tripoli City

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#### Questionnaire for Residents

Questionnaire No:  Date

Project No:  Address

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#### HOUSING DATA

(1) What is the type of the area?

Old city

Planned area with permission

Planned area without permission

Other

(2) What type of building construction?

Traditional

Prefabricated

(3) What is the type of dwelling do you live in?

Flat  House

(4) For how long have you living in this dwelling? 5 years  10 years   
15 years  other

(5) In which floor do you live? Ground  First  Second  Third  Other

(6) Are you facing housing problem? Yes  No

*If yes please specify* \_\_\_\_\_

(7) How many bedrooms your dwelling comprises? 2  3  4  more than 4

(8) *Where did you move from, when you first came to this house?*

Did not move  Tripoli  Another city

(9) Why did you move to this house?

To live close to the place of work

To live near relatives and friends

To live near education facilities

To own a house

To be independent of the family

Others (specify).....

(10) Are you?

Tenant  Home owner  others please specify .....

(11) If tenant, why did you not benefit from the government scheme of owning your

House.....

(12) Do you share this dwelling with others? Yes  No

(13) If yes, are those who share the house with you are: Individuals  Families

(14) In total how many people normally live in this house? Your family  others

(15) How did you obtain this dwelling? Application  By employer

Inherited  others, please specify.....



(16) How is this dwelling unit financed?

Housing allowance  Monthly rent

LD ..... per month

Purchased by regular installments

LD.....per month

Cash purchase

LD.....

Free from the government

(17) In case you pay monthly rent or purchased the house on instalment, the payment is paid by whom?

1. You  2. By your employer and deduct from your salary

(18) Is the rent or monthly instalment?

1- High (not affordable)  2- Medium (affordable)  3- Low (easy to affordable)

(19) If you get the loan from the bank what rate of interest do you pay? -----

(20) What is the period for the repayment? -----

(21) Were you satisfied with the way you were treated when you applied for a loan?

1- Satisfied  2- very satisfied  3- dissatisfied

(22) Are you up to date with your payment?

1- Yes  2- No

(23) If you have obtained a loan and it is not paid, how do you intend to repay it? -----

-----  
(24) What are the type of maintenance your dwelling needs?

1- Internal (dwelling)  2- External & shared facilities

(25) Maintenance undertaken by the occupier Yes  No

1- within last week  2- within last month  3- within last 12 months

(26) Are you satisfied with the service of your inspector?

1- usually satisfied  2- sometimes satisfied  3- usually unsatisfied

(27) Have you extended your dwelling beyond the units that was provided initially?

1- Yes  2- No

(28) If yes, what kind of extension, if no go to Q 24

1- other storey  2- more bed rooms  3- Expansion of the garden

(29) The reason for extension is: 1- less number of bedrooms  2- increase of family members

3- looking for other sort of income  4- others, .....

(30) Have you had permission from the authority for building extension?

1- Yes  2- No

(31) Does this accommodation meet the needs of your family?

1- Yes  2- No

(32) If no, what are the problems with the dwelling?

1- Less number of rooms  2- Not the right type  3- not the right building system

4- Far from your work

(33) What is the standard of your dwelling?

1- V. good  2- Good  3- Uncertain  4- Poor  5- V. poor

(34) Could you please state your level of satisfaction with the following factor?

Factor	Satisfied	V. Satisfied	Uncertain	Dissatisfied	V. Dissatisfied
Accessibility					
Safety and Security					
Maintaining privacy					
Pedestrian Movement					

(35) Rank the factors that affect your selection of accommodation in order of importance?

Factors	First	Second	Third	Fourth	Fifth
Proximity to work					
Good location					
Type of dwelling					
Cost					
Availability of infrastructure					

(36) What is your level of satisfaction with the location of the following facilities?

<i>Public Facilities</i>	Satisfied	V.Satisfied	Uncertain	Dissatisfied	V. Dissatisfied
Schools					
Shopping facility					
Clinic					
Open Space					
Mosques					
Post Office					

(37) Do you think public housing is a good idea for the Libyan people? 1- Yes  2- No

(38) Is traditional building system suitable for Libyan people?

1- Yes  2- No

(39) Is prefabricated building system is suitable for Libyan people?

1- Yes  2- No

### INFRASTRUCTURE DATA

(40) Who is responsible for rubbish disposal?

1- Local authority  2- Private company  3- Others.....

(41) How often is the rubbish collected?

1- once a week  2- twice a week  3- once a month  4- others .....

(42) How is the water in your unit supplied?

1- through the network  2- through a tank

(43) If from a tank, was the tank provided by:

1- the government  2- private company  3- others.....

(44) Would you please indicate your satisfaction with the following services?

Services	satisfied	v. satisfied	uncertain	dissatisfied	v. dissatisfied
Water supply	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drainage system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road network	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electricity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rubbish disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sewage system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**GENERAL**

(45) Does your family enjoying the outdoor space in your area?

1- Yes  2- No

(46) If no, why

- 1- Not properly prepared
- 2- Not clean
- 3- There is no play space

(47) Do you like to live in this area?

1- yes  2- No

(48) If no, please explain (*please chose the most important three*)

- 1- Lack of educational facilities
- 2- Lack of health facilities
- 3- Lack of religious facilities
- 4- To far from chopping centre
- 5- Lack of maintenance
- 6- Poor building system
- 7- other reasons

(49) What type of dwelling do you prefer?

1- Flat  2- House

(50) What type of building system do you prefer?

! - Traditional  2- Prefabricated

(51) Do you prefer a complete dwelling built by the government or a plot of land to build a house

under your supervision? 1- complete house  2- Plot of land

-If a house, explain your preference.....

-If plot explain your preference.....

(52) Could you please list the aspects you normally consider when you looking for a house? Please rank them according to importance.

1- Type  2- Size  3- Building system  4- Cost  5- Location

**PERSONAL INFORMATION**

(53) Sex 1- Male  2- Female

(54) Martial status 1- Single  2- Married  3- Widow  4- Divorced

(55) Education status 1- Illiterate  2- Primary  3- Secondary  4- University degree

(56) Are you employed? 1- Yes  2- No

(57) If yes, what is your occupation? 1- Self employed  2-Government  3- Private sector

(58) Your age please 1- 20-30  2- 31-40  3- 41-50  4- 51-60  5- over 61

(59) Could you please indicate your monthly income (In L.D)?

1- 200 or less  2- Between 201-250  3- 251-300  4- 301-350

5- 350-400  6- more than 400

(60) Could you please indicate how much you spend per month on the following items? Is it affordable or not

Items	Amount L.D
Food, cloths and medicine	.....
Transport	.....
Electricity & Gas	.....
Water	.....
Rent or repayment	.....
Others specify	.....

(61) How much do you normally save per month (L.D)

1- 100  2- 200  3- 300  4- 400  5- more than 400

(62) How would you compare life now with life before you moved into a government-housing unit?

1- Very much better  2- better  3- worse  4- Uncertain

Thank you

## **LIBYAN ENVIRONMENT AND ECONOMIC DEVELOPMENT**

### **2.1 Introduction**

The problems of economic development in some Third World countries directly reflect those of their dominant or primate cities. In some Middle-Eastern and North African countries where oil exports form the major source of national income, the economies have been rapidly transforming in the 1970s and early 1980s as a result of revenues from oil exports, and the cities have been disproportionately growing due to the allocation of large amounts of capital to physical development projects (such as housing and transportation), education, and employment-providing services (Kamara et al, 1987).

The rapid development of these countries and the growth of their economies have allowed them to enjoy a special, status-opportunities for growth and a potential basis for economic diversification.

Historical, economic and political developments as well as geographical location have played an important part in housing development, and transmission of cultural life in Libya. However, the diversity of economic conditions in Libya before the colonial and oil eras have not been significant enough to produce a wide variety of dwelling unit type. After the discovery of oil, the Libyan economy witnessed a rapid



increase in income particularly in the big cities, which had a high rate of rural urban migration.

This part of the research presents an overall analysis of the socio-economic and demographic characteristics of the population in relation to the housing condition in Libya. Since economic condition of any country affect its planning programme and policies including housing.

A further aim of this chapter is to familiarise the reader with the historical, political, social and economic aspects of Libyan society, as well as to lay a foundation for a later discussion of the findings of this research.

This chapter will discuss the historical outline, political aspects of Libyan society and the development of social and economic aspects in Libya before and after 1969. The development plan, urban growth and the planning system are also discussed.

## **2.2 Brief historical outline of Libyan society**

Libya is situated on the Mediterranean Sea in North Africa between Egypt to the east, Algeria and Tunisia to the west, and Chad, Niger and Sudan to the south (see Figure 3.1: Location of Libyan map). The country has an area of some 1,760,000 square kilometres, making it the fourth largest country physically, spatially in Africa and borders the Mediterranean for about 1.9 thousand kilometres (Abuarrosh, 1996).

Libya contains three provinces: Tripolitani in the west, Cyrenaica in the east, and Fezzan in the south (more recent names given are: Western area; Eastern area and

Southern area). About 92% of Libyan land is desert or semi-desert, and farming is possible on less than 1.5% of the country's total area, which is conducted mostly on the coastlands and uplands of northernmost Tripolitania and Cyrenaica (Naur, 1986; Wright, 1982).

The words "Libya" and Libyan originate from the name of a tribe who lived in North Africa to the west of Egypt and who were known to the Egyptians in the 13<sup>th</sup> century as the "Levu", also called the "Lebu" (Abuarrosh, 1996).

Moslems conquered the country in the 7th century. From the mid 16th century until 1911 Libya was part of the Ottoman Empire. The invasion by Italians was in 1911 and Libya remained an Italian colony until 1942. After the Second World War, the Cyrenaica and Tripolitania were occupied by a British military administration and the Fezzan region by French forces (Naur, 1986).

On 24 December 1951 the country became independent. Its official name was the United Kingdom of Libya. A federal government was adopted which lasted until the end of April 1963, when another system was introduced (the unitary system). This latter system continued until the Libyan Revolution on 1<sup>st</sup> September 1969, which brought the overthrow of the regime of King Idris. Since then the country has experienced dramatic changes in every aspect of government and administration, the most important of which may be said to be the following:



Figure 2.1: Location map of Libya

Source: *Libya our home*, [www.Libyanet.com](http://www.Libyanet.com)

### 2.3 Population estimation

According to the population census taken by the Italians in 1960, the total population of Libya was 848,910 (Quin, 1961). The first population census after Independence was in 1954 with the help of the United Nations, and the total population of the country was 1,041,099. Libya's population increased from 1,515,501 in 1964 to

2,052,372 in 1973, and is estimated to have reached 2,900,000 by mid-1978. This rate, of increase of nearly four percent annually.

According to the table 3-1, there was a clear rapid growth in the Libyan population (from 1,041,099 to 4,273,535) through the period 1954 -1994, with a rate of increase of 35 percent. The Central Bank puts the growth rate for Libyan nationals at 3.9 percent annually. The IMF's international financial statistics puts it at 4.2 percent, while the World Bank predicts an overall growth of 3.6 percent annually between 1988-2000, one of the highest growth rates in the world (EIU, 1994).

Moreover, the Libyan population witnessed a marked increase in the number of females (from 501,235 to 2,101,945) through the period 1954 - 1994, with a percentage increase of 364.4 percent. This indicates that the proportion of Libyan women has increased markedly; therefore, the number of women working, especially in the health services, education and services industries has increased. Since 1954 regular censuses have been undertaken every ten years.

**Table 2-1 Estimated, total Libyan Population by Sex During the years 1954-1997**

<b>Sex/Year</b>	<b>1954</b>	<b>1964</b>	<b>1973</b>	<b>1984*</b>	<b>1994</b>	<b>1995*</b>	<b>1997</b>
<b>Male</b>	540,364	788,657	1,057,919	1,651,562	2,171,581	2,236,943	2,359,100
<b>Female</b>	501,235	726,844	994,453	1,579,497	2,101,954	2,168,043	2,288,420
<b>Total</b>	1,041,099	1,515,501	2,052,372	3,231,059	4,273,535	4,404,986	4,647,520

*(\*) Census Year Sources: National Corporation for Information and Documentation, 1998; Secretariat of Planning, 1995.*

The official census of 1984 recorded a population of 3,231,059, an annual average growth of 4.21% during the period 1973-1984. The results of the last census, given in

Table 3-2 show that the Libyan population in 1995 was 4,404,986, with an average growth of 2.86% during the period 1984-1995 and 2.23% during the period 1973-1995 (NAID, 1995). The finding reveals that the highest growth percentage was 4.21% in 1984. However, Libya's population growth rate had drastically reduced to 2.86% in the last census of 1995.

**Table 2-2 Distributions of the Latest Three Libyan Censuses (1973-84 and 95)**

<b>Census</b>	<b>1995</b>	<b>1984</b>	<b>1973</b>
<b>Libyan inhabitants</b>	<b>4,404,986</b>	<b>3,231,059</b>	<b>2,052,372</b>
<b>Net annual Growth per cent</b>	<b>The period 1984-95 2.86%</b>	<b>The period 1973-84 4.21%</b>	<b>The period 1973-95 3.23%</b>

*Source: National Agency of Information and Documentation (NAID), 1995.*

#### **2.4 Political aspects of Libyan society**

It is clear that since independence the Libyan state has played a highly interventionist role in Libyan development and so it is necessary to analyse recent political changes in Libya in further detail. The main objective of this section is to observe the impact of political structures in Libya on the people of Libya, and in particular upon their economic and social life.

The political system in Libya during the early 1950s to late 1960s was a representative organisation of the people in the parliament, which was composed of an upper House, known as the Senate, and a lower House, known as the House of Representatives. The Senate consisted of twenty-four members; eight members were, appointed by the King, while the others (sixteen) were, elected by the legislative councils of the provinces (Zuhri, 1978). During this period (1950 & 1960), the

constitution, which emerged, abolished all the existing parties. Meanwhile, during the period from independence of 1951 to the late sixties, tribalism grew rapidly.

The practice of exercising political rights in a country where illiteracy dominated and where no political parties were well organised, obliged the electors to turn to their original tribes as their chief supporter. The competition for the Representative seats was between the rich members of tribes (Zuhri, 1978).

Also Ministers and officials were chosen from notable tribes as well as from powerful families. As Abbas (1987) stated that:

*Appointments to government jobs were made on the basis of family connection and kinship rather than qualification or experience. (p. 87)*

On 1<sup>st</sup> September 1969 a military coup was staged in Libya while the King was in Turkey for medical treatment, and proclaimed the Libyan Arab Republic. The slogan for it was “Freedom, Socialism, Unity”. The governing authority became the Revolutionary Command Council under the leadership of Mummer al Qaddafi.

## **2.5 The Climate of Libya**

The Mediterranean coastal areas are characterised by hot, dry summers and rainy, mild winters. In winter the desert region has very little rain, with warm days and cold nights. While in the summer the climate is hot during the day and mild during the night. However, 96 per cent of Libyan territory lies in the Sahara desert and that influences the climate of the country. If one takes a closer look at the old houses, in places such as in the south of Libya, one suspects that these old houses, built from simple local materials, may be more comfortable to live in under the harsh climate

conditions, than most modern houses, even though they have been built hundreds of years ago.

The climate of Libya has influenced the native architecture and allowed the building of flat roofs, terraces and courtyards, which are considered major social and recreational spaces in the Libyan family life, especially in the large cities such as Tripoli.

Libyan climate can be divided into three regions as follows:

- The subtropical, Mediterranean climate, with an average rainfall exceeding 70 mm per year and in the coldest month having a temperature of between 8 degrees centigrade and 36 degrees centigrade. The largest percentage of people in Libya, live in this zone where the climate is more comfortable. It covers the whole Libyan coastal area.
- The subtropical semi-arid, with annual temperature of 30 degrees centigrade and average rainfall of 40mm per year. This zone consists of the major upland of Libya; it lies to the west and south of Tripoli and south of Benghazi. The temperature between 16 and 19 degrees centigrade in winter and between 26 and 32 degrees during the summer time.
- The subtropical, arid or desert region, with a mean annual temperature of over 40 degrees centigrade and less than 15mm of rainfall per year. This zone covers the largest part of the country and lies to the south of the country.

## 2.6 Social aspects of Libyan society

Mogherbi, (1998) stated that:

*“Family, tribal and regional affiliations are more important than class structure in influencing the social and political interaction in Libyan society...tribal affiliation is a most important factor in determining the choice of people’s committee members at their different levels”. (p. 56,74)*

Since the 7th century, Libyan society has consisted of Arab, Berber and other ethnic groups. Before discovering oil in 1957, Libya was one of the poorest countries in the world. Its population in 1954 was over one million, about 25% of the population were living in towns and nearly 50% were living in rural areas, while 25% were nomads or semi-nomads (Abbas, 1987).

Traditional Libyan society consists of families, clans and tribes. The family is extended, consisting of a man and wife, their unmarried children, their married sons and their wives and children, and sometimes unmarried or widowed brothers or sisters of the head of the household. In modern Libya the situation has begun to change somewhat. The difference between families in traditional and modern Libya is the separate households, while the roles of family members have not changed (Abuarrosh, 1996).

The individual in Libyan society identifies himself strongly with his family, and considers himself to be a member of a group whose importance outweighs his own. Family membership is also a requirement, in most cases, for membership of large units such as clans and tribes. The family, as well as the clan and the tribes, has



educational, economic, and security functions or roles – providing organisation for its members. In return, the individual has to obey, respect, and preserve the rules and traditions of those social units (El Fathaly and Palmer, 1980). Related families in Libyan society make up clans and tribes. In Libya, as in most Arab societies, loyalties are usually based on family and region, as well as on tribal groupings. None of the political changes in the country; from Italian rule to the Kingdom to the Revolution could change the strong relationships between the individuals in Libyan society with their families and tribes. As Mogherbi wrote in 1998:

*“Libya is among the few Arab countries which are significantly affected and characterised by their tribal structure, and tribalism as a social system. The persistence of the tribal structure was a result of the nature of Italian colonisation, where the policies of the monarchical regime of maintaining and reinforcing the tribal structure of Libya was one of its main bases of support. The social structure was essentially maintained through the traditional tribal kinship system. This social cohesion was found primarily within tribes having separate genealogical and socio-economic units”. (P.6, 7)*

The discovery of oil in the late 1950s brought a radical change in the social structure of Libyan society. It created new social groups such as commercial traders, landowners and traders in land. These classes became the major target of the revolution. “Although several measures were taken by the revolutionary government during the early 1970s in order to reduce class control over the economy, it was not until the late 1970s that private ownership and trade were abolished in order to eliminate class structures in Libyan society” (Abbas, 1987).

In addition to the family, clans and tribes, the religious factor is of principal importance in Libya. “Standing next in importance to the traditional units of family,

clan and tribe, religion is another variable that significantly affects the structure, values and attitudes of Libyan society” (El Fathaly and Palmer, 1980). Furthermore, Islam, for the Libyan is a code that directs social relations from the home to the marketplace to the workplace. It is a philosophy that people in Libya live every day.

“Libyans have looked to the Koran as a source of and guide for right action. The supreme laws have been the laws of God, which determine people’s relations with each other and with God” (El Fathaly and Palmer, 1980). The religious institution has had a profound effect on Libyan society throughout its history. Therefore, Islam played and still plays, a very important role in Libya (Mogherbi, 1998).

To complete a description of the Libyan environment, a review of the economic situation in Libya will be useful. This will be the subject of the next section.

## **2.7 Economic Aspects of Libyan Society**

This section intends to give an idea of economic development and the background in which government economic policies developed. It will be divided into the following sub-sections: the pre-oil period and the discovery of oil; 1960-1969, post production of oil and pre-revolution; 1981-1989, completion of conversion to the public sector; and the 1990s, re-emergence of a private sector.

### **2.7.1 The pre-oil period and the discovery of oil (1951-1960)**

In 1951 the average per capita income was less than \$30 (US) per year while by 1960 it rose to \$100 per year. Gross Domestic product (GDP) was £L15 million Libyan pounds in 1955, but by 1958 GDP had increased to £L52 million (Abuarroush, 1996;

Giurnaz, 1985). The country became dependent on aid from foreign states and payments for the use of military bases, particularly the UK and USA.

It was difficult to speak of any development of the Libyan economy prior to 1960, due to the scarcity of water and other natural resources and because the country was poorly endowed with skilled and educated manpower (El Fathaly and Palmer, 1980). During this period, agriculture was always the major mainstay of Libyan economy and society. Although the majority of the Libyan people were engaged in agriculture, the productivity of this sector was very low. This was due to a number of factors, such as a shortage of water, the absence of modern technical machinery and a limited amount of fertile land.

Furthermore, at that time Libyan resources such as: mineral and water had not been exploited. Thus, industry was limited and primitive, and lacked skilled workers and the required materials (UNESCO, 1952).

In addition to this, the country was also suffering from a lack of housing, education, health facilities and an efficient transport system. Housing conditions were very poor, with Libyans living in tents or rough edifices of steel or wood. In 1959 Esso, a USA petroleum company, in Zelten field, discovered commercial oil and production began in August 1961 (Giurnaz, 1985).

### **2.7.2 The period from 1960-1968**

Oil production increased rapidly in the 1960s, and by 1969 Libya was the second largest producer in the Middle East/ North Africa region (Giurnaz, 1985). The

Libyan economy had changed dramatically; oil production and oil revenues increased at a rate never before experienced by an oil producer. Day (1992) stated that during the 1960s 99% of the Libyan exports were from oil. GDP and per capita income increased substantially as oil revenues increased. “National income increased from £LM 131 (million Libyan pounds) in 1962 to £LM 798 in 1968” (Fisher, 1990).

**Table: 2.3 Per Capita Income in Libya (Libyan Pound) 1962-1968**

Year	Per Capita Income
1962	107
1963	156
1964	234
1965	304
1966	379
1967	430
1968	595

*Source: Socio-economic evolution in Libya, Ministry of Planning 1980, p.11; Cited in Giurnaz, 1985:180*

The development policy in Libya like many developing countries was concentrated mainly on urban areas. Therefore, big cities such as Tripoli and Benghazi had benefited from the oil economy to a greater extent than other areas. This caused a large number of rural populations to move to these cities.

From the early 1960s, planning for development in Libya had been concerned with the overall development of the economy. In the early 1960s, a National Planning Council was introduced to examine matters of planning policy, and a Ministry of Planning and Development was set up to administer and execute planning and

development in 1963 (Gurnaz, 1985). Various economic development plans were implemented since 1963, for either a three-year or five-year period.

In 1963 the first Five-year Plan (1963-1968) for economic and social development was approved by the Libyan parliament. The main objectives of this development plan were: to improve the standard of living of Libyan people; to give special consideration to the agricultural sector; to be independent from foreign financial aid; to permit the public sector to continue in such services as education, health, communication and housing (Giurnaz, 1985). The government allocated £LM169 to fund the plan. The plan was extended to £LM 625 when oil revenues grew faster than originally expected (Ghanem, 1987).

The first Five-year Plan stated its seven major objectives as follows (Allan, 1981):

- To ensure the early improvement of the standards of living of the people, particularly those of limited income who did not benefit from the economic prosperity.
- To give special consideration to the agricultural sector, being the source of supply of most of the essential consumer goods, as well as the source of income and employment for the majority of the people; to improve the productive efficiency of farmer and labourer; and to encourage the private sector to make investments in these fields.

- To permit the public sector to continue its investments in such services as education, health, communications and housing, together with other sectors as required consolidate the basic elements for rapid economic growth.
- To develop rural areas by establishing all the *production and public service* projects, thus ensuring regular employment for countrymen, utilising their productive faculties and raising their incomes in such a way as to achieve justice in the distribution of national income and restrict their migration into the cities.
- To organise the imports policy to avoid importation of all goods which can be produced in the country on the one hand, and to ensure protection from the danger of inflation and the provision of sufficient supplies of the capital goods needed for development on the other hand; at the same time striving to set up local production and to adopt an appropriate customs policy for its protections.
- To take such monetary, financial and commercial measures as may be necessary to ensure increased revenue and to enforce “tight-belt” control on expenditure.
- To take steps to meet the lack of information and statistical data which are necessary for planning, by strengthening the existing statistical organs and by studies and research work.

Although the development of the agricultural sector was one of the plan’s priorities, “the performance of this sector was very low at the end of the plan” (Abbas, 1987:73). At the same time the plan recorded some achievement in sectors such as

health and education. Therefore, self-sufficiency and reducing dependency on the oil sector were the main objectives of the second development plan.

The most notable aspect of the plan was that the first objective was that of improving the standards of living of the people, “Housing” did not figure in the original plan as a separate heading.

### **2.7.3 The period from 1969-1980**

After the revolution of 1969, the structure of the Libyan economy changed again. Several steps were taken by the revolutionary government in order to reform the existing economic situation; for example nationalisation of the foreign bank’s changing the oil prices and participation in production (Vandewalle, 1998). “Libya’s oil price increased from \$2.3 per barrel in 1969 to \$25 per barrel in 1979” (Abbas, 1987:75).

After the 1973 oil crises Libya’s oil revenues increased from “LD 2.4 billion Libyan Dinars to about LD 6.5 billion by 1980” (Giunaz, 1985:177). This growth in the revenues enabled an increase in spending on development in all sectors, particularly the agricultural and industrial sectors, which received the highest priority in order to achieve the objectives of self-sufficiency and reducing dependency on the oil sector.

However, this did not come about and their contributions to GDP remained small (Ghanem, 1987; Kilani, 1987). The new government wanted to change and increase the objectives of development plans. It therefore, decided to abandon the Five-year Plan (1969-1974) prepared by the former government. *During the period 1970-1972,* the government spent £L791 million on economic and social development. The

highest amount was on housing (19% of actual expenditure £L149,1 million), then the agricultural and industrial sectors (17.1% and 13% respectively £L109 million).

To achieve a more balanced growth in the national economy, the government tried to reduce the economic dependence on the revenues from oil by creating alternative ways to achieve economic growth.

El Fathaly (1977) says of the Libyan oil policy:

*The first September revolution (1969) changed the priorities of the development strategy by giving different emphasis to certain sectors. Ever since the start of the new regime, attention has been focused on planning and development to effectuate a shift in the social and economic structures a state of full dependence on the oil sector to one of balanced growth for all the sectors. (p. 36-37)*

The first socio-economic development plan of the revolutionary government covered the period 1973-1975. The plan's highest emphasis was on housing (LD361million, 18.4%), followed by agriculture (LD 327 million, 16.6% of total allocation), electricity and water (LD 257.4 million, 13.1%), and the industrial sector (LD231.6 million, 11.8%).

The second socio-economic plan of the revolutionary government (the third for the country) covers the period 1976-1980. In this plan, the highest priority was the industrial sector (LD 1515.4 million, 21.1% of the total plan investment); several factories were established and run by the public sector during this period. The next priority was transport and communication (LD 1197.8 million, 16.7%), followed by



the agriculture sector (LD 1030.1 million, 14.4% of the total investment). Consideration was also given to housing, public services, electricity and water.

Thus, it can be seen that the priorities changed from one sector to another, regarding changes in development plans. Since the mid 1970s, the country's economy has been based on the new socialist ideology incorporating income and wealth. The fundamental changes in the Libyan economic structure were aimed at transforming the economy to a socialist system. Therefore, the private sector had to be stopped (Vandewalle, 1998), as the Green Book (part two in 1978) outlined that private ownership is a form of exploitation through wages, rent and profit. However, whilst it is interesting to discuss further the changes in emphasis in these plans, this thesis will not develop this area any further as it is outside the scope of its research aims. The exception to this is the housing sector, which will be discussed in chapter 6.

#### **2.7.4 The period from 1981-1989**

Libya's economy was, in the 1980s, severely restricted by the effects of the low prices for oil. Oil revenue declined from \$23.2 billion in 1980 to \$5 billion in 1988 (Fisher, 1990). Decreasing revenues caused serious cash-flow problems and necessitated a major revision of the 1981-1985 development plan (Khader, 1987; Burgat, 1987). In response to the new situation, most of the economic sectors faced severe cuts, as Ghanem (1985: Cited in Abbas, 1987) stated:

*“While the value of projects signed in Libya as part of the five year plan which was drawn up before the sudden fall in oil resources, was \$11, 827 billion in 1981, the value of projects signed in 1982 went down to \$1,374 billion or about 1/12 of the value of the projects signed in 1981”. (p. 228)*

This decline constrained government spending, reduced the level of imported goods, and increased Libya's debt repayment problems, all of which led to a lower standard of living (Abuarrosh, 1996). In the period 1980-1986 GDP declined from \$35.5 billion to \$24 billion, while average per capita income fell from \$10,900 in 1980, to \$6,404 in 1986.

By the end of 1981, with the exception of the agricultural sector, all private ownership in Libya was abolished, housing ownership was restricted to one house per family, business enterprises were replaced by government agencies, and workers took over private and public factories. The whole private sector was completely replaced by People's Committees, and retail activity became controlled by state-administered supermarkets (Fisher, 1990).

The fourth socio-economic development plan (fourth for the country, third for the revolution) covered the period 1981-1985, with the total allocations of LD 17000 million. The plan's highest emphasis was on the industrial sector (light, and heavy industries) (LD930 million – 23.1% of the total plan). The second emphasis was on agriculture and land reclamation (LD 3100 million – 18.2% of the total plan), while transport and communications came third (LD 2100 million – 12.3%), followed by the housing sector (LD1700 million – 10% of the total plan).

Libyan's finance revolves around oil revenues. Therefore, the start of oil exports in the 1960s, nationalisation and oil price rises in the 1970s, all helped to expand government revenues and finance Libya's development programmes. However, government budgets have been in constant deficit since 1981. Development spending

has declined since the mid-1980s, with only priority projects, such as Great Man-Made River (GMR) continuing to attract funds and remaining relatively free of the payments delays experienced by other sectors (Arab Oil & Gas Directory, 1996).

### **2.7.5 The period 1990s**

In September (1988) the government proposed an increase in privatisation and announced that Libya would be able to import and export in complete freedom (Fisher, 1990). This restructuring policy was initiated and regulated through the Issue of Government Act number (9), Dated 5/9/1992. The Act's objective was to regulate and enhance the role of private sector activities in the national economy some of its main provisions are as follows (See for more detail, African Development Report, 1994):

- The Libyan economy will be based on joint ownership, popular socialism and individual initiatives and abilities
- The economic areas open for private and individual initiatives will include production, distribution and services. They will take place in areas such as agriculture, industry, commerce, tourism, housing and finance, as well as in the private practice of professionals.
- Based on a recommendation of the General People's Committee, public or joint enterprise could be sold to private ownership.

Although there was no long plan between 1986-1993, the fifth economic plan for the country covered the period 1994-1996: The three-year programme. The programme's main objectives in order of importance were the following: settling the debts of previous development projects (i.e. debts belonging to companies that carried out these projects); completion of current projects, especially in health, housing, education, public utilities and energy sectors; encouraging investment in the production sectors, whether through the public or re-emerging private sectors; suspension of all projects which had not yet started (The Secretariat of Planning, Trade and Treasury, 1993).

The three-year programme (1994-1996) was LD 2400 million, but due to a shortage of funds the actual expenditure was LD 1450.566 million. This represented 60% of total allocation during the same period (See Appendix: 3.3) the highest amount was in the energy sector: LD 371.5 million, this represents 25.6% of the total actual expenditure. Followed by development of administration centres (LD 271.911 million – 18.7%), housing and public utilities (LD 140.4 million – 9.7%), and the industrial sector (LD 132.8 million – 9.1%) (The Secretariat of Planning Economic and Trade, 1997)

The three-year programme faced many problems and difficulties. These included insufficient amounts of both the allocations and actual expenditures necessary to achieve the programme plan. As a result of shortages in funds, new debts were incurred. This meant that the total debts at the end of the programme (1996) amounted to LD 2210 million, a figure close to that for the debts at the beginning of the programme (The Secretariat of Planning, Economic and Trade, 1997).

Therefore, it is difficult to separate an assessment of Libya's economy from Libya's political ideology, although this is true of any country. However, in the case of Libya there is a high level of involvement from the government in development policies.

It appears that after 1969, the government implemented a strategy aimed at developing the agricultural and industrial sectors. This would result in efficient use of national resources and reduce economic dependency on the volatile foreign markets. Hence, the government executed a large number of agricultural projects, equipping farms with advanced technology, as well as housing facilities.

## **2.8 Development Plans**

Historically, the first development plan before 1969 covered the year's 1963/64-1967/68, providing for estimated expenditure at LD 337 million. Communications and public works took priority; water, electricity and roads were introduced to the interior. Under the second plan priority was given to agriculture, transport and communications, housing and local government. Due to the swift increase of oil revenues in 1973, the second plan was ended by introducing a Three-year Development Plan (1973-75) providing for investment of LD 2.2 billion, of which a total of 34 per cent was allocated to industry, petroleum and electricity. The Fourth Plan was a Five-year Development Plan (1976-80), which represented an aspiring plan, known as the "economic and social transformation plan"; priority in this plan was given to agriculture, housing, industry and communications (Ghanem, 1985).

Appendix 3.4 shows that the total expenditure during the 1970s was about 50% of the Libyan oil revenues during this period, which meant the necessity of finding other places to invest the surplus, even outside the country.

El-Jehaimi, (1987) summarised the planning objectives, which are relevant for long-range planning in Libya.

- To alter the structure of the economy in favour of agriculture and industry. The role of the oil sector is to be gradually reduced and exports are to be limited to the financing requirements of other sectors
- To achieve a greater degree of self-sufficiency in broad agricultural and industrial products, particularly in certain key food groups and in industries catering for people's basic needs.
- To build industries based on oil and natural gas, to capitalise on areas where the country possesses clear advantages for exports.
- To develop an indigenous manpower base capable in due course of carrying out the development effort with minimum foreign participation. (P.76)

The Secretariat of Planning (1981a) summarised the main objectives of this socio-economic transformation plan as follows:

- To continue intensive efforts towards the achievement of a socio-economic transformation and realise a high rate of growth in agriculture and industry.
- To achieve a high degree of self-sufficiency and self-reliance in building up the economy and to give priority to the expansion of all production elements.

- To reduce crude oil production to the necessary level required financing the transformation programme and projects.
- To intensify development of human resources, to increase the contribution of Libyans in the transformation process and to limit the number of foreign workers.

**Appendix: 3.1 Foreign Assistance Allocations to Libya During 1952-1960**

**Libyan Fiscal Years: (£L1, 000)**

<b>Country</b>	<b>Total Allocation</b>	<b>%</b>
USA	41,138	56
UK	28,740	39
France	893	1
Italy	1,070	1
United Arab Republic	50	-
Turkey	50	-
Pakistan	10	-
UN Technical Assistance	1,964	3
<b>Total</b>	<b>73,915</b>	<b>100</b>

*Source: The Economic Development of Libya, published for the I.b.r.d. by the John Hopkins press, Baltimore, 1960. p. 48; Cited in (Abbas, 1987:68)*



**Appendix: 3.3 Distribution of housing units completed by (GHC) (1970-80)**

<b>Region</b>	<b>Number of units completed</b>
Tripoli	28,455
Benghazi	16,369
Gahrian	9,303
Zawia	6,509
El-Kums	5,904
Miserata	6,194
Jabal-Akhdar	7,206
Derna	6,465
Sebha	12,170
El-Kalij	6,077
Total	104,791

*Source: Secretariat of Housing (1976-80)*